

ACADEMIC ACHIEVEMENT AND PEER RELATIONSHIP OF CHILDREN IN
CARE: THE MODERATOR ROLE OF TEMPERAMENT AND SOCIAL
SUPPORT

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

ACADEMIC ACHIEVEMENT AND PEER RELATIONSHIP OF CHILDREN IN CARE: THE MODERATOR ROLE OF TEMPERAMENT AND SOCIAL SUPPORT

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The present study aimed to investigate whether children in care differ from home-reared children in academic achievement and peer relationships and to examine the factors underlying individual differences in these developmental outcomes. Perceived social support and negative affect were taken as moderators. The present study included 365 children; 142 of them were from residential care settings, and 223 of them were selected from the classrooms that these youngsters were attending. Child-Adolescent Social Support Scale, Peer Victimization Scale, and measurement of peer-acceptance/rejection were filled by children in order to measure perceived social support and peer relationships. Caregivers or mothers filled in the temperament questionnaire. Academic achievement of children was evaluated by behavioral academic engagement and grades of children. To compare children in care and family-reared children, MANOVA analyses were conducted. Results indicated children in care showed poorer academic achievement and peer relationships than children living with their parents, except peer-acceptance. In addition, hierarchical regression analyses were conducted for each developmental outcome to assess the direct and

moderator roles of social support and temperament. Social support perceived from caregivers/mothers and teachers, and temperament (i.e. effortful control and perceptual sensitivity) significantly predicted child outcomes. Moreover, the interaction between rearing condition and negative affect was marginally significant in predicting peer-rejection. Also, three-way interaction between rearing condition, teacher support, and negative affect was marginally significant in predicting academic engagement. To be more precise, perceived teacher support increased academic engagement of children in care when they were with low negative affect.

Keywords: Children in Care, Academic Achievement, Peer Relations, Social Support, Temperament

ÖZ

DEVLET KORUMASI ALTINDAKİ ÇOCUKLARIN AKADEMİK BAŞARILARI VE AKRAN İLİŞKİLERİ: SOSYAL DESTEK VE MİZACIN DÜZENLEYİCİ ROLÜ

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Bu çalışma, kurum bakımı altındaki çocuklar ile aile yanında kalan çocukların akademik başarı ve akran ilişkileri bakımından farklılaşıp farklılaşmadıklarını araştırmayı ve bu gelişimsel sonuçlardaki bireysel farklılıklarda rol oynayan faktörleri incelemeyi amaçlamıştır. Algılanan sosyal destek ve olumsuz duygulanım düzenleyici değişken olarak ele alınmıştır. Mevcut çalışmanın örneklemi 365 çocuktan oluşmaktadır; bu çocukların 142'si kurum bakımından, 223'ü kurum bakımı altındaki çocukların biyolojik aileleri ile yaşayan sınıf arkadaşlarından seçilmiştir. Çocuk-Ergen Sosyal Destek Ölçeği, Akran Zorbalığını Belirleme Ölçeği, akran kabulü ve akran reddi ölçümü çocuklardan alınmıştır. Bakım personelleri/anneler mizaç ölçeğini doldurmuşlardır. Çocukların akademik başarısı sınıf içi davranışsal akademik katılımları ve notları ile değerlendirilmiştir. Kurum bakımındaki çocuklar ile aile yanında büyüyen çocukları karşılaştırmak için, çok değişkenli varyans analizi kullanılmıştır. Sonuçlara göre, devlet koruması altındaki çocuklar diğer çocuklardan daha düşük akademik başarı göstermekte ve daha olumsuz akran ilişkileri (akran

kabulü hariç) belirtmektedir. Sosyal destek ve mizacın doğrudan ve düzenleyici etkilerini görmek amacıyla her bir sonuç değişkeni için hiyerarşik regresyon analizi yapılmıştır. Bakım personelleri/anneler ve öğretmenlerden algılanan sosyal destek ile mizaç özellikleri (kendini denetleme ve algısal hassasiyet) sonuç değişkenlerini anlamlı olarak yordamaktadır. Buna ek olarak, yetiştirilme koşulları ve olumsuz duygulanım arasındaki etkileşim akran reddini yordamada marjinal olarak anlamlı bulunmuştur. Ayrıca, yetiştirilme koşulları, öğretmen sosyal desteği ve olumsuz duygulanım arasındaki üç yönlü etkileşim de akademik katılımı yordarken marjinal olarak anlamlıdır. Öğretmen sosyal desteği kurum bakımı altındaki çocukların akademik başarılarını yalnızca düşük olumsuz duygulanımı olan çocuklarda anlamlı olarak artırmaktadır.

Anahtar Kelimeler: Kurum Bakımındaki Çocuklar, Akademik Başarı, Akran İlişkileri, Sosyal Destek, Mizaç

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CHAPTER 1

INTRODUCTION

1.1 Overview

Children's rearing environment has a substantial impact on their development (Bronfenbrenner, 2005; Evans, 2006). Psychosocially deprived conditions negatively affect child outcomes in terms of cognitive, emotional and social development (MacLean, 2003; Bos, Fox, Zeanah, & Nelson, 2009). One of these conditions is to grow under the care of social services. Over two million children worldwide have been placed in government care for various reasons such as negative family environment, economic difficulties, death of parents, neglect, or abuse (Petrowski, Cappa, & Grossi, 2017). According to Ministry of Family and Social Policy (2017), 14189 children are under the government protection in our country. Being raised in institutions put children under the risk of developmental latencies and problems (MacLean, 2003; Roy, Rutter, & Pickles, 2004). To be more precise, children in institutions are more likely to show cognitive deficits (Nelson et al., 2007), problem behaviours (Wiik et al., 2011), attachment problems (Zeanah, 2000), and socioemotional difficulties (Tarullo, Bruce, & Gunnar, 2007).

This study focused on the school-related variables outcomes of children in care. One of the school problems that institutionalized children are more likely to show is the failure in school life. Several studies came to the same conclusion that children under government protection had lower grades when compared to their peers (MacLean, 2003). In addition to academic achievement, children raised in institutions also have more problems in their peer relationships. The most common problems that children in care experience are avoiding contact with their classmates, teasing between peers, and being overwhelmed by peers' attention (Fisher, Ames, Chisholm, & Savoie, 1997).

Negative effects of being raised in institutions show differences from child to child. In the literature, there are several models (e.g. diathesis-stress, vantage sensitivity, and differential susceptibility models) to explain these individual differences (Slagt, Dubas, Dekovic, & van Aken, 2016). It is important to assess which factors have a moderator role in the relationship between institutionalization and developmental outcomes in order to understand mechanisms underlying these differences. When looked at the studies in the literature, it is seen that several environmental and individual factors play a moderating role in developmental outcomes of children at risk (Werner, 2000). However, there is limited research examining the protective role of social support and temperamental susceptibility of children in care. Therefore, the goals of the present study to investigate whether children in care differ from home-reared children in academic achievement and peer relationships and to examine the factors (social support and temperamental characteristics) underlying individual differences in these developmental outcomes of children.

With these aims, in the following sections first, government protection and its effects on child development; secondly, academic achievement and peer relations (i.e. peer-acceptance, peer-rejection, and victimization) will be reviewed. Finally, literature about the direct and moderating role of social support sources and temperament will be discussed in the third part.

1.2 Government Protection and Its Effects on Child Development

1.2.1 Characteristics of Government Protection

For children at risk, there are different government protection services. Some of those are providing economic support for families without separating children from their home; others are adoption, foster care, or residential care (Aile ve Sosyal Politikalar Bakanlığı, 2017). As stated above, a large number of children are taken in care for several reasons (e.g. loss of parents, abuse, violence, and poverty). These children reside in different types of residential care settings which are institutions, group homes, and care villages with various characteristics (Aile ve Sosyal Politikalar Bakanlığı, 2017). Institutions, in other words, orphanages are places where a large number of

children stay in one building. Physical conditions of institutions are not always optimal for healthy child development such as inappropriate furniture and insufficient toys (McCall, 2013). In addition to physical environment, growing up in a large group and lack of sensitive care is also a negative factor for children's development (The St. Petersburg–USA Orphanage Research Team, 2008). In Turkey, Aydın (1997) revealed that one caregiver is responsible for 8-10 children and groups can consist of almost 20 children in some institutions (as cited in Atlı, 2008). Another characteristic of institutions is inconsistency of caregivers that negatively affects children's emotional and social development. Because of the disadvantages, since 2005 these places have replaced with home-based care types (Yolcuoğlu, 2009). These alternative care types to institutions are care villages and group homes. In the current study, children living in care villages or group homes were included since none of the children in the targeted age group were residing in institutions.

1.2.1.1 Care Villages

Care villages consist of several detached houses in one campus. 6-10 children stay together in one house. Caregivers cook, help children for their homework, and spend most of their times within the house with children. These characteristics make care villages more family like settings when compared to institutions. However, living in a campus still separates those children from the community.

1.2.1.2 Group Homes

Different from care villages, group homes are located in different neighborhoods of cities across the country. Thus, children residing in group homes are raised within the local community similar to children living with their own biological parents. Group homes, in other words, group homes are generally apartment flats in which 5-6 children stay. Caregivers cook, help children doing their homework, and do housework in these homes. In addition, children residing in group homes go to neighborhood schools, do shopping with their caregivers, and make friends from their neighborhood as their family-reared peers. Also, it was attempted to reduce inconsistency of caregivers in these settings. Therefore, children in group homes get in contact with less

number of caregivers that enables children to form more stable relationships compared to large settings.

1.2.2 Effects of Government Protection on Child Development

There are a large number of studies in the literature examining the development of children under government protection of social services. Findings indicated that children reared in institutional settings show more problems in their cognitive, physical, social and emotional development (McCall, 2013; van Ijzendoorn et al., 2011).

Children growing in care show poorer physical development when compared to their home reared age peers. For instance, their height, weight, weight for height, size, and head circumference were found to be delayed (Smyke et al., 2007). Those children's brain development is also under risk because of deficiencies in nutrition, lack of micronutrients (e.g. iron), infections, and chronic stress (Nelson, Bos, Gunnar, & Sonuga-Barke, 2011). In addition to negative conditions in institutional settings, these children are highly likely to have an exposure to prenatal risks, like maternal alcoholism or negative experiences before being taken under government care.

Furthermore, children under protection differ from their family-reared peers in terms of cognitive development. First, the meta-analysis conducted by van Ijzendoorn, Luijk and Juffer (2008) indicated that children living in government protection of social services had lower IQs when compared to children living in family environment. Also, those children show poorer theory of mind skills (Yağmurlu, Berument, & Celimli, 2005), memory (Bos et al., 2009), and executive functioning (McDermott et al., 2013) than their peers during pre-school and first years of primary school. According to longitudinal studies, the detrimental effects of institutionalization on cognitive development persist into early adolescence period (Beckett et al., 2006).

As another developmental area, institution-reared children have difficulties in socio-emotional development such as attachment formation (Zeanah, Smyke, Koga, Carlson, & BEIP Core Group, 2005). According to Bowlby's attachment theory (1977),

sensitive, stable, and warm relationship with caregiver is important for development of secure attachment. Since caregivers in social service system are not generally stable and not able to offer one to one interaction, children do not have a chance to form secure relationship with an adult during early years of life, so they are more likely to show attachment disturbance (Smyke, Dumitrescu, & Zeanah, 2002). Vorria et al. (2006) examined the attachment of adopted children spending their first two years in the settings of government protection. Findings indicated that they were less secure than children living with biological parents even after spending two years with a stable family. Furthermore, children with a history of institutional care exhibit more indiscriminant social behaviors to strangers (Gleason et al., 2014).

In addition to the attachment related outcomes, children under government protection have more difficulty in emotion understanding (Vorria et al., 2006) and regulation (Tottenham et al., 2010). Moreover, these children exhibited more internalizing and externalizing behaviors when compared to family-reared children (Zeanah et al., 2009; Roy, Rutter, & Pickles, 2000). In detail, depression, anxiety, aggression, and rule breaking behaviors were more frequent among those children (Erol, Şimşek, & Münir, 2010).

In addition to the difficulties in cognitive and socio-emotional development of children growing in care, they also have more problems in their school life. As stated above, the present study focused on school-related outcomes of children in care.

1.3 School-Related Outcomes of Children

Children under government protection have more difficulties in their school life in terms of both academic achievement and peer relationships when compared to their family-reared peers (MacLean, 2003, McCall, 2013). In this section, academic achievement and peer relationships of children will be reviewed.

1.3.1 Academic Achievement of Children

There are different definitions for academic achievement in the literature. According to Deary, Strand, Smith and Fernandes (2007), academic achievement is knowledge

obtained through learning. The level of knowledge learned by individuals generally evaluated by grades obtained from exams and performance in classroom. Wang and Holcombe (2010) stated that children with higher engagement in class have higher success. Classroom engagement includes being interested in learning, fulfilling the class responsibilities, and behavioral involvement in the course (Finn, Panno, & Voelkl, 1995). In the current study, academic achievement was evaluated by children's behavioral engagements in classroom and their grades.

Children's academic achievement in the early years plays an important role in their future life. Higher academic achievement during middle childhood is positively associated with better health (Lê-Scherban, Roux, Li, & Morgenstern, 2014), higher self-efficacy in their business life (Kelly, 1993), and better career (Arbona, 2000). Several individual and environmental factors have an impact on children's academic achievement (Crisp, Taggart, & Nora, 2015). As instance for environmental factors, being raised in a stimulus-rich environment (Eamon, 2005) and having authoritative parents (Cohen & Rice, 1997) positively predicted academic achievement. On the other hand, being minority (Burchinal, Roberts, Zeisel, & Rowley, 2008), or being reared in a family from low socioeconomic status (Sirin, 2005) or poverty (Lacour & Tissington, 2011) have a negative effect on children's success in school. In addition, exposure to violence in family (Thompson & Massat, 2005), having a mother with depression (Downey & Coyne, 1990), and growing up in a multi-child family (Gutmann, Sameroff, & Eccles, 2002) are risk factors for children's academic achievement.

As mentioned before, being raised under government care is also a risk for children's school life. In the review conducted by MacLean (2003), it was indicated that children in care have lower achievement when compared to home-reared children since residential care settings generally lack of sufficient stimulus that is necessary for children's learning and performance. Furthermore, children under government protection are more likely to have attention problems that also negatively related to their academic achievement. In addition to attention problems, since children's vocabulary knowledge was limited during early childhood, they have more problems

in later academic life (Merz, McCall, & Wright, 2013). Studies examining the effect of care duration also indicated that the more time children spend in care, the worse academic achievement they have. To be more precise, children who stay more than 6 months in institutions showed more difficulties in reading, comprehension, and math than the children adopted before 6 months (Beckett et al., 2007).

1.3.2 Peer Relationships

Peer relationships have either positive or negative influences on children's socioemotional and cognitive functioning depending on the nature of the relations (Rubin, Bukowski, & Parker, 2006). In the literature, there are several aspects to measure peer relationships. For instance, number of friends, friendship quality, frequency of contact with peers, sociometric status, prosocial or aggressive behaviors towards friends, bullying and victimization were examined in the studies under the name of peer relationship (Bukowski, Laursen, & Rubin, 2018; Parker & Asher, 1993). Among those domains, in the current study peer-acceptance, peer-rejection, and victimization are included. Peer-acceptance and peer-rejection are defined as being liked or disliked by their peers, respectively (Asher, Singleton, Tinsley, & Hymel, 1979). In the literature, these concepts are seen as indicators of sociometric status and usually are measured via nomination method. Although there are five dimensions of sociometric status, which are accepted (popular or being liked), rejected (being disliked), controversial (being both liked and disliked), neglected (received very few positive and negative nominations), and average (received average number of positive and negative nominations) children (Cillessen & Bukowski, 2000; Gifford-Smith & Brownell, 2003), this study only focused on accepted and rejected ones. As the other peer-related variable, victimization has defined as active exposure to maltreatment by their friends (Perry, Kusel, & Perry, 1988). These maltreatments include physical, verbal, relational, and indirect bullying (Hawker & Boulton, 2000).

It is obvious that peer-acceptance, rejection, and victimization have important effect on children in terms of their academic development, psychological adjustment, and social functioning. For instance, peer-acceptance is positively related to children's school performance but negatively related to loneliness. However, peer-rejection was

positively associated with academic failure, school avoidance, and adjustment problems in their later life (Buhs & Ladd, 2001; Ladd, 1990; Parker & Asher, 1993; Rubin et al., 2006). Furthermore, victimized children also reported to have academic maladjustments such as school avoidance, low enjoyment and feeling unsafe in school (Card & Hodges, 2008). Moreover, those children showed psychological problems such as depression, anxiety symptoms, and somatic complaints (Hawker & Boulton, 2000; Rigby, 2000).

There are several factors affecting the peer-acceptance, rejection, and victimization. For instance, child-related variables such as children's verbal abilities, emotion knowledge (Mostow, Izard, Fine, & Trentacosta, 2002) and children's attachment security predicted higher levels of peer-acceptance. A longitudinal study conducted by Bohlin, Hagekull, and Rydell (2000) investigated that securely attached children during infancy were more likely to be positive, popular and socially active in primary school years. In addition to individual variables, several environmental factors have influences on children's peer relationships. For instance, negative parental attitudes (Dekovic & Meeus, 1997), low socioeconomic status (Fergusson, Woodward, & Horwood, 1999), and family violence (McCloskey & Stuewig, 2001) are associated with problems in peer relationships.

Institutional care experience also has an important role in peer relations. Since those children could not have a secure relationship with an adult in their early life, they have more difficulties in establishing and maintaining social relationships. According to the study conducted by Vorria, Rutter, Pickles, Wolkind, and Hobsbaum (1998) showed that institutionalized children had less intimate and harmonious relationships with peers than children living with biological parents. Also, those children were more likely to avoid contact with peers and being teased by their peers when compared to normative sample (Fisher et al., 1997).

Considering the studies focusing on sociometric status and victimization of children, there is limited research examining these domains in children residing in institutional settings. Only one study compared the social status of children in institutional settings. They reported that children from institutions were less likely to be popular, but more

likely to be ignored. Furthermore, they were more likely to be rejected by their peers, but this difference was not found significant (Palacios, Moreno, & Román, 2013). All other studies in the literature examining children's social status and victimization had participants with institutional care history rather than currently institutionalized children. Therefore, several factors such as age of adoption, characteristics of adoptive families, and cross national adoption status were effective in their findings. For instance, being adopted before the age of six months and spending more time in adoptive family (Stams, Juffer, Rispens, & Hoksbergen, 2000) eliminated the difference in peer-acceptance between adopted children and non-adopted children. On the other hand, children adopted after age of six were more likely to be exposed to victimization when compared to non-adopted children (Raaska et al., 2012). Since children currently residing in institutional settings experience different conditions from adopted children, it is important to examine peer relationships of this risk group in order to investigate difficulties they can face in their life.

1.4 The Role of Social Support and Temperament in Developmental Outcomes

There are individual differences in the developmental outcomes of children in care. Therefore, in the present study the role of perceived social support and temperament traits of children on child outcomes are investigated. Thus, in the following sections the literature about these environmental and individual factors will be reviewed.

1.4.1 The Direct and Moderator Role of Social Support in Child Outcomes

According to Gottlieb (1983), social support defined as “verbal and non-verbal information or advice, tangible aid, or action that is proffered by social intimates or inferred by their presence and has beneficial emotional or behavioral effects on the recipients.” . In line with the definition, social support makes changes in behaviors, social cognition and self-related values (Danielsen, Samdal, Hetland, & Wold, 2009) and reduces stress of person who receives support (Heinrichs, Baumgartner, Kirschbaum, & Ehlert, 2003). According to ecological and developmental perspectives, children benefit from social support especially if it comes from individuals whom they have secure relationships (Cicchetti, Toth, & Maughan, 2000).

In the literature, there are various support sources including parent, close friend, teacher, and school, which have influences on child outcomes (Rueger, Malecki, & Demaray, 2010). For instance, social support from family members delays the onset of problem behaviors of children under risk (Appleyard, Egeland, & Sroufe, 2007). In addition, support from parents predicted less internalizing and externalizing behaviors through increased school satisfaction (King, Huebner, Suldo, & Valois, 2006). Beside family members, perceived social support from teachers and peers is positively associated with life satisfaction and self-efficacy of children (Danielsen et al., 2009).

While, for children with normal life conditions, social support play a promotive role in their healthy development, perceived social support has a protective role in child outcomes against negative life conditions such as poverty, dangerous neighborhood, and stress (Malecki & Demaray, 2006; Murray, Nettles, Mucherah, & Jones, 2000). For instance, children exposed to natural disasters benefit from social support. To be more precise, among children and adolescents exposed to earthquake (Derivois, Mérisier, Cénat, & Castelot, 2014) and hurricane (Banks & Weems, 2014), there was a negative relationship between post-traumatic stress disorder and perceived social support. Considering the sources of social support, studies emphasize the importance of social support perceived from non-family individuals beside family members. For instance, Banks and Weems (2014) indicated that support perceived from peers is as effective as parental support in psychological symptoms of children exposed to hurricane.

1.4.1.1 The Direct and Moderator Role of Social Support in Academic Achievement

When examined the effects of social support on children's academic achievement, emotional support from parents was beneficial for children's academic outcomes such as school success and motivation during middle childhood (Song, Bong, Lee, & Kim, 2015). Positive influence of social support is also seen in later period of life. Studies in the literature indicated that social support perceived from parents was positively correlated with GPA of undergraduate students (Cutrona, Cole, Colangelo, Assouline, & Russell, 1994). In addition to parental support, children who perceived support from

their teachers and classmates were more motivated in their academic life (Wentzel, Battle, Russell, & Looney, 2010). Perceived teacher support and emotional support in classroom even in kindergarten is important for children's learning engagement and literacy skills during primary school (Lee & Bierman, 2015). On the other hand, even if they are few, some studies showed inconsistent findings. For instance, a study conducted with minorities stated that perceived teacher support did not predict academic achievement at the end of year (Elias & Haynes, 2008). Another study indicated that the relationship between mother and teacher support and academic achievement changed depending on grade level of children. To be more precise, the role of support in academic achievement disappeared in higher grades (Chen, 2008).

Social support also moderated the association between life conditions and academic outcomes. For instance, a study including migrating families indicated that social support positively related to resilience and academic effort in school while negatively associated with school dropout (Wu, Tsang, & Ming, 2012). As another risk group, support perceived from parents mitigated the negative influences of low socioeconomic status on children's grades (Ong, Phinney, & Dennis, 2006). In addition to negative life conditions, support has a moderator role for children at risk of school failure because of their problem behaviors. To be more precise, social support had a protective role for children with early behavioral, attention, and social problems posing a risk for academic achievement of first graders (Hamre & Pianta, 2005).

1.4.1.2 The Direct and Moderator Role of Social Support in Peer Relationships

Social support also has an effect on children's peer relationships. In detail, a positive relationship found between teacher support and peer liking. On the other hand, having conflict with teacher positively related to peer disliking (Hedrickxa, Mainharda, Boor-Klipb, Cillessenb, & Brekelmans, 2016). In addition, several studies indicated that supportive and caring relationships with teachers negatively related to peer victimization. Teachers in the schools had mentoring role and positive relationship between teacher and student was associated with more effective behaviors and feeling safe (Marachi, Astor, & Benbenishty, 2007; Furlong, Chung, Bates, & Morrison,

1995). To the best of our knowledge, there is no study examining the relationship between perceived maternal support and peer-acceptance, rejection, and victimization of children. However, several studies examined the relations between some variables that might be closely related to social support and children's sociometric status and victimization. For instance, emotional connectedness to parents and secure mother-child relationship positively related to peer-acceptance (Clark & Ladd, 2000; Kerns, Klepac, & Cole, 1996). Furthermore, the findings indicating the negative relationship between social support and problem behaviors (Bender & Lösel, 1997) and positive relationship between maternal social support and social competence (Taylor et al., 2015) suggests a significant relationship between social support and peer-acceptance/rejection and victimization.

Considering the moderator role of social support in peer relations, one study examined the moderator role of parental support on peer-rejection (Ato, Galian, & Fernandez-Vilar, 2014) and reported that boys were more likely to be rejected by their peers, and parental support eliminated this gender differences through effortful control. The literature lacks studies examining the relationship between negative environmental conditions and peer-acceptance, rejection, and victimization. However, research focusing on the moderator role of social support in children's adjustment indicated that perceived parent and peer support had buffering effects on problem behaviors against stressful life events (Dubow & Tisak, 1989). Thus, it can be concluded that perceived social support has a protective role for children's peer relationships.

1.4.2 The Direct and Moderator Role of Temperament in Child Outcomes

In addition to environmental factors, studies indicated that individual factors (i.e. genetic factors or temperamental characteristics) have a moderating impact on the relationships between environment and child outcomes (Belsky, 2005). As one of the individual factors, temperament has an effect on children's developmental outcomes. The way individuals approach, react and experience situations have been impacted by their temperamental characteristics which are innate and relatively consistent (Rothbart, 1991). In the literature, there are different dimensions of temperament such as affectivity, perceptual sensitivity, inhibitory control, sociability, and shyness

(Mervielde & De Pauw, 2012). The current study addressed the moderator role of negative affect in the academic achievement and direct role of effortful control and perceptual sensitivity. Negative affect defined as the tendency to experience negative emotions such as distress, discomfort from novelty, hopelessness, fear, anger / disappointment, sadness, and difficulty in soothability. As another temperamental characteristic, effortful control is to suppress unwanted behaviors by using behavioral and attentional control, so enable to show adaptive behaviors (Rothbart & Bates, 2006). This trait involves three subdomains, which are activation control (ability to continue with doing an acitivity in despite of a strong tendency to stop), attention focusing (ability to sustain attention on a task and shift attention), and inhibitory control (ability to plan and control inappropriate reactions) (Rothbart, 2007). Since effortful control was most related temperamental characteristics to school-related outcomes (Morris et al., 2013; Zhou et al., 2010), its role was investigated in the current study. Lastly, perceptual sensitivity defined as being sensitive to stimuli perceived by all five senses of individuals; so, high perceptual sensitivity can be interpreted as the ability to detect even low intensity stimuli (Ellis & Rothbart, 2001). This temperamental trait has been recently studied in child outcomes such as social competence (Memişoğlu, 2015), self-recognition, and self-regulation (Ertekin, 2014). Although there is no study examining the effect of perceptual sensitivity on school-related outcomes, being sensitive to cognitive and social stimuli could also be related to academic achievement and peer relationships.

Considering the moderator role of temperament, there are several models in the literature. One of the vulnerability models is dual-risk which posits that some characteristics (e.g. difficult temperament) make individuals more vulnerable to negative environmental conditions (Sameroff, 1983). Another model is vantage sensitivity which states that some individuals benefit from positive environment disproportionately (vantage sensitivity), while others do not benefit from the same enriched environment (vantage resistance). It focuses only on the differences in benefiting from positive environmental condition (Pluess & Belsky, 2013). The final model focusing on the sensitivity to environmental characteristics is differential susceptibility (Belsky, 2005). This model proposes that certain characteristics of

children make them sensitive to positive and negative environment. In other words, children with particular genetic and temperamental traits show better outcomes when they are exposed to positive environmental conditions but the same characteristics pose a risk when there is a negative condition (Belsky, 1997). In the present study, differential susceptibility hypothesis is tested by examining the moderator role of negative affect that was indicated as a susceptibility marker (Slagt et al., 2016).

1.4.2.1 The Direct and Moderator Role of Temperament in Academic Achievement

Temperamental characteristics of children have shown to be a predictor for academic achievement (Guerin, Gottfried, Oliver, & Thomas, 2003). For instance, persistence and adaptability (Martin & Holbrook, 1985) positively predicted children's grades whereas negative affect (Mullola et al., 2010), anger/frustration (Zhou et al., 2010), higher activity and distractibility (Mullola et al., 2011) negatively predicted the children's academic achievement. Considering the role of effortful control, there was a positive association between academic achievement and effortful control for children in primary school (Zhou, et al., 2010). Regardless of gender and ethnicity, effortful control of children positively predicted academic achievement in terms of math, reading, and school readiness (Morris et al., 2013).

Studies in the literature examined the moderator role of different temperamental characteristics in various child outcomes. For instance, a study showed that effortful control played a moderator role in math and reading of children living with family from low socioeconomic or minority (Liew, Chen, & Hughes, 2010). Within the scope of differential susceptibility, there are very few studies taking difficult temperament as a moderating variable in predicting academic achievement. According to the study conducted by Pluess and Belsky (2010), children with difficult temperament which was reported at 6 months were found more susceptible to the care conditions when their cognitive-academic functioning was assessed during middle childhood. In addition, executive function that is related to academic achievement has examined on children reared in families with chronic poverty and financial hardship (Raver, Blair, & Willoughby, 2013). Results indicated that children with high reactivity had lower

executive functioning when their families experienced more episodes of financial strain whereas they had the higher executive functioning in less economically difficulties. However, this pattern has not detected with chronic poverty. Thus, the role of negative affect as a susceptible factor may change depending on the context and outcome.

1.4.2.2 The Direct and Moderator Role of Temperament in Peer Relationships

Child temperament is also influential in predicting peer relationships. A study examining the relationship between temperament and peer-acceptance/rejection (Szewczyk-Sokolowski, Bost, & Wainwright, 2005) of preschoolers indicated that children with difficult temperament were more likely to be disliked by their peers. As parallel with this study, rejected and neglected children were shown to have higher distractibility and activity level, lower persistence and adaptability (Walker, Berthelsen, & Irving, 2001). The association between activity level and social status was mediated by children's aggressive and prosocial behaviors (Sterry et al., 2010). Furthermore, negative affect was negatively associated with prosocial and cooperative behaviors in the first and third grades that might negatively affect peer relations (Laible, Carlo, Murphy, Augustine, & Roesch, 2014). Moreover, shyness as a temperamental trait was negatively related to sociability of children that can be an important factor in making close friends (Russel, Hart, Robinson, & Olsen, 2003). The role of effortful control in peer relationships was also examined. Studies indicated that children with high effortful control were more likely to regulate their emotions, be socially competent and have positive peer relationships, while children with low effortful control had social difficulties, and more likely to be victimized by peers (Iyer, Kochenderfer-Ladd, Eisenberg, & Thompson, 2010; Spinrad et al., 2006).

Children's temperamental characteristics also moderated the correlation between environmental factors and peer relationships. For instance, effortful control had a moderating effect between interparental conflict and peer relationship which indicating children with high effortful control show lower problems in their relations (David & Murphy, 2007). As a domain of negativity, children with high social fear were found more susceptible to positive and negative environmental conditions in

terms of having good peer relations (Volling & Feagans, 1995). Also, children with high negative temperament have more difficulties in social functioning when they exposed to low quality parenting (Pluess & Belsky, 2010). Thus, in the present study, negative affect has selected to test children's differential susceptibility to environmental conditions.

1.5 Effects of Social Support and Temperament on Children in Care

Considering the children in care, it is obvious to see that every child is affected differently by the shared environmental conditions (van IJzendoorn et al., 2011). Several factors including genetic, brain activity, temperament, care history, and gender of children accounted the individual differences in developmental outcomes (Almas et al., 2012; van IJzendoorn et al., 2011; Vorria et al., 1998). However, only few studies examined the effect of social support and temperament on academic achievement and peer relationships of institutionalized children. One study examined the impact of social support showed that positive relations with caregivers are associated with resilience, self-efficacy, and avoidance from risky behaviors (Drapeau et al., 2007). In our country, a study conducted by Şimşek, Erol, Öztop and Münir (2007) indicated that children's total social support scores negatively correlated with problem behaviors and attention difficulties reported by teachers. However, they did not examine the effects of different social support sources and the moderator role of social support in academic achievement and peer relations. Therefore, present study aimed to fill in this gap by investigating the moderator role of different social support sources on school-related outcomes of children under government protection.

In institutional care literature, only few studies investigated the moderator role of temperamental characteristics. Studies targeting the preschoolers in care indicated that temperament (e.g. perceptual sensitivity and inhibitory control) had a moderator role in children's problem behaviors, self-development, and social competence (Ertekin, 2014; Memişoğlu, 2015). However, no study has investigated the moderating effect of temperament on academic achievement and peer relations of children during middle childhood. Therefore, present study aimed to fill this gap by examining the effect of negative affect as a temperament domain on children's school-related outcomes.

In addition to the interaction between temperament and rearing condition, the effect of perceived social support on child outcomes can show differences depending on children's negative affect. In the literature, studies showed that children with difficult temperament were more susceptible to supportive rearing on different child outcomes (Boyce & Ellis, 2005). For instance, infants high on irritability benefited more from maternal support for their attachment security (Crockenberg, 1981). Also, children with high negative affect had the highest scores on externalizing problems when they received least supportive parenting (Belsky, Hsieh, & Crnic, 1998). In addition, difficult temperament has significantly interacted with maternal responsiveness and parental care quality while predicting children's cooperation and externalizing behaviors (Belsky & Pluess, 2012; Kochanska, Aksan, Carlson, 2005). Since there was no study examining the interaction between negative affect and perceived social support in predicting academic achievement and peer relationships, the present study examined this interaction in both children in care and children living with biological families as exploratory.

In the lights of findings, first the current study attempts to examine the academic achievement and peer relations (peer-acceptance, peer-rejection, and victimization) of children in care and children living with their own parents. Second aim of the present study was to assess the role of social support and temperament on child outcomes. Thirdly, the study aimed to examine whether social support acts as a protective factor for children in care. Forth aim was to investigate differential susceptibility to social support and rearing conditions. Last aim of the present study was to test whether susceptibility to social support differed for children in care. In line with these aims, hypotheses of the present study are stated below.

- 1- Children in care will show poorer academic achievement compared to children living with their own biological families.
- 2- Children in care will be less accepted, more rejected and victimized by their peers compared to children living with their biological families.

- 3- Children who perceive more teacher and caregiver/maternal support will be better at academic achievement and peer relationship when compared to those who perceive less support.
- 4- Considering the role of effortful control and perceptual sensitivity, children with higher effortful control will be better at academic achievement and peer relationship when compared to those with lower level of effortful control. The role of perceptual sensitivity will be examined explanatory.
- 5- Children who perceive less teacher and caregiver support will have poorer academic achievement and worse peer relationship in governmental protection compared to children living with their parents, but no difference is expected for children who receive more teacher and caregiver support across rearing condition (protective role of social support).
- 6- From the differential susceptibility perspective, children with higher level of negative affect will have poorer academic achievement and worse peer relationship in governmental protection whereas they will more benefit from the family environment when compared to children with lower negative affect.
- 7- Children with higher level of negative affect will also have poorer academic achievement and worse peer relationship at low level of perceived support whereas they will more benefit from high perceived support when compared to children with lower negative affect.
- 8- The three-way interaction between negative affect, perceived social support, and rearing condition will be examined explanatory.

CHAPTER 2

METHOD

2.1 Participants

Participants of this study consisted of children who were in care of General Directorate of Children Services of Ministry of Family and Social Policy, their classmates, teachers, and caregivers as well as mothers of children living with their biological families. 400 children who were from 3rd to 6th grades participated in the study. 35 of them were excluded because of more than 5% of incomplete data. Thus, the present study included 365 children; 81 of these were from care villages, 61 of them from group homes, and 223 of them were selected from the classrooms that these youngsters were attending. Random selection for their classmates was not possible since teacher and school administration informed that participation rate was low in previous studies. Therefore, teachers invited families who were more likely to participate to this study. Children's age range were between 7 years and 13 years ($M = 10.18$, $SD = 1.20$). Of these children, 233 (63.4%) were boys and 132 (36.6%) were girls. Demographic information about children across groups were presented in Table 2.1.

Table 2.1 Demographic Information about Children

Groups	Age (Year)		Gender (N)		Grades (N)			
	Mean	SD	Female	Male	3 rd	4 th	5 th	6 th
Children in care	10.29	1.26	48	94	27	35	45	34
Children with biological family	10.11	1.15	84	139	42	56	75	50

Among children in care, duration of care ranged between 4 to 121 months ($M= 37.94$, $SD= 27.11$). In addition, causes of care placements such as abuse, neglect and death of parents were add up. The sum of all risk factors constituted total risk as a composite score. Total risk factors ranged between 1 and 11 ($M= 3.20$, $SD= 1.70$). Children in care are residing in care villages and group homes in Ankara. Considering demographic information about caregivers in these care settings, the age range of caregivers was between 22 and 53 ($M= 35.57$, $SD= 6.62$) and their education levels were high school ($N = 93$) and university ($N = 68$). Demographic information about mothers of children living with biological family can be seen in Table 2.2.

Table 2.2 Demographic Information about Mothers

Mothers		
	N	Percentage
Education Levels		
Illiterate	1	0.4%
Literate	1	0.5%
Primary School	83	37.2%
High School	95	42.6%
University (undergraduate)	38	17%
Graduate school	5	2.2%
Income Levels		
0-1000 TL	3	1.4%
1000-2000 TL	67	30.5%
2000-3000 TL	76	34.4%
3000-4000 TL	30	13.6%
4000-5000 TL	22	10.0%
+5000 TL	18	8.2%
Job		
Unemployed	172	77.8%
Employed	47	21.2%
Marriage Status		
Married	209	95.0%
Divorced	7	3.2%
Other	2	1%

2.2 Measures

2.2.1 Academic Achievement

2.2.1.1 Grades

Children's grades in Math, Turkish, social studies, and science were assessed through school reports. Grades were out of 100 for fourth, fifth and sixth graders, while third graders were evaluated out of 3 as "very good", "good", and "should be developed". In order to equalize all scores third graders grades were multiplied by 33.

2.2.1.2 Academic Engagement

This report measures the academic engagement of children with 15 items. 10 items were translated by researchers from the Behavioral Academic Engagement Scale (BAES) (Hughes & Coplan, 2010). Five additional items were written by the researchers (e.g. "Do not attend the class" (reversed item)). Items of the teacher report were rated on 4-likert scale ranging from 1 (never) to 4 (always)(see Appendix A). After adding new items, exploratory factor analysis was conducted and one-factor solution was suggested (See Table 2.3). Higher scores indicated higher academic engagement. Internal consistency was .96.

2.2.2 Peer Relationships

2.2.2.1 Peer Victimization Scale

This scale was developed by Gültekin and Sayıl (2005) in order to assess peer victimization. Gültekin and Sayıl (2005) formed this measure by using item pool of Multidimensional Peer Victimization Scale (Mynard & Joseph, 2000) and added new items addressing aggressive behaviors. This 28-item measure consisted of five factors, which are teasing, relational victimization, overt victimization, terror, and attacks on property. 27 items rated on 3-point Likert scale ("0 = not at all", "1 = once" and 2 = "more than once") assess the frequency of exposure to victimization. Higher scores indicate that the child is a victim of peer bullying. Internal consistency of the scale was

.86 in the study conducted by Gültekin and Sayıl (2005). In the current study, internal consistency was .93.

Table 2.3 Summary of Principle Component Analysis of Academic Engagement Scale

	Academic Engagement Item Loadings	Item Total Correlations
1. Contributes positively to class.	.91	.89
2. Listens attentively.	.90	.88
3. Focuses on tasks.	.89	.88
4. Shows an interest in learning.	.89	.88
5. Completes assignments in a timely fashion.	.88	.86
6. Tries to answer questions when called upon.	.87	.85
7. Does homeworks completely.	.86	.86
8. Has materials ready in a timely fashion (books open).	.86	.84
9. Fulfills responsibility in group work.	.85	.83
10. Raises hand in class.	.84	.83
11. Asks questions about course topic.	.83	.81
12. Comes to school with necessary materials.	.83	.81
13. Do not attend the lesson.	.63	.40
14. Do not do his/her homework.	.45	.65
15. Talks with others during course, do not listen to the lesson.	.42	.43
Eigenvalue	10.05	
Reliability (Cronbach's Alpha)	.96	
Percentage of Variance Explained	65.05	

2.2.2.2 Measurement of Peer Acceptance and Rejection

In the literature, peer acceptance and rejection generally measured by a nomination method. However, in the current study, nomination method was not an option, since only some of the children from each class participated in the study. Therefore, a child self-report questionnaire was formed. In order to measure peer acceptance, 4 out of 6 items of the “Self-Perception Profile for Children-Social Acceptance Subscale” (Harter, 1985) were selected and two additional items were written by the researchers, considering commonly used nomination statements.

In order to measure peer rejection, six items out of seven selected from exclusion subscale of Child Behavior Scale (CBS) (Ladd & Profilet, 1996; Gulay, 2008). One item “ridiculed by peers” in this subscale was excluded since there was an overlapping item in the “Peer Victimization Scale”. Items in this scale were rated on 4-point Likert scale ranging from “strongly disagree” to “strongly agree”).

Exploratory factor analysis was conducted and results suggested 2-factor solution for 11 items (See Table 2.4). Since one item (i.e. I wish other children would like me more) did not load to any factor, it was removed from the scale. In our sample, internal consistencies were .77 and .72 for peer-acceptance and peer-rejection subscales, respectively.

2.2.3 Social Support

2.2.3.1 Child-Adolescent Social Support Scale

This scale was developed by Malecki and Demaray (2002) in order to measure perceived social support from parents, classmates, teachers, school, and close friends. Yardımcı and Başbakkal (2009) adapted this scale into Turkish. New factor structure was found in the Turkish version as mother, father, teacher, classmates and close friends support. In the current study, mother and teacher support subscales –each including 12 items- were used (see Appendix B). Children’s perception of support was measured for frequency and importance. In the present study, only frequency responses, which are rated on 4-point Likert scale (1 = Never and 4 = Always) were

evaluated. For children under protection of social services, mother support subscale was titled as “caregiver support”. Internal consistencies were .88 and .89 for perceived mother/caregiver and teacher support, respectively.

Table 2.4 Summary of Principle Component Analysis of Peer Acceptance/Rejection Scale

	Peer Acceptance Item Loadings	Peer Rejection Item Loadings	Item Total Correlations
1. Other children ignore me.		.68	.52
2. Other children exclude me from activities.		.64	.52
3. Other children do not choose me as playmate.		.59	.48
4. Other children refuse to let me play.		.57	.47
5. Other children avoid me.		.40	.36
6. I wish other children would like me more.*	.29	.15	.05
7. I have lots of friends.	.67		.58
8. Other children like me.	.57		.59
9. I am chosen to group activities.	.55		.57
10. I am popular among my peers.	.53		.45
11. I usually do a lot of things with my friends.	.51		.48
12. Other children want to play with me during breaks.	.44		.47
Eigenvalue	4.17	1.44	
Reliability (Cronbach's Alpha)	.77	.74	
Percentage of Variance Explained	29.75	6.70	

Note. * This item was deleted to increase reliability of Peer Rejection Factor.

2.2.4 Temperament

2.2.4.1 The Temperament in Middle Childhood Questionnaire (TMCQ)

This scale was developed by Simonds and Rothbart (2004) in order to measure temperamental characteristics of children aged between 7 and 10. This self-report consists of 157 statements which assess four higher-order scales including 17 lower-order subscales such as activity level, anger/frustration, assertiveness, attentional focusing, discomfort, high intensity pleasure, impulsivity, inhibitory control, perceptual sensitivity, fear, sadness, shyness, and activation control. Items in this scale were rated on 5-point Likert scale (1 = almost never true, 5 = almost always true). In the current study, 8-item inhibitory control as a subscale of effortful control, 8-item soothability/falling reactivity as a subscale of negative affect, and 10-item perceptual sensitivity were used. These subscales were translated into Turkish by translation and back-translation method by the developmental psychology graduate students. Internal consistencies were .76, .84, and .82 for inhibitory control, perceptual sensitivity, soothability/falling reactivity subscales, respectively.

2.2.4.2 The Early Adolescent Temperament Scale-Revised Form (EATS-R)

Capaldi and Rothbart (1992) developed this scale in order to measure temperamental characteristics of early adolescents (9- to 15-year-olds). The short version (65 items) of this original scale was used in present study (Ellis & Rothbart, 2001). This form consists of 4 higher-order factors and each factor includes three lower-order subscales. These subscales are effortful control (activation control, attentional focusing, inhibitory control), surgency (high intensity pleasure, shyness, fear), negative affect (frustration, aggression, depressive mood), and affiliativeness (affiliation, perceptual sensitivity, pleasure sensitivity). In this study, 6-item attention focusing and 7-item activation control as lower-levels factor of effortful control, and 6-item aggression as a lower level of negative affect were selected. These subscales were translated to Turkish by translation and back-translation method. Internal consistencies of these subscales were .73, .78, and .71 for attention focusing, activation control, and aggression subscales.

In the present study, temperamental characteristics of effortful control (inhibitory control, attention focusing, and activation control), perceptual sensitivity, and negative affect (aggression and soothability/falling reactivity) were assessed. Reliability analyses were conducted for composite scores of subscales. Internal consistencies were .90, .84, and .81 for effortful control, perceptual sensitivity, and negative affect. In negative affect subscale, one item was excluded because its item total correlation was very low. After that, the reliability of this scale was increased to .84.

2.2.5 Experience History

Experience History Scale included several questions addressing demographic characteristics and care history of children. Information related to children's gender, age, length of institutionalization, causes of placement, and number of movement between care settings were obtained from children's files in the General Directorate of Children's Services or from social service staffs (see Appendix C).

2.2.6 Demographic Information

Demographic information form filled in by mothers consisted of several questions related to mothers' and fathers' age, education levels, professions, incomes, marital status, and number of children (see Appendix D).

2.3 Procedure

This study was a part of a project addressing developmental outcomes of children in care during middle childhood. Ethical approval was obtained from Institutional Review Board in Middle East Technical University (see Appendix E). In addition, the permission from General Directorate of Children's Services and Ministry of Family and Social Policy, and Ministry of Education was taken in order to collect data from children in group homes/care villages and public schools. Researchers visited group homes or care villages to complete child and caregiver assessments. Caregivers who gave informed consent and children who gave verbal assent, completed questionnaires. Participant children's schools were determined and sixty-two schools in total were visited to recruit their classmates as comparison group of children living with their

biological parents. After explaining the study to classroom teacher, classmates of children in care were given an envelope including informed consent and questionnaires in order to deliver it to their mothers. Afterward, children whose parents accepted to participate in the study were included as a control group. Child questionnaires were given to children in groups of 2-3 students in an available classroom in the school during their school time. Then, teachers filled in the questionnaires related to academic engagement for all children who participated in the study. Researcher thanked to children and teachers for their participation and answered their questions if they had. At the end of the semester, researcher revisited schools and got information about grades from vice-principal/assistant principal.

CHAPTER 3

RESULTS

3.1 Data Screening

Before analysis, data were screened using Statistical Package for Social Science (SPSS) version 23.0. First, missing value analysis were conducted for all subscales in child, mother, and teacher assessments, separately. Since social support and temperament domains were included in all models, thirty-four cases with more than 5% missing values on these scales were deleted from the data set. Regarding dependent variables, some cases out of the remaining 365 cases had more than 5% missing values for academic achievement ($N = 10$) and grades ($N = 9$) subscales. Therefore, these cases were kept in the analyses by coding their mean scores as missing in these outcome variables. Other missing values that were below 5% were replaced by Expectation-Maximization method. Second, univariate and multivariate outliers were checked for each group separately. In total, there were twenty-four univariate outliers that were identified as not between -3.29 and 3.29 (Tabachnick & Fidell, 2007). For children under protection, five univariate outliers were found in variables of maternal support, teacher support and effortful control. For children living with their parents, nineteen univariate outliers were found in victimization, peer acceptance, peer rejection, grades, maternal support, and teacher support domains. After, outliers were replaced with the scores created by adding one unit to the nearest acceptable value. Multivariate outliers were also checked by using Mahalanobis distance. No multivariate outlier was found for both samples. Moreover, multicollinearity assumption was checked. According to Pearson correlations, highest correlation between variables was identified as .73 which showed that the assumption was not violated. Lastly, assumptions of linearity and homoscedasticity were controlled with scatter-plots. Further analyses were carried out on remaining 365 cases.

3.2 Descriptive Statistics

Sample sizes, means, and standard deviations for temperament domains (effortful control, perceptual sensitivity, and negative affect), perceived social support (mother and teacher social support), academic achievement (academic engagement and grades), and peer relationships (victimization, peer acceptance and rejection) were given separately for two groups in Table 3.1.

Table 3.1 Descriptive Statistics for Study Variables

Variables	Children under government protection			Children living with biological parents		
	Mean	SD	N	Mean	SD	N
Temperament						
Effortful Control	3.21	0.64	142	3.72	0.61	223
Perceptual Sensitivity	3.82	0.73	142	4.23	0.52	223
Negative Affect	2.81	0.68	142	2.54	0.69	223
Social Support						
Maternal Support	3.53	0.58	142	3.66	0.36	223
Teacher Support	3.52	0.61	142	3.63	0.38	223
Academic Achievement						
Academic Engagement	2.56	0.65	138	3.47	0.49	213
Grades	66.87	14.98	137	88.41	10.45	214
Peer Relationships						
Victimization	0.41	0.41	142	0.30	0.28	223
Peer-Acceptance	3.30	0.72	142	3.38	0.53	223
Peer-Rejection	1.64	0.73	142	1.34	0.48	223

3.3 Correlation Analysis

Pearson bivariate correlation analysis was performed and correlation matrix included correlations between study variables (academic achievement, peer relationships, temperamental characteristics, and perceived social support) and demographic variables (gender and age) for all participants (see Table 3.2).

3.4 One-Way Between Subject MANOVAs for Comparison between Groups in Predicting Child Outcomes

A series of multivariate analysis of variance (MANOVA) were conducted to compare academic outcomes consisting of behavioral engagement in class and grades between groups. There was a significant difference between children in care and children living with their biological parents in their academic achievement, $\lambda = 0.53$, $F(2, 345) = 153.03$, $p < .001$. Considering separate univariate statistics, rearing environment of children had a significant effect on both behavioral engagement, $F(1, 346) = 222.57$, and grades, $F(1, 346) = 249.99$, $p < .001$. To be more precise, children in care ($M = 2.56$, $SD = .05$) showed less engagement in class than children living with their families ($M = 3.48$, $SD = .04$). Also, children under government protection ($M = 66.81$, $SD = 1.06$) had lower grades compared to their peers ($M = 88.20$, $SD = 0.84$).

Another one-way between subjects MANOVA was carried out for peer relationships. Results with Bonferroni correction indicated that children significantly differed from each other based on their rearing condition, $\lambda = 0.93$, $F(3, 361) = 8.82$, $p < .001$. Univariate analyses showed that there were significant differences between children in care and children living with their biological parents in terms of victimization, $F(1, 363) = 9.38$, $p < .05$, and peer rejection, $F(1, 363) = 21.68$, $p < .001$, but not in peer acceptance. To be more precise, children who were under protection exposed to more victimization ($M = 0.42$, $SD = .41$) than children living with their biological parents ($M = 0.30$, $SD = .29$). In line with this finding, children in care ($M = 1.64$, $SD = .73$) perceived more rejection by their peers than other children ($M = 1.35$, $SD = .48$).

Table 3.2 Pearson Correlations between Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1												
2. Age	.05	1											
3. Group	.04	-.07	1										
4. Effortful Control	.14**	0.2	.37**	1									
5. Perceptual Sensitivity	.14**	-.01	.32**	.44**	1								
6. Negative Affect	-.07	.00	-.19**	-.55**	-.14**	1							
7. Maternal Support	.04	-.08	.13*	.18**	.22**	-.11*	1						
8. Teacher Support	.01	-.04	.11*	.14**	.17**	-.02	.50**	1					
9. Academic Engagement	.25**	-.12*	.62**	.47**	.36**	-.27**	.15**	.15**	1				
10. Grades	.15**	-.29**	.65**	.41**	.24	-.24**	.13*	.14*	.73**	1			
11. Victimization	-.10	-.11*	-.16**	-.24**	-.18**	.19**	-.36**	-.34**	-.25**	-.24**	1		
12. Peer-Acceptance	.05	.02	.07	.17**	.20**	-.06	.38**	.39**	.14**	.05	-.19**	1	
13. Peer-Rejection	-.11*	-.07	-.24**	-.28**	-.27**	.13*	-.26**	-.25**	-.35**	-.28**	.34**	-.53**	1

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

3.5 Hierarchical Regression Analyses

Second aim of the study was to investigate whether children's perceived social support and temperamental characteristics moderated the relationship between rearing condition and child outcomes. For this aim, a series of hierarchical regression analyses were carried out. For the moderation analyses, two-way and three-way interactions between group, social support, and temperament were computed. While examining the moderation effect, the continuous variables were centered in order to avoid possible multicollinearity problem.

Two hierarchical regression analyses consisting of six steps were run for each outcome variable. In the first step, age and gender (0 = male, 1= female) were entered to the model. Second step included group- rearing condition of children. In the third step, temperamental domains were entered. Social support sources were added to the model in the fourth step. Fifth step included two-way interaction terms (group*temperament, group*social support, temperament*social support). In the sixth and final step, a three-way interaction (group*temperament*social support) was entered to the model.

These regression analyses were also conducted only for children under government protection in order to test whether results show differences in those children after their residential care history (i.e. the total risk, number of residential settings, and ratio of duration in care to children's ages) was controlled. Results of these analyses were given at the end of the chapter¹.

3.5.1 Hierarchical Regression Analyses in Predicting Academic Achievement

Four hierarchical regression analyses were performed in order to assess moderator role of social support sources (maternal and teacher support) and negative affect as a temperamental characteristic in the prediction of academic engagement and grades of children.

3.5.1.1 Hierarchical Regression Analyses for Academic Engagement

The first step which included age and gender was significant, $R^2 = .08$ (adjusted $R^2 = .08$), $F(2, 352) = 15.32$, $p < .001$. Both age ($\beta = -.14$, $p < .01$) and gender ($\beta = .26$, p

< .001) were significant predictors for academic engagement. In the second step, group variable was added to the model, and this step contributed significantly to the explained variance, $R^2 = .44$ (adjusted $R^2 = .44$), $F_{change}(1, 351) = 228.69$, $p < .001$. In addition to age and gender, rearing condition of children significantly predicted academic engagement ($\beta = .61$, $p < .001$). Temperamental characteristics were entered in the third step and made a significant contribution to the model, $R^2 = .51$ (adjusted $R^2 = .50$), $F_{change}(3, 348) = 14.43$, $p < .001$. Age ($\beta = -.10$, $p < .01$), gender ($\beta = .19$, $p < .001$), and group ($\beta = .50$, $p < .001$) remained significant in this step. Among temperamental characteristics, effortful control positively predicted academic engagement ($\beta = .22$, $p < .01$). Also, perceptual sensitivity approached to significance ($\beta = .08$, $p = .07$). In the fourth step, social support sources which are perceived maternal support and teacher support, were added, but these domains did not contribute to the model significantly, $R^2 = .51$ (adjusted $R^2 = .49$), $F_{change}(2, 346) = .99$, *ns*. Fifth and sixth step included two-way and three-way interactions. In the fifth step, group*negative affect, group*maternal support, and negative affect*maternal support were entered. These interactions did not make a significant contribution, $R^2 = .51$ (adjusted $R^2 = .49$), $F_{change}(3, 343) = .07$, *ns*. In the last step, a three-way interaction (group*negative affect*maternal support) were added, but no significant increase in explained variance, $R^2 = .51$ (adjusted $R^2 = .49$), $F_{change}(1, 342) = .00$, *ns*. Results indicated in Table 3.3. Since there was no significant interaction, their values were not shown in the table.

For the moderator role of teacher support, all steps were repeated. Statistical values in the first four steps stated above were the same in this hierarchical regression analysis. In the fifth step, teacher support were entered to the interaction terms instead of perceived maternal support. Interactions did not make a significant contribution to the model, $R^2 = .51$ (adjusted $R^2 = .50$), $F_{inc}(3, 343) = 1.31$, *ns*. However, teacher social support had unique effect on academic engagement in this step, ($\beta = .12$, $p < .05$).

In the last step, three-way interaction between group, negative affect, and teacher social support was added and this step made a marginally significant contribution to the model, $R^2 = .52$ (adjusted $R^2 = .50$), $F_{inc}(1, 342) = 3.30$, $p = .07$. The interaction

between children's rearing condition, negative affect, and teacher support was found marginally significant, ($\beta = .10, p = .07$) (see Table 3.3).

Table 3.3 Results of the Hierarchical Regression Analyses in Predicting Academic Engagement: Temperament and Social Support as Moderators

Predictors	R	R ²	ΔR^2	F	F _{change}	B	SE	β
Step 1	.28	.08	.08	15.32	15.32			
Age						-.08	.03	-.14**
Gender						.38	.08	.26***
Step 2	.67	.44	.36	93.05	228.69			
Age						-.05	.02	-.09*
Gender						.34	.06	.23***
Group						.88	.06	.61***
Step 3	.71	.51	.06	59.08	14.43			
Age						-.06	.02	-.10**
Gender						.28	.06	.19***
Group						.72	.06	.50***
Perceptual Sensitivity						.089	.05	.08 ^a
Effortful Control						.232	.06	.22***
Negative Affect						-.02	.04	-.02
Step 4	.71	.51	.003	44.56	.99			
Age						-.06	.02	-.10**
Gender						.28	.05	.19**
Group						.72	.06	.49**
Perceptual Sensitivity						.08	.05	.08 ^a
Effortful Control						.23	.06	.21***
Negative Affect						-.02	.04	-.03
Maternal Support						-.04	.07	-.03
Teacher Support						.09	.06	.07

Table 3.3 (continued)

Negative Affect and Teacher Support as Moderators							
	Step 5	.72	.51	.01	32.85	1.31	
Age							-0.06 .02 -.10**
Gender							.29 .06 .20***
Group							.71 .06 .49***
Perceptual Sensitivity							.09 .05 .08 ^a
Effortful Control							.24 .06 .22***
Negative Affect							-.03 .06 -.03
Maternal Support							-.03 .07 -.02
Teacher Support							.16 .08 .12*
Group* Negative Affect							.00 .08 .00
Group*Teacher Support							-.20 .11 -.09 ^a
Negative Affect *Teacher Support							-.08 .08 -.04
	Step 6	.72	.52	.01	30.59	3.30	
Age							-0.06 .02 -.10**
Gender							.29 .06 .20***
Care Type							.71 .06 .49***
Perceptual Sensitivity							.08 .05 .20 ^a
Effortful Control							.23 .06 .22***
Negative Affect							-.03 .06 -.03
Maternal Support							-.02 .07 -.01
Teacher Support							.16 .08 .12*
Group* Negative Affect							.01 .08 .00
Group *Teacher Support							-.19 .11 -.09 ^a
Negative Affect *Teacher Support							-.22 .11 -.11 ^a
Group* Negative Affect *Teacher Support							.28 .15 .10 ^a

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, ^a marginally significant.

The interaction between children’s rearing condition, negative affect, and teacher support was shown in Figure 3.1. According to this figure, two pairs of interaction was significant in predicting academic engagement. First, interaction between negative affect and teacher support was significant for children living in institutional care, but this interaction was not significant for children living with their biological parents. Among children in care, perceiving higher social support from teacher made a significant increase in academic engagement for children with low negative affect. However, there was no significant change depending on perceived support for children with high negative affect. Also, the interaction between rearing condition and social support was significant only for children with low negative affect. Among children with low negative affect, academic engagement of children in care significantly increased when they perceived higher social support from their teachers, but there was no difference in academic engagement of family-reared children depending on the levels of teacher support.

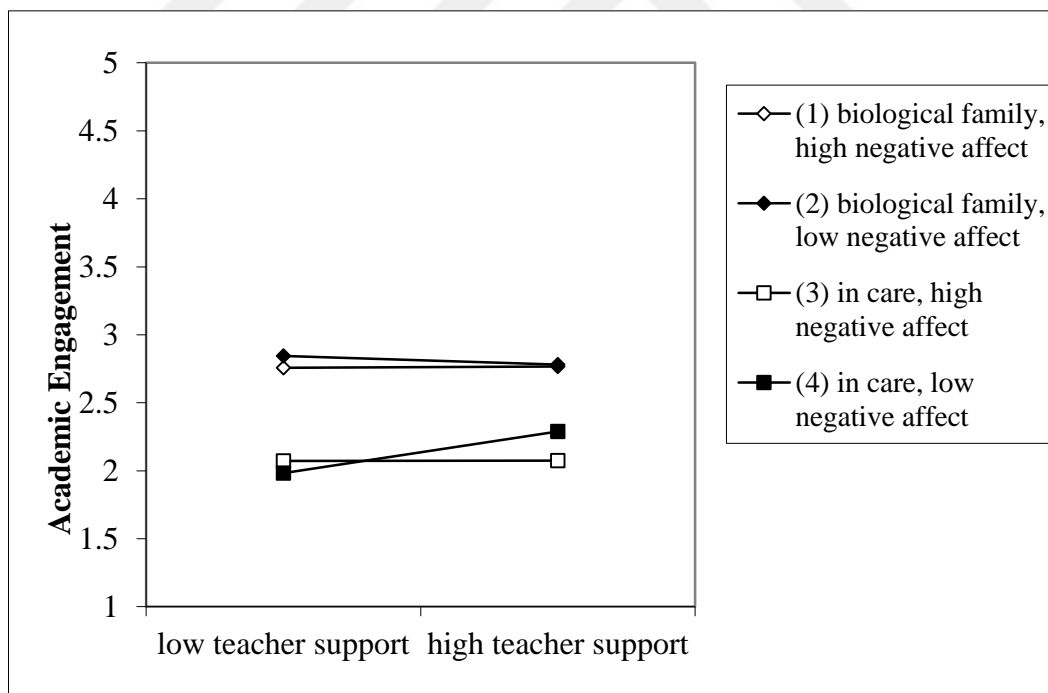


Figure 3.1 The Interaction between Rearing Condition, Negative Affect, and Teacher Support in Predicting Academic Engagement.

3.5.1.2 Hierarchical Regression Analyses for Grades

The first step which included age and gender was found significant, $R^2 = .11$ (adjusted $R^2 = .10$), $F(2, 353) = 21.52, p < .001$. Both age ($\beta = -.30, p < .001$) and gender ($\beta = .16, p < .01$) had significant effects on children's grades. In the second step, group variable was entered and this step contributed significantly to the explained variance, $R^2 = .49$ (adjusted $R^2 = .49$), $F_{change}(1, 352) = 267.08, p < .001$. Temperamental characteristics were added in the third step and they made a significant contribution to the explained variance, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(3, 349) = 8.74, p < .001$. In addition to age ($\beta = -.26, p < .001$), gender ($\beta = .10, p < .01$), and group ($\beta = .56, p < .001$), effortful control was also a significant predictor for grades ($\beta = .20, p < .001$) in this step. In the fourth step, maternal support and teacher support, were entered, however these variables did not contribute to the model significantly, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(2, 347) = 1.11, ns$. In the fifth and sixth steps, two-way and three-way interactions were included to the model. In the fifth step, group*negative affect, group*maternal support, and negative affect*maternal support were added. These interactions did not make a significant contribution, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(3, 344) = .39, ns$. In the last step, a three-way interaction (group*negative affect*maternal support) was entered, but no significant contribution was found, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(1, 343) = .00, ns$.

In order to investigate the moderator role of teacher support, the first four steps were performed in the same way as the previous analysis. Therefore, statistical values were identical in these steps stated above. In the fifth step, two-way interactions were entered by changing the variable of maternal support with teacher support. These interaction effects did not contribute to the model significantly, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(3, 344) = .46, ns$. Last step including group*negative affect*teacher support interaction also did not make a significant contribution, $R^2 = .53$ (adjusted $R^2 = .52$), $F_{change}(1, 343) = .42, ns$. Table 3.4 demonstrated the main effects of predictors for grades of children in the first four steps.

Table 3.4 Results of the Hierarchical Regression Analyses in Predicting Grades

Predictors	R	R ²	ΔR^2	F	F _{change}	B	SE	B
Step 1	.33	.11	.11	21.52	21.52			
Age						-4.02	.68	-.30***
Gender						5.30	1.70	.16**
Step 2	.70	.49	.39	114.18	267.08			
Age						-3.42	.52	-.25**
Gender						4.07	1.28	.12**
Group						20.74	1.27	.62***
Step 3	.73	.53	.04	65.23	8.74			
Age						-3.53	.50	-.26***
Gender						3.42	1.26	.10**
Group						18.56	1.35	.56***
Perceptual Sensitivity						-1.11	1.06	-.04
Effortful Control						4.97	1.24	.20***
Negative Affect						-.44	.97	-.02
Step 4	.73	.53	.003	49.23	1.11			
Age						-3.54	.05	-.26***
Gender						3.44	1.26	.10**
Group						18.54	1.35	.56***
Perceptual Sensitivity						-1.14	1.08	-.05
Effortful Control						4.83	1.24	.20***
Negative Affect						-.57	.97	-.04
Maternal Support						-1.25	1.53	-.04
Teacher Support						2.04	1.37	.06

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

3.5.2 Hierarchical Regression Analyses in Predicting Peer Relationships

There were three outcomes related to peer relationships, which are victimization, peer acceptance, and peer rejection. Two hierarchical regression analyses were conducted for each outcome in order to assess moderator role of temperamental characteristic of negative affect, and social support.

3.5.2.1 Hierarchical Regression Analyses for Victimization

In the first step, gender and age were included and accounted for a significant variance in victimization, $R^2 = .02$ (adjusted $R^2 = .02$), $F(2, 362) = 3.74$, $p < .05$. Children's age had a unique effect on their victimization ($\beta = -.10$, $p < .05$). Rearing condition of children were entered in the second step and variance explained by the model was increased significantly, $R^2 = .05$ (adjusted $R^2 = .04$), $F_{change}(1, 361) = 10.07$, $p < .05$. Findings indicated that children living with their parents were less likely to be victimized by their peers when compared to children in care ($\beta = -.16$, $p < .01$). Third step in which temperamental characteristics were entered also made a significant contribution, $R^2 = .09$ (adjusted $R^2 = .07$), $F_{change}(3, 358) = 5.46$, $p < .01$. In the fourth step, social support sources were entered and significantly contributed to the model, $R^2 = .22$ (adjusted $R^2 = .20$), $F_{change}(2, 356) = 29.78$, $p < .001$. Both perceived maternal support ($\beta = -.23$, $p < .001$) and teacher support ($\beta = -.20$, $p < .001$) negatively predicted peer victimization (see Table 3.5). In the fifth and sixth steps, interactions between group, negative affect, and maternal support were entered. The fifth step ($R^2 = .22$ (adjusted $R^2 = .20$), $F_{change}(3, 353) = 0.31$, *ns*) and sixth step ($R^2 = .23$ (adjusted $R^2 = .20$), $F_{change}(1, 352) = 1.87$, *ns*) did not significantly contributed to the variance.

Considering teacher support as moderator, in the fifth and sixth steps, interaction of this variable instead of maternal support with care type and negative affect was included. The fifth step which included two-way interactions did not make a significant contribution, $R^2 = .22$ (adjusted $R^2 = .20$), $F_{change}(3, 353) = 0.19$, *ns*. Also, three-way interaction in the sixth step did not increase the variance significantly, $R^2 = .22$ (adjusted $R^2 = .20$), $F_{change}(1, 352) = 1.37$, *ns*.

Table 3.5 Results of the Hierarchical Regression Analyses in Predicting Victimization

Predictors	R	R ²	ΔR ²	F	F _{change}	B	SE	B
Step 1	.14	.02	.02	3.74	3.74			
Age						-.03	.02	-.10*
Gender						-.07	.04	.09 ^a
Step 2	.22	.05	.03	5.92	10.07			
Age						-.03	.02	-.12*
Gender						-.06	.04	-.09
Group						-.12	.04	-.16**
Step 3	.30	.09	.04	5.80	5.46			
Age						-.03	.02	-.11*
Gender						-.06	.04	-.06
Group						-.06	.04	-.08
Perceptual Sensitivity						-.05	.03	-.09
Effortful Control						-.06	.04	-.11
Negative Affect						.04	.03	.09
Step 4	.47	.22	.13	12.49	29.78			
Age						-.04	.01	-.14*
Gender						-.04	.03	-.06
Group						-.04	.04	-.06
Perceptual Sensitivity						-.01	.03	-.02
Effortful Control						-.04	.03	-.07
Negative Affect						.04	.03	.10
Maternal Support						-.17	.04	-.23***
Teacher Support						-.14	.04	-.20***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, ^a marginally significant.

3.5.2.2 Hierarchical Regression Analyses for Peer-Acceptance

In the prediction of peer acceptance, the first step of hierarchical regression indicated that gender and age did not account a significant variance, $R^2 = .003$ (adjusted $R^2 = -.003$), $F(2, 362) = 0.50$, *ns*. Rearing condition of children were entered to the model in the second step and variance explained by the model did not change significantly, $R^2 = .01$ (adjusted $R^2 = -.001$), $F_{change}(1, 361) = 1.63$, *ns*.

When temperamental characteristics were entered in the third step, a significant contribution were found, $R^2 = .05$ (adjusted $R^2 = .03$), $F_{change}(3, 358) = 5.41$, $p < .01$. Perceptual sensitivity positively predicted peer acceptance ($\beta = .15$, $p < .01$) while effortful control approached to significance ($\beta = .12$, $p = .08$). In the fourth step, social support sources were added and made a significant increase in variance, $R^2 = .22$ (adjusted $R^2 = .20$), $F_{change}(2, 356) = 37.34$, $p < .001$ (see Table 3.6). Both maternal support ($\beta = .23$, $p < .001$) and teacher support ($\beta = .25$, $p < .001$) positively predicted peer acceptance. In the fifth and sixth steps, interactions between care type, negative affect, and maternal support were entered. Two-way interactions in the fifth steps did not account a significant variance, $R^2 = .22$ (adjusted $R^2 = .19$), $F_{change}(3, 353) = 0.56$, *ns*. In addition, last step did not make a significant contribution to the variance, $R^2 = .22$ (adjusted $R^2 = .19$), $F_{change}(1, 352) = 0.70$, *ns*.

In order to assess the moderating role of teacher support, the same steps were conducted by replacing maternal support with teacher support in fifth and sixth steps. The fifth step including two-way interactions did not make a significant contribution, $R^2 = .22$ (adjusted $R^2 = .19$), $F_{change}(3, 353) = 0.23$, *ns*. Also, in the sixth step, three-way interaction did not increase the variance significantly, $R^2 = .22$ (adjusted $R^2 = .19$), $F_{change}(1, 352) = 0.88$, *ns*.

Table 3.6 Results of the Hierarchical Regression Analyses in Predicting Peer-Acceptance

Predictors	R	R ²	ΔR ²	F	F _{change}	B	SE	B
Step 1	.05	.00	.00	0.50	0.50			
Age						0.01	.03	.02
Gender						0.06	.07	.05
Step 2	.09	.01	.004	0.88	1.63			
Age						0.01	.03	.02
Gender						0.06	.07	.05
Group						0.08	.07	.07
Step 3	.22	.05	.04	3.16	5.14			
Age						0.01	.03	.02
Gender						0.02	.07	.01
Group						-0.03	.07	-.02
Perceptual Sensitivity						0.15	.06	.16**
Effortful Control						0.11	.07	.12 ^a
Negative Affect						0.03	.05	.03
Step 4	.46	.22	.17	12.19	37.34			
Age						0.02	.02	.04
Gender						0.02	.06	.02
Group						-0.05	.07	-.04
Perceptual Sensitivity						0.08	.05	.09
Effortful Control						0.08	.06	.08
Negative Affect						0.02	.05	.02
Maternal Support						0.30	.07	.23***
Teacher Support						0.30	.07	.25***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, ^a marginally significant.

3.5.2.3 Hierarchical Regression Analyses for Peer-Rejection

The first step of the regression analysis showed that gender and age account a marginal significant variance in peer rejection, $R^2 = .02$ (adjusted $R^2 = .01$), $F(2, 362) = 2.86$, $p = .06$. Gender of the children had unique variance in peer rejection ($\beta = -.11$, $p < .05$). Group were added in the second step and variance explained by the model increased significantly, $R^2 = .07$ (adjusted $R^2 = .07$), $F_{change}(1, 361) = 22.12$, $p < .001$. Children in care perceived more rejection than children living with their biological parents, ($\beta = -.24$, $p < .001$). In the third step, temperamental characteristics were entered and they made a significant contribution, $R^2 = .13$ (adjusted $R^2 = .11$), $F_{change}(3, 358) = 7.70$, $p < .001$. In addition to care type, perceptual sensitivity ($\beta = -.15$, $p < .01$) and effortful control ($\beta = -.16$, $p < .05$) negatively predicted peer rejection. Social support sources were added in the fourth step and a significant increase in variance explained by the model, $R^2 = .18$ (adjusted $R^2 = .16$), $F_{change}(2, 356) = 10.91$, $p < .001$. Both mother ($\beta = -.13$, $p < .05$) and teacher support ($\beta = -.14$, $p < .05$) negatively predicted the peer rejection in this step. In the fifth and sixth steps, interactions between group, negative affect, and maternal support were entered. Two-way interactions in the fifth step showed a marginally significant increase in the explained variance, $R^2 = .19$ (adjusted $R^2 = .17$), $F_{change}(3, 353) = 2.11$, $p = .09$. The interaction effect between group and negative affect approached to significance, ($\beta = .15$, $p = .06$) (see Table 3.7). The last step did not make a significant contribution to the variance, $R^2 = .20$ (adjusted $R^2 = .17$), $F_{change}(1, 352) = 0.97$, *ns*.

While investigating the moderating role of teacher support, the first four steps were identical with the previous hierarchical regression analysis. In the fifth and sixth steps, interactions of teacher support were examined instead of maternal support. In the fifth step, two way interactions between care type, and negative affect and teacher support did not make a significant contribution, $R^2 = .19$ (adjusted $R^2 = .17$), $F_{change}(3, 353) = 1.63$, *ns*. However, the interaction between group and negative affect was found marginally significant, ($\beta = .13$, $p = .09$). Moreover, the sixth step which included three-way interaction did not increase the variance significantly, $R^2 = .19$ (adjusted $R^2 = .16$), $F_{change}(1, 352) = 0.24$, *ns*.

Table 3.7 Results of the Hierarchical Regression Analyses in Predicting Peer Rejection

Predictors		R	R ²	ΔR ²	F	F _{change}	B	SE	B
	Step 1	.13	.02	.02	2.86	2.86			
Age							-.03	.03	-.06
Gender							-.14	.07	-.11*
	Step 2	.27	.07	.06	9.39	22.12			
Age							-.04	.03	-.08
Gender							-.12	.06	-.10 ^a
Group							-.30	.06	-.24***
	Step 3	.36	.13	.06	8.81	7.70			
Age							-.04	.03	-.07
Gender							-.07	.06	-.06
Group							-.17	.07	-.13*
Perceptual Sensitivity							-.14	.05	-.15**
Effortful Control							-.15	.06	-.16*
Negative Affect							-.01	.05	-.01
	Step 4	.42	.18	.05	9.71	10.96			
Age							-.04	.03	-.09 ^a
Gender							-.08	.06	-.06
Group							-.15	.07	-.12*
Perceptual Sensitivity							-.10	.05	-.11*
Effortful Control							-.13	.06	-.14*
Negative Affect							-.01	.05	-.01
Maternal Support							-.17	.07	-.13*
Teacher Support							-.16	.07	-.14*

Table 3.7 (continued)

Negative Affect and Maternal Support as Moderators									
	Step 5	.44	.19	.01	7.70	2.11			
Age							-.05	.03	-.09 ^a
Gender							-.09	.06	-.07
Group							-.16	.07	-.13*
Perceptual Sensitivity							-.10	.05	-.11*
Effortful Control							-.13	.06	-.14*
Negative Affect							-.09	.07	-.11
Maternal Support							-.26	.09	-.20**
Teacher Support							-.16	.07	-.13*
Group * Negative Affect							.16	.08	.15 ^a
Group * Maternal Support							.22	.13	.10
Negative Affect * Maternal Support							.06	.09	.03
Negative Affect and Teacher Support as Moderators									
	Step 5	.44	.19	.01	7.55	1.63			
Age							-.05	.03	-.09 ^a
Gender							-.09	.06	-.07
Group							-.16	.07	-.13*
Perceptual Sensitivity							-.10	.05	-.11*
Effortful Control							-.12	.06	-.14*
Negative Affect							-.09	.07	-.11
Maternal Support							-.20	.08	-.15*
Teacher Support							-.16	.08	-.13 ^a
Group * Negative Affect							.14	.08	.13 ^a
Group * Teacher Support							.04	.12	.02
Negative Affect * Teacher Support							.10	.08	.06

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, ^a marginally significant.

Interaction between children's rearing condition and negative affect was shown in Figure 3.2. According to this figure, there was a significant difference between children in care and children living with their biological parents when they were with low negative affect. However, this difference disappeared for children with high negative affect.

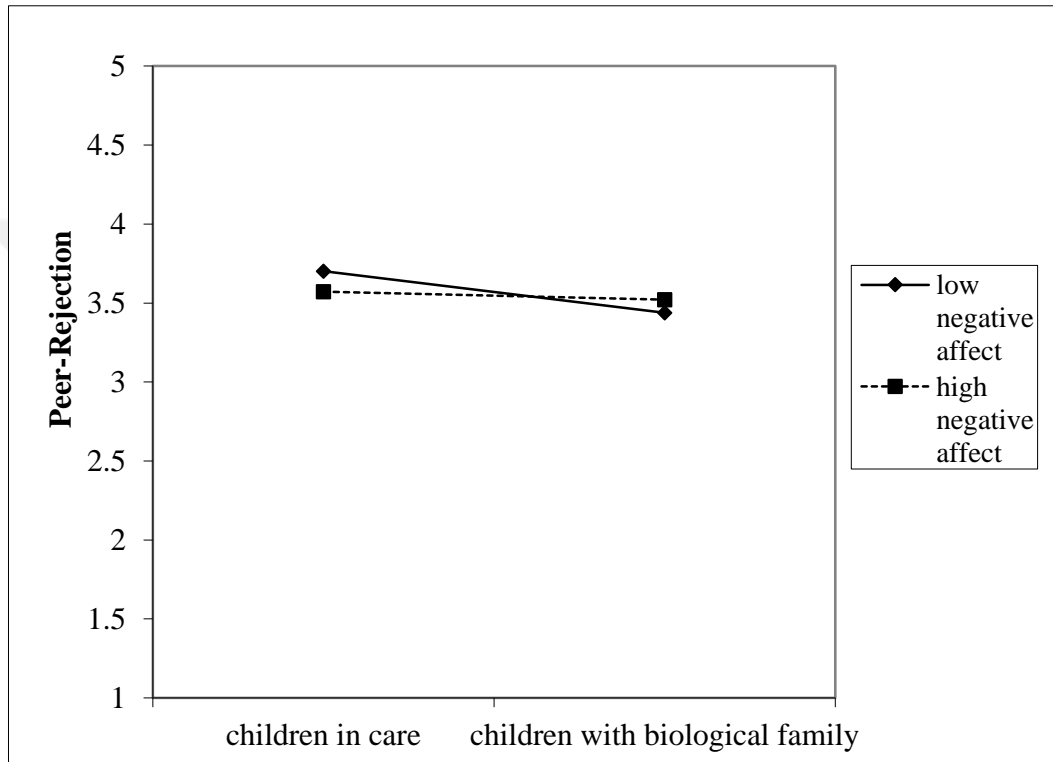


Figure 3.2 The Interaction between Rearing Condition and Negative Affect in Predicting Peer-Rejection

¹After controlling experience history of children in care, results were similar in terms of predictors for child outcomes except for peer-rejection. The predictive role of teacher support was not significant in predicting peer-rejection after controlling care-related factors. Among those factors, ratio of duration in care to children's age negatively predicted victimization. In addition, total risk negatively predicted peer-acceptance, but positively predicted peer-rejection.

CHAPTER 4

DISCUSSION

Present study aimed to investigate the effects of being reared in residential care settings on children's academic achievement and peer relationships. The second aim of the study was to examine the role of perceived social support and temperament of children on their school achievement and peer relations. Lastly, present study attempted to examine the roles of social support and temperament namely negative affectivity on the individual differences in these developmental outcomes. In the first part, findings will be discussed in the light of the literature. Afterwards, strengths and contributions, limitations, implications and future suggestions will be mentioned, respectively.

4.1 Discussion of Findings Related to Hypotheses

Before explaining the predictive effects of main variables, it was seen that age and gender as demographic variables predicted some child outcomes. First, age of children negatively predicted academic engagement, grades, and victimization. Considering the age of children, almost half of the children are in adolescence period. In the literature, there are different trajectories of academic engagement during adolescence (Li & Lerner, 2011). Decline in academic engagement with age might be related to changes in biological, psychological and social contextual factors (Eccles & Roeser, 2011). As an instance of social changes, moving from primary school to secondary school affects children-teacher relationships because of changes in number of teachers. Closer relationship with teacher and greater monitoring during primary school might be related to more academic engagement. In addition, results indicated that age of children predicted less victimization. Pellegrini and Long (2002) stated that children start to learn how to avoid being a victim, ignore, and cope with bullies as their social and cognitive skills increase with age. Moreover, gender of children significantly predicted academic achievement. To be more precise, girls showed more academic

engagement and had higher grades than boys, as consistent with the literature (Lam et al., 2012).

4.1.1 The Direct Role of Rearing Condition on Child Outcomes

The first aim of the current study was to assess the effects of rearing condition on children's academic achievement and peer relationships during middle childhood. In line with this aim, it was hypothesized that children under government protection would show poorer school-related outcomes when compared to children living with their own parents.

There is a substantial literature indicating that being reared under government protection has negative influences on child outcomes (MacLean, 2003; Merz, McCall, Wright, & Luna, 2013; Smyke, Zeanah, Fox, Nelson, & Guthrie, 2010). When compared to children living with their biological parents, children in institutional care are more likely to have difficulties in social, emotional, and cognitive development (McCall, 2013). As the first developmental outcome, academic achievement of children was measured by both academic engagement in classroom and grades in school reports. Consistent with the literature (MacLean, 2003), our results supported the hypothesis that children under care showed poorer academic engagement and lower grades than their family-reared peers. When looked at the characteristics of institutional settings, several negative conditions are thought to play a role in differences between those children. First of all, it is well known that cognitively stimulating environment is important for children's school success. To be more precise, number of books and educational plays in home, attending scientific and cultural activities predicted children's academic motivation and achievement (Davis-Kean, 2005; Gottfried, Fleming, & Gottfried, 1998). However, institutional care settings are usually lack sufficient stimulations (e.g. educational toys and books) which are necessary for children's normal intellectual development (van IJzendoorn et al., 2011). In addition, children's academic achievement is affected by parental factors such as their education level and involvement in academic activities (Fan & Chen, 2001; Makewa, Role, Otewa, 2012). Although caregivers graduated from high school and university, they are not able to involve in children's academic life adequately.

Since the number of caregivers are still insufficient to meet needs of children in all areas (e.g. physical, social, and educational areas) despite of attempts to reduce the caregiver child ratio in family based care types. Moreover, the difference between children under care and children living with their biological parents in academic achievement can be explained with delays in cognitive development of disadvantaged children. Studies showed that children in institutional settings have lower IQ points (van Ijzendoorn, Luijk, & Juffer, 2008), worse performance in memory and executive functioning (Bos et al., 2009), poorer attention and language skills (Merz et al., 2013) which are very closely related to children's academic achievement.

The second developmental outcome is peer relationship of children. When reviewed the literature, it was shown that children under government protection had more problems in their peer relationships. For instance, children in institutional care demonstrated less harmonious and trustful relationships with their friends when compared to children living with their biological families (Vorria et al., 1998). Also, studies including adopted children indicated that early social-emotional deprivation was associated with more difficulties in getting contact with peers, having intimate relations and showing prosocial behaviors in their relations, especially when they were adopted at older ages (Fisher et al., 1997; Hawk & McCall, 2014; Merz & McCall, 2010). In the current study, peer relationship was addressed by examining peer-acceptance, peer-rejection, and victimization and findings partially supported hypotheses. More precisely, children in care reported more peer-rejection and victimization than their family-reared peers while there was no significant difference in peer-acceptance between those groups. In the literature, researchers seem to have neglected this topic, especially on children not previously but currently residing in institutional settings. One study investigated sociometric status of children in care using nomination method, and found that institutionalized children were less likely to be popular, but more likely to be ignored. (Palacios, et al., 2013). Different from that study, in the present study peer-acceptance and rejection were measured by children's perceptions. In the literature, it was indicated that peer status showed differences in nominations and children's perceptions. The study conducted by Parkhurst and Hopmeyer (1998) showed only 31% of children sociometrically popular were also

high on perceived popularity. According to children's perceptions, there was no difference in peer-acceptance between institutional-reared and family-reared children might be related to children's friends in their living settings. Children in child homes and care villages establish close relationships with peers from their institutional settings. Since there was no specific instruction given to the participants about whom to think of as a peer while responding to the questions, children in care might have reported perceived peer-acceptance from their care settings rather than their schools. Considering the differences in peer-rejection and victimization between groups, it was thought that children might perceive acceptance from one group, but also perceive rejection or exposed to victimization from other groups. When the finding that children were more likely to be rejected or victimized was considered, it is important to emphasize that children's early interactions with an adult play a crucial role in their later relationships (Bohlin et al., 2005). Since children under care are less likely to have a stable and secure relationship with a caregiver, they miss opportunities to learn how to make friends and maintain peer relationships competently. It was shown that children in care had more socioemotional problems when compared to children living with biological parents. For instance, children living in institutional care had more difficulties in perspective-taking abilities (Tarullo et al., 2007), emotional regulation (Tottenham et al., 2010), and secure attachment (van IJzendoorn et al, 2011) which are important factors to have good relationships with their peers. Also, several studies in the literature indicated that institutionalized children were more likely to exhibit aggressive behaviors. According to Hay, Payne, and Chadwick (2004), children showing aggressive behaviors are not liked by their peers, and both overt and relational aggression cause more rejection. In addition, studies focusing on peer relations in residential care stated that children were also exposed to peer victimization in these settings because of individual (e.g. low self-efficacy) and institutional (e.g. insufficient monitoring) risk factors (Attar-Schwartz & Khoury-Kassabri, 2015). Thus, findings of the current study supports the literature about the peer relations of children in care.

4.1.2 The Direct Roles of Social Support and Temperament on Child Outcomes

The role of social support from teacher and mother and temperamental characteristics of effortful control and perceptual sensitivity were examined in predicting academic achievement and peer relationships. First of all, it was hypothesized that children perceiving more mother and teacher support would be better at more academic achievement. The findings of this study showed that teacher support positively predicted children's behavioral engagement in classroom, but not grades. Also, perceived support from mother was not related to academic outcomes. Perceiving teacher support is important for children's engagement in classroom since students need to feel comfortable and cared by their teachers in classroom environment (Klem & Connell, 2004). When examined the items in teacher support subscale, they are related to treating students fairly, being sensitive to children's needs, and encouraging them to ask questions. Therefore, children perceiving teacher support may feel comfortable to engage in the academic activities. As consistent with the finding, studies also indicated that teacher support and involvement predict higher academic motivation, behavioral and emotional engagement (Skinner & Belmont, 1993; Tucker et al., 2002). Considering the effects of teacher support on grades, studies generally indicated that teacher support affected children's academic achievement through academic engagement (Chen, 2005; Perry, Liu, & Pabian, 2010). Therefore, further research is needed to assess whether teacher support has direct or indirect effect on children's grades.

In addition, children's other characteristics such as self-discipline (Duckworth & Seligman, 2005), memory and executive functioning (Bull, Espy, & Wiebe, 2008) might have stronger influences on grades. In addition, maternal support was not a significant predictor of academic achievement in this study. Studies yielded mixed results in the literature. For instance, one study demonstrated that support from mothers positively predicted academic achievement (Bean, Bush, McKenry, & Wilson, 2003) while another study indicated that academic support from mothers was negatively related to children's academic achievement in higher grades (Chen, 2008). Thus, there might be different mechanisms underlying the role of support from

mothers in academic achievement. Even if the direct role of maternal social support in academic achievement was not found, perceived support from mothers might indirectly affect children's academic outcomes through their self-efficacy (Alivernini & Lucidi, 2011), career preparation, and class engagement (Perry et al., 2010).

Moreover, in addition to academic achievement, it was hypothesized that perceived social support from mother or teachers would predict more peer-acceptance, less peer-rejection and victimization, and results supported this hypothesis. In the literature, the role of teacher support in these outcomes was examined (Hendrickx et al., 2016), but no study related to the role of maternal support was found. Considering the role of teacher support in peer status, one reason might be related to social referencing theory. Teacher-student relationship or teacher attitudes towards a student have an impact on other students' reactions to that child since children viewed their teachers as a social referent (Hendrickx, Mainhard, Boor-Klip, & Brekelmans, 2017). In addition, children who perceived more social support had better outcomes in their peer relationships since they had more self-efficacy (Danielsen et al., 2009) and felt more secure in school environment (Furlong et al., 1995) which might positively affect peer relations. As mentioned before, effect of perceived support from mother on peer-acceptance, rejection, and victimization was not studied. However, findings that maternal social support being negatively related to problem behaviors and positively related to social competence (Bender & Lösel, 1997; Taylor et al., 2015) seem to be in line with explanations of those findings since problem behaviors were positively associated with rejection and victimization, and social competence was closely related to peer-acceptance (Hay et al., 2004; Lindsey, 2002)

When looked at the role of temperament on child outcomes, it was hypothesized that children with higher effortful control would show better outcomes at academic achievement and peer relationships. The role of perceptual sensitivity was tested as exploratory since no study was found in the literature. First of all, findings indicated that effortful control positively predicted both academic engagement and grades of children, while perceptual sensitivity did not predict. As consistent with the finding, studies in the literature showed that higher effortful control predicted more academic

achievement (Liew, McTigue, Barrois, & Hughes, 2008; Valiente, Lemery-Chalfant, & Swanson, 2010). Effortful control is an umbrella term including inhibitory control, attention focusing, and activation control (Rothbart & Bates, 2006). Accordingly, children with higher effortful control are more likely to sustain their attention, regulate their behaviors, and have self-discipline (Rothbart, 2007), and these factors are known to contribute to academic achievement of children (Duckworth & Seligman, 2005; Blair & Razza, 2007). As the other temperamental trait, the role of perceptual sensitivity was not found significant. More research is needed to understand the role of perceptual sensitivity in child outcomes.

Considering the role of temperament in peer relations, it was expected that effortful control would positively predict peer-acceptance and negatively predict peer-rejection and victimization. Results supported the hypotheses, only for peer-rejection and effortful control relationship. Since children with low effortful control are more likely to have problems in self-regulation and show more externalizing behaviors (Murray & Kochanska, 2002), they can be more disliked by their peers.

On the other hand, insignificant effect of effortful control on victimization was inconsistent with the most of the literature (Valiente, Swanson, Lemery-Chalfant, & Berger, 2014). However, similar to the present study, a research (Iyer et al., 2010) also did not find a significant prediction even there was a negative correlation between effortful control and victimization. The reason for failure to show significant role of effortful control might be related to functions of aggressive behaviors resulting from poor effortful control. Although children showing externalizing problems are more likely to be disliked by their peers, exhibiting aggressive behaviors might make those children more involved in bullying groups rather than victimized ones.

Furthermore, perceptual sensitivity which was examined as exploratory, negatively predicted peer-rejection in the last step of analyses. High perceptual sensitivity might be related to more understanding of social cues and emotions of others; in turn, they are less likely to be disliked by their peers.

4.1.3 The Moderating Role of Social Support on Child Outcomes

In the present study, it was hypothesized that perceived social support from teacher or mother would play a protective role for children under protection of social services. In other words, it was expected that children who perceive less social support would have poorer academic achievement and worse peer relationship in governmental protection compared to children living with their parents, but no difference was expected for children who receive more teacher and caregiver support across rearing condition. However, findings obtained from two-way interactions between social support and rearing conditions did not support the hypotheses except academic engagement. The interaction between rearing condition and teacher support were marginally significant in predicting academic engagement. It was shown that children in care showed less engagement in classroom than family reared children when they perceived less support, but this difference was reduced when they perceived more support.

When looked at the literature, the moderator role of perceived social support on child outcomes (e.g. academic achievement, well-being, psychological adjustment) was studied in different disadvantaged groups such as poor minority (Gutman & Midgley, 2000), low socioeconomic status (Ong et al., 2006), and exposure to bullying (Holt & Espelage, 2007) or abuse (Bal, Crombez, Van Oost, & Debourdeaudhuij, 2003). However, to the best of our knowledge, the protective role of social support on academic achievement and peer relations was not studied in children under the government protection.

In the present study, the reason for teacher support only having had a partially protective role for academic engagement might be related to persistency of outcomes. In other words, academic engagement which is a behavioral involvement in academic activities might be more likely to change depending on the contextual factors (e.g. feeling comfortable or secure in class) whereas the effects of institutionalization might be more permanent on other child outcomes. First, it was thought that grades of children are more likely to be related to cognitive development when compared to academic engagement, thus it might be difficult to buffer negative effect of

institutionalization on difficulties in cognitive development. Although academic engagement and grades were found to be positively related (Wang & Holcombe, 2010), children who engage more in the classroom settings might not be successful in exams. Instead of social support, cognitive factors such as attention, memory, IQ and executive functioning might play a moderating role on individual differences in the grades of children.

Similarly, establishing good relationships is also related to factors (e.g. attachment security, social cognition, and emotion understanding) which are relatively more difficult to change. For these reasons, social support measured concurrently with the outcomes might not have protective role. However, further studies might find the protective role of social support by examining effects early social ties / social support on later outcomes longitudinally. Moreover, beyond perceiving support from caregivers and teachers, being raised under government protection in itself might affect the social status of children in care. Since those children reported to perceive stigmatization (Şimşek et al., 2007), their social status might be influenced by stigmatization by other children in school environment (Link & Phelan, 2001).

Considering the protective role of maternal/caregiver support on child outcomes, contrary to our expectations results were not significant. When looked at the literature, protective role of support from mothers was shown for children living with their biological parents (Song et al., 2015). However, in the present study, caregiver support was examined for children in care and the function of perceived support from them might differ from the biological maternal support. As another explanation might be that child outcomes in this study are more school-related factors and the protective role of caregiver support may not expand to other environments, yet.

4.1.4 The Moderator Role of Temperament on Child Outcomes

From differential susceptibility perspective, children with higher negative affect were thought to be more susceptible to both positive and negative environmental conditions. It means that children high on negative affect show worse outcomes in negative conditions (i.e. in care or low support condition) and better outcomes when faced with

positive conditions (i.e. biological family or high support condition) (Pluess & Belsky, 2010). In the present study, it was hypothesized that children with higher level of negative affect would have poorer academic achievement and worse peer relationship in governmental protection whereas they would benefit more from the family environment when compared to children with lower negative affect. Also, it was expected that children with higher level of negative affect would have poorer academic achievement and worse peer relationship at low level of perceived support whereas they would more benefit from high perceived support when compared to children with lower negative affect. None of the findings of the study supported these hypotheses.

When looked at the interactions between temperament and rearing condition, the interaction between them was found marginally significant only in predicting peer-rejection. According to this finding, there was a marginal difference in peer-rejection between children under care and children living with their biological parents for children with low negative affect, while children with high negative affect did not differ based on their rearing conditions. This finding did not support the differential susceptibility hypothesis. However, result that low negative affect were related to the less peer-rejection in biological family environment, but more-rejection in institutional settings is not surprising since the function of low negative affect might show differences depending on conditions. To be more precise, for children living with their biological families, having low negative affect is an adaptive temperamental characteristic, since it predicted better peer relationships in normal samples (Laible et al., 2014). On the other hand, under the condition of institutional settings, low negative affect might be dysfunctional since caregivers are more likely to take care of children with high negative affect. Since it was thought that children with low negative affect are more likely to be ignored by their caregivers, they might have a tendency to perceive rejection from their peers. Also, those children might have more difficulty in developing social skills because of the lack of caring; in turn, they may be more rejected by their peers.

Interactions between negative affect and other child-outcomes –peer acceptance, victimization and academic achievement- were not significant, so further studies are required to understand factors underlying mechanism.

Considering the interaction between negative affect and social support, results indicated that only the interaction between negative affectivity and teacher support was significant in predicting academic engagement. The interaction indicated that teacher support significantly increased academic engagement of children with low negative affect, while there was no significant difference between the levels of teacher support for children with high negative affect. Directions of relationships did not support the differential susceptibility hypothesis; however, this result is also feasible to interpret. It is not surprising that children with low negative affect and high teacher support showed the highest academic engagement since both of the predictors is positively associated with the academic engagement as mentioned above (Hughes & Kwok, 2006; Bryce et al., 2018). On the other hand, children with high negative affect did not benefit from teacher support. The reason for the finding might be related to that children with high negative affect were highly likely to show externalizing and internalizing problems. Even those children perceived teacher social support, their academic achievement may not be improved because of their psychological maladjustments.

To conclude, hypotheses related to differential susceptibility were not supported in any child outcomes. A general explanation for these findings might be the age of the children in the study. According to a meta-analysis (Slagt et al., 2016), negative emotionality was stated as a susceptibility marker for the effects of parenting only when it was assessed during infancy. This inference might also be valid for the effect of being reared in institutional settings on child outcomes in the present study.

4.1.5 Three-way Interactions between Rearing Condition, Social Support, and Temperament

The last aim of the present study was to test whether susceptibility to social support differed for children in care. Three way interactions between rearing condition,

perceived social support, and negative affect were tested as explanatory since there was no study examining this relationship in the literature. Results indicated that three-way interaction between teacher support, negative affect, and rearing condition was marginally significant in predicting academic engagement of children. After probing the plots, two pairs of interaction slopes were significant in predicting academic engagement of children. First, the interaction between teacher support and rearing condition was significant among children with low negative affect while this interaction was not significant for children with high negative affect. In other words, the partially protective role of teacher support was found only for children with low negative affect. In addition, the interaction between negative affect and teacher support was significant among children under care while this interaction was not significant for children living with their families. According to results, among children with low negative affect, perceived teacher support significantly increased academic engagement of children in care, but there was no change in engagement of children with biological parents depending on teacher support. As stated before, having low negative affect in institutional settings might make children more vulnerable to poorer outcomes unlike other populations. Since low negative affect in large settings might make children more invisible, they might be more likely to have difficulties in developmental areas because of the lack of monitoring and caretaking. Therefore, those children might show greater improvement when they received support from their teachers.

On the other hand, findings of the study showed that the three-way interactions between social support sources, negative affect, and rearing condition were not found significant for the outcomes related to peer relationships (i.e. peer-acceptance, rejection, and victimization). Although, the moderator roles of temperament and social support on peer relations of disadvantaged children were not investigated in the literature, other child outcomes (e.g. aggressive behaviors and social competence) which might have influence on peer-acceptance, rejection and victimization were previously examined (Davidson & Demaray, 2007; Dubow & Tisak, 1989). This non-significant three-way interaction showed that the interaction between perceived social support and negative affect on peer relationships did not differ across children in care

and children living with their own families. Further studies might examine the different factors such as self-efficacy, social competence, and effortful control in order to investigate mechanisms underlying individual differences in peer relations.

4.2 Strengths and Contributions of the Study

As mentioned before, the effects of being reared in institutional settings on child outcomes were examined in the literature extensively. Although many child outcomes such as psychological adjustment, academic achievement, and cognitive development of children were addressed in the institutional care literature (MacLean, 2003), there is only one study examined children's peer-acceptance, rejection, and victimization which play an important role in social and academic development (Nelson & Dishion, 2004). Therefore, the current study contributed to the literature by assessing peer relationships from different perspectives.

Also, this study made contributions to the literature by including children staying in child homes and care villages which are home-based care settings. In the literature, some studies targeted children in large institutional settings while some of them were focusing on developmental outcomes of children after adoption. Although smaller care types are encouraged because of their favored characteristics, it is important to see that children living in those settings have still poorer outcomes when compared to children living with their biological parents.

In addition, literature lacks studies investigating moderators in the relationship between rearing conditions and child outcomes. It is important to examine moderating variables in order to understand individual differences in reactions to the shared environmental factors. Both perceived social support and temperament were not studied in this risk group while predicting children's school-related outcomes.

Beside contributions to the literature, the current study has methodological strengths. First of all, this research has a special sample including children from institutional settings. To get permissions for studying with this group and selecting participants among those children is a difficult process which requires labor. Also, in this study,

including different sources (i.e. child, mother/caregiver, and teacher) in order to get accurate information is a strength of this study.

4.3 Limitations of the Study

The current study, on the other hand, also has some limitations. First of all, peer-acceptance, rejection, and victimization were measured by child reports without asking them to specify whether they considered a peer from school or residential place while responding to the questions. This leads to a restriction while making interpretation about child peer relationships in school. In addition, social status of children were evaluated only by child perceptions. Teacher report or nomination method could provide additional information about peer-acceptance and rejection. Furthermore, self-report of children were conducted with each child one-to one. Even all children were instructed about that there was no right/wrong answer and answers would be confidential, the problem of social desirability might have affected their answers.

4.4 Implications of the Study and Future Suggestions

Present study has important implications for children under government protection. This study replicated the finding that children in institutional care settings, even in smaller ones, had worse academic achievement than their peers. Therefore, it is important to determine which factors should be improved in institutional settings for children's academic achievement. Also, the current study also showed that children in care were exposed to more rejection and victimization by their peers. In line with this finding, caregivers and teachers should be informed about that children in care perceived more rejection and victimization by their peers. Staff and teachers should be more careful while interacting with other children and intervene when necessary. In addition, the role of mother and teacher support in child outcomes is important for social policies. Caregivers and teachers can be educated in terms of how to approach children. Also, number of caregivers might be increased so that caregivers are able to involve in children's academic and social development. Considering the limitations of this study, several suggestions can be offered for future studies. First of all, researchers can conduct longitudinal studies in order to understand mechanisms in a time-line.

Also, future studies can examine other school-related outcomes of children such as the quality of peer relationships, bullying behaviors, and academic motivation of children in order to look at the picture from a broader perspective.



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APPENDICES

Appendix A: Measurement of Academic Engagement

	1 (Hiçbir zaman)	2 (Ara sıra)	3 (Genellikle)	4 (Her zaman)
1. Ödevlerini zamanında tamamlar.				
2. Derse istenilen materyallerle gelir.				
3. Derse olumlu yönde katkıda bulunur.				
4. Derse katılmaz, söz hakkı almaz.				
5. Yapılan işlere / görevlere odaklanır.				
6. Ders materyalleri gerektiği zamanlarda hazırdır (örneğin, konu işlenirken ders kitabı açık mıdır?)				
7. Öğrenmeye karşı ilgilidir.				
8. Verilen ödevleri yapmaz.				
9. Grup çalışmalarında üzerine düşeni yapar.				
10. Sınıfta parmak kaldırarak derse katılım gösterir.				
11. Dersi dikkatli bir şekilde dinler.				
12. Derste sorulan soruları cevaplar.				
13. Ders sırasında başkalarıyla konuşur, anlatılanı dinlemez.				
14. Dersi dinlediğini gösteren ders ile ilgili sorular sorar.				
15. Ödevlerini eksiksiz yapar.				

Appendix B: Child-Adolescent Social Support Scale

Bu çalışmada sizden, anneniz ve sınıf öğretmeninizden aldığınız destekler konusunda ilgili maddeleri yanıtlamanız istenecektir.

Her cümleyi dikkatlice okuyup, dürüstçe yanıtlayın. Yanıtlarda doğru veya yanlış cevap yoktur. Önemli olan sizin için gerçekte geçerli olanı belirtmenizdir. Tüm cümleleri atlamadan yanıtlayınız.

ANNEM	Ne Kadar Sıklıkla?			
	1. Hayır	2.Evet, nadiren	3.Evet, bazen	4.Evet, her zaman
1. Benimle gurur duyduğunu gösterir.				
2. Beni anlar.				
3. Konuşmaya ihtiyacım olduğunda beni dinler.				
4. Ne yapacağımı bilmediğimde önerilerde bulunur.				
5. Bana öğüt verir.				
6. Bana bilgi vererek, problemlerimi çözmeme yardımcı olur.				
7. Bir şeyi iyi yaptığımda, bana aferin der.				
8. Hata yaptığımda bana bunu uygun bir dil ile anlatır.				
9. Bir şeyi iyi yaptığımda beni ödüllendirir.				
10. Aktivitelerimi yapmamda bana yardımcı olur.				
11. Karar vermeme yardımcı olmak için bana zaman tanırırlar.				
12. İhtiyacım olan pek çok şeyi bana alır.				

ÖĞRETMENİM	Ne Kadar Sıklıkla?			
	1. Hayır	2.Evet, nadiren	3.Evet, bazen	4.Evet, her zaman
13. Bana ilgi gösterirler.				
14. Bana adil davranırlar.				
15. Soru sormama izin verirler.				
16. Anlamadığım şeyleri açıklarlar.				
17. İşleri nasıl yapacağımı gösterirler.				
18. Bana bilgi vererek, problemlerimi çözmeme yardımcı olurlar.				
19. Bir şeyi iyi yaptığımda, bana aferin derler.				
20. Hata yaptığımda bana bunu uygun bir dil ile anlatırlar.				
21. Görevlerimde ne derecede başarılı olduğumu bana söylerler.				
22. Okulda neye ihtiyacım olduğunu bilirler.				
23. Bir şeyi iyi yapmayı öğrenmem için bana zaman ayırıp, yardım ederler.				
24. Yardıma ihtiyacım olduğunda bana zaman ayırırlar.				

Appendix C: Experience History

GENEL BİLGİLER			
Adı soyadı:		Katılımcı numarası:	
Şehir:		Kurum adı:	
Cinsiyet:	K <input type="radio"/> E <input type="radio"/>	Doğum tarihi-yeri:	-- / -- / ----- -
Engel durumu:	Var <input type="radio"/> Yok <input type="radio"/>	Premature durumu:	Evet <input type="radio"/> Hayır <input type="radio"/>

GELİŞ BİLGİLERİ			
Geliş tarihi:	----- / ----- / -----	Geliş yaşı:	
Geliş nedeni: <i>(Geliş nedenleri birden çok ise hepsi işaretlenmelidir)</i>			
<input type="radio"/> Kimsesiz olması (sokakta bulunması)	<input type="radio"/> Fiziksel istismar	<input type="radio"/> Cinsel istismar	<input type="radio"/> Duygusal istismar
<input type="radio"/> Annenin hastalığı (fiziksel)	<input type="radio"/> Babanın hastalığı (fiziksel)	<input type="radio"/> Annenin hastalığı (psikolojik)	<input type="radio"/> Babanın hastalığı (psikolojik)
<input type="radio"/> Anneni evi terk etmesi	<input type="radio"/> Babanın evi terk etmesi	<input type="radio"/> Aile içi şiddet	<input type="radio"/> Ailenin ekonomik sıkıntıları
<input type="radio"/> Annenin hapiste olması	<input type="radio"/> Babanın hapiste olması	<input type="radio"/> Annenin ölümü	<input type="radio"/> Babanın ölümü
<input type="radio"/> Anne babanın boşanması	<input type="radio"/> Diğer (lütfen belirtiniz)	

BAKIM ÖYKÜSÜ

Daha önce başka bir kurumda kaldı mı?

Evet Hayır

Cevap **EVET** ise, birden fazla kurumda kaldıysa veya aynı kurumda farklı zamanlarda kaldıysa, her kurum veya her kalış dönemi için bilgileri ayrı ayrı doldurunuz.

Birinci Kurum

Kurum Adı

İli

Kabul tarihi

Ayrılış tarihi

İkinci Kurum

Kurum Adı

İli

Kabul tarihi

Ayrılış tarihi

Üçüncü Kurum

Kurum Adı

İli

Kabul tarihi

Ayrılış tarihi

Dördüncü Kurum

Kurum Adı

İli

Kabul tarihi

Ayrılış tarihi

GEÇMİŞ ÖYKÜSÜ

Şu anda bulunduğu kuruma gelmeden önce kim tarafından bakılıyordu?

Süre

İlk kez kaldığı kuruma gelmeden önce kim tarafından bakılıyordu?

Süre

 Anne-baba Büyükanne – büyükbaba Akraba Koruyucu aile Evlatlık Diğer Anne-baba Büyükanne – büyükbaba Akraba Koruyucu aile Evlatlık Diğer

AİLE BİLGİLERİ

Öz anne babası sağ ise görüşüyorlar mı?	Evet <input type="radio"/>	Hayır <input type="radio"/>
Cevap EVET ise, ne şekilde ve hangi sıklıkta? (Birden çok şık işaretlenebilir)	Görüşme şekli	Sıklığı (ve süresi)
	<input type="radio"/> Telefonla	
	<input type="radio"/> Mektupla	
	<input type="radio"/> Kurumda ziyaret	
	<input type="radio"/> Evine giderek	

Kardeşleri var mı?	Evet <input type="radio"/>	Hayır <input type="radio"/>	<i>Evet ise aşağıdaki soruları yanıtlayın</i>
Kardeş sayısı:		Kaçıncı çocuk olduğu:	
Aynı kurumda kalan kardeş sayısı:		Başka kurumlarda kalan kardeş sayısı:	
Kardeşler aynı kurumda değil ise, ne şekilde ve hangi sıklıkla görüşüyorlar? (Birden çok şık işaretlenebilir)	Görüşme şekli	Sıklığı (ve süresi)	
	<input type="radio"/> Telefonla		
	<input type="radio"/> Mektupla		
	<input type="radio"/> Kurumda ziyaret		
	<input type="radio"/> Evine giderek		

GÖNÜLLÜ AİLE BİLGİLERİ

Şu anda ya da daha önce gönüllü aile tarafından alındığı zamanlar var mı?	Evet <input type="radio"/>	Hayır <input type="radio"/>
Cevap EVET ise, ne şekilde ve hangi sıklıkta? (Birden çok şık işaretlenebilir)	Zaman	Sıklığı (ve süresi)
	<input type="radio"/> Hafta sonları	
	<input type="radio"/> Tatillerde	

OKUL ÖNCESİ BİLGİLERİ

Okul öncesi bir kuruma devam etti mi?	Evet <input type="radio"/> Hayır <input type="radio"/>	<i>Evetse, süresi:</i>
---------------------------------------	---	---------------------------------

Appendix D: Demographic Form

Açıklama: Aşağıda size ve ailenize dair bilgiler vermeniz istenmektedir. Lütfen sizden istenen bilgileri dikkatlice okuyun. Size uygun olan bilgiler için “X” (çarpı) işareti koyun.

1) Sizin:

Yaşınız: _____

Eğitim Durumunuz:

__ Okur-yazar değil __ Okur-yazar __ İlköğretim mezunu __ Lise mezunu
__ Üniversite mezunu __ Yüksek lisans __ Doktora ve üzeri

Çalışma durumunuz:

__ Çalışmıyorum __ Emekliyim.
__ Yarı zamanlı çalışıyorum (İşiniz: _____)
__ Tam zamanlı çalışıyorum (İşiniz: _____)

*Çalışan annelerimiz:

Ailemin ihtiyacı olmasaydı *çalışmazdım.* Ailemin ihtiyacı olmasaydı da *çalışırdım.*

Medeni durumunuz:

__ Evliyim __ Boşandım __ Eşim vefat etti.
__ Diğer (Lütfen açıklayın: _____)

Herhangi bir dine inanıyor musunuz?

Evet Hayır Açıklamak istemiyorum.

*Herhangi bir dine inanıyorsanız, bu dine ne dereceye kadar inanıyorsunuz?

1-Hiç	2	3	4-Orta	5	6	7-Çok

2) Çocuğumun babasının

Yaşı: _____

Eğitim Durumu:

__ Okur-yazar değil __ Okur-yazar __ İlköğretim mezunu __ Lise mezunu
__ Üniversite mezunu __ Yüksek lisans __ Doktora ve üzeri

Çalışma durumu:

__ Çalışmıyor __ Emekli
__ Yarı zamanlı çalışıyor (İşi: _____)
__ Tam zamanlı çalışıyor (İşi: _____)

3) Ailenizin

Aylık toplam geliri:

__ 1000TL'den az __ 1000-2000 TL __ 2000-3000TL __ 3000-4000TL
__ 4000-5000TL __ 5000TL ve üzeri

3) Çocuğunuz /Çocuklarınız:

Doğum sırası	Doğum Tarihi	Cinsiyeti	Okul / iş durumu	Aynı evde mi yaşıyorsunuz?
1.				
2.				
3.				
4.				
5.				

Bu çalışmadaki sorulara hangi çocuğunuzu düşünerek cevap veriyorsunuz?

(Lütfen doğum sırasını yazınız.) _____

Appendix E: Ethics Committee Permission

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
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04 MART 2016

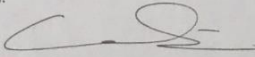
Gönderilen: Prof.Dr. Sibel KAZAK BERUMENT
Psikoloji Bölümü

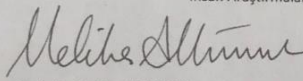
Gönderen: Prof. Dr. Canan SÜMER
İnsan Araştırmaları Komisyonu Başkanı

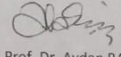
İlgi: Etik Onayı

Sayın Prof.Dr. Sibel KAZAK BERUMENT'in danışmanlığını yaptığı yüksek lisans öğrencisi Sema EREL, Seren GÜNEŞ, Aybegüm MEMİŞOĞLU SANLI'nın "Orta Çocukluk Döneminde Devlet Koruması Altındaki Bireylerin Gelişimsel Sonuçları" başlıklı araştırması İnsan Araştırmaları Komisyonu tarafından uygun görülerek gerekli onay 2016-SOS-002 protokol numarası ile 15.02.2016-15.01.2017 tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.


Prof. Dr. Canan SÜMER
Uygulamalı Etik Araştırma Merkezi
İnsan Araştırmaları Komisyonu Başkanı


Prof. Dr. Meliha ALTUNIŞIK
İnsan Araştırmaları Komisyonu
Üyesi


Prof. Dr. Aydan BALAMIR
İnsan Araştırmaları Komisyonu
Üyesi

Appendix F: Turkish Summary/Türkçe Özet

1. Giriş

Psikososyal açıdan yoksun bir çevrede yetişen çocukların bilişsel, duygusal ve sosyal gelişimleri risk altındadır (Bronfenbrenner, 2005; Evans, 2006). Bu riskli çevrelerden biri de kurum bakımı altında büyümektir. Dünya genelinde iki milyondan fazla çocuk ebeveynlerinin ölümü, ihmal, istismar, ekonomik güçlük gibi nedenlerle korunma altına alınmaktadır (Petrowski, Cappa, ve Grossi, 2017). Devlet koruması altında büyüyen çocuklar, aile yanında kalan çocuklara göre daha fazla sorun davranış, bilişsel zorluk, bağlanma sorunları ve sosyo-duygusal güçlükler göstermektedir (Merz, McCall, Wright, ve Luna, 2013; Roy, Rutter, ve Pickles, 2004; Wiik ve ark., 2001). Bu çalışmada korunma altındaki çocukların okul ile ilgili sonuçlarına odaklanmaktadır. Kurumda büyüyen çocukların akademik hayatlarında ve akran ilişkilerinde diğer çocuklara göre daha fazla problem yaşadıkları bilinmektedir (MacLean, 2003). Korunma altında büyümenin olumsuz etkileri çocuklar arasında farklılık göstermektedir. Bu ilişkide düzenleyici rol oynayan faktörlerin belirlenmesi bireysel farklılıkların altında yatan mekanizmayı anlamak açısından önemlidir.

Bu nedenle, mevcut çalışma korunma altındaki çocukların akademik başarı ve akran ilişkilerinde ailesi yanında kalan çocuklardan farklılaşıp farklılaşmadığını ve bu gelişimsel sonuçlarda etkili olan düzenleyici faktörleri (sosyal destek ve mizaç) araştırmayı amaçlamıştır.

1.1 Devlet Koruması ve Çocuk Gelişimi Üzerindeki Etkileri

1.1.1 Devlet Korumasının Özellikleri

Risk altında olup kurum bakımına alınan çocuklar için çeşitli bakım türleri mevcuttur. Bunlar çocuk yuvaları, çocuk evleri ve sevgi evleridir (Aile ve Sosyal Politikalar Bakanlığı, 2017). Çocuk yuvaları çok sayıda çocuğun tek bir binada kaldığı

kurumlardır. Bu kurumların fiziksel ve psikososyal koşulları sağlıklı bir çocuk gelişimi için genellikle uygun değildir (McCall, 2013). Türkiye’de, bir bakım personeli 8-10 çocukla ilgilenmek durumunda kalmaktadır (Atlı, 2008). Çocuk yuvalarının bir diğer sorunu da bakım personellerinin sıkça değişmesidir. Bu olumsuz özelliklerinden dolayı, 2005’ten beri bu kurumlar daha küçük bakım çeşitlerine dönüştürülmeye başlanmıştır (Yolcuoğlu, 2009). Alternatif bakım türleri çocuk evleri ve sevgi evleridir. Bu çalışmada, sevgi evlerindeki ve çocuk evlerindeki çocuklar katılımcı olarak seçilmiştir. Sevgi evleri, 6-10 çocuğun birlikte kaldığı tek bir kampüste yer alan müstakil evlerdir. Bakım personelleri evin içinde yemek pişirmekte, çocukların bakımı üstlenmekte ve zamanlarının çoğunu evin içinde çocuklarla geçirmektedirler. Bu özellikler sevgi evlerini aile ortamına benzetmekle birlikte çocukların toplumdan uzak ayrı bir kampüste yaşamaları onları diğer çocuklardan farklılaşmaktadır.

Sevgi evlerinden farklı olarak, çocuk evleri farklı semtlerde kiralanmış apartman dairelerinden oluşmaktadır. Böylece kurum bakımı altındaki çocuklar, biyolojik aileleri ile yaşayan akranları ile birlikte mahalle okuluna gidebilir, onlarla okul dışında da vakit geçirebilir. 5-6 çocuğun kaldığı bu çocuk evlerinde bakım personelleri yemek pişirir, çocukların ödevlerinde yardımcı olur ve ev işlerinden sorumludur. Ayrıca bu kurumlarda çocukların ilişki içinde oldukları bakım personellerinin sıkça değiştirilmemesine, böylelikle az sayıda yetişkin ile güvenli bağ kurmasına dikkat edilmektedir.

1.1.2 Devlet Korumasında Büyümenin Gelişimsel Sonuçlara Etkileri

Kurum bakımındaki çocuklar, ailesi ile beraber büyüyen çocuklarla kıyaslandığında, daha fazla gelişimsel zorluk göstermektedir. İlk olarak, kurum bakımındaki çocukların fiziksel gelişimleri (örn. kilo, boy, kafa çevresi) akranlarına göre gecikme göstermektedir (Smyke ve ark., 2007). Bu çocukların beyin gelişimleri de beslenme yetersizliği, enfeksiyonlar ve kronik stres gibi nedenler ile risk altındadır (Nelson, Bos, Gunnar, ve Sonuga-Barke, 2011). Ayrıca, kurum bakımında büyüme bilişsel gelişimi de olumsuz etkilemektedir. Bu çocukların zeka düzeyleri, zihin kuramı becerileri ve yürütücü işlevleri genellikle akranlarından daha düşüktür (Bos ve ark., 2009). Bir diğer gelişimsel sonuç olarak, kurumda büyüyen çocuklar sosyo-duygusal gelişimlerinde de

daha çok güçlük çekmektedir. Kurum bakımında yetişen çocuklarda daha fazla bağlanma sorunu (Gleason ve ark., 2014), duygu anlamada güçlük, içselleştirme ve dışsallaştırma davranışları görülmektedir (Roy, Rutter, ve Pickles, 2000). Bu çalışmada, kurum bakımı altındaki çocukların okul ile ilişkili sonuçlarına odaklanılmıştır.

1.2 Kurum Bakımındaki Çocukların Akademik Başarı ve Akran İlişkileri

Deary, Strand, Smith ve Fernandes (2007)'e göre, akademik başarı öğrenme yoluyla edinilen bilgilerdir ve genelde sınavlardaki notlar ile ya da sınıf içi performans ile değerlendirilir. Sınıfta katılımın yüksek olması başarı ile pozitif yönde ilişkili bulunmuştur (Wang ve Holcombe, 2010). Bu çalışmada akademik başarı hem sınıf içi katılım hem de karne notları ile değerlendirilmiştir.

Çocukların akademik başarıları daha iyi bir sağlık, daha yüksek öz yeterlik ve daha iyi kariyer gibi olumlu sonuçlar ile ilişkilidir. Çeşitli çevresel ve bireysel faktörler çocukların akademik başarılarını etkilemektedir. Örneğin, uyaran açısından zengin bir ortam (Eamon, 2005) ve yetkili ebeveynlik çocukların akademik başarılarını olumlu yönde yordamaktadır. Kurum bakımı altında büyümek de çocukların akademik başarılarını olumsuz yönde yordamaktadır. Bu çocukların daha fazla akademik zorluk yaşaması, kurumların uyaran bakımından eksik olması, kurumdaki çocuklarda dikkat sorunlarının daha sık görülmesi, kelime dağarcıklarının kısıtlı olması gibi nedenlerle ilişkili olabilir (Merz, McCall, ve Wright, 2013).

Bir diğer sonuç değişkeni olarak, çocukların akran ilişkileri de onların sosyoduygusal ve bilişsel gelişimleri için oldukça önemlidir (Rubin, Bukowski, ve Parker, 2006). Alanyazında akran ilişkileri, arkadaş sayısı, arkadaşlık kalitesi, akranları ile iletişim sıklığı, zorbalık gibi pek çok açıdan değerlendirilmektedir. Bu çalışmada, akran kabulü, reddi ve zorbalığa maruz kalma ele alınmıştır. Akran kabulü ve akran reddi sırasıyla akranları tarafından sevilme ya da sevilme olarak değerlendirilmektedir (Asher, Singleton, Tinsley, ve Hymel, 1979). Zorbalığa maruz kalma ise akranları tarafından aktif olarak kötü muameleye maruz kalma olarak tanımlanmaktadır (Perry, Kusel, ve Perry, 1988).

Çocukların sözel becerileri, duygu bilgileri, bağlanmaları örüntüleri gibi bireysel; düşük sosyoekonomik düzey ve olumsuz ebeveyn tutumu gibi çevresel faktörler akran ilişkilerini olumlu ve olumsuz yönde etkilemektedir (Mostow, Izard, Fine, ve Trentacosta, 2002; Dekovic ve Meeus, 1997).

Kurum bakımı altında yetişen çocuklar da bir yetişkin ile güvenli bağ kuramadıklarından, sosyal ilişkilerinde zorluk çekmektedirler. Bu çocuklar akranlarına göre daha az yakın ve uyumlu ilişkiler göstermektedirler (Vorria ve ark., 1998). Kurum bakımındaki çocukların sosyometrik statüleri ve akran zorbalığına maruz kalmalarına yönelik çalışma oldukça kısıtlıdır. Yalnızca bir çalışma halen kurumda kalan çocukların akran kabul ve reddini ele almıştır. Bulgularına göre, kurum bakımındaki çocuklar daha az popüler olup akranları tarafından daha çok göz ardı edilmektedir (Palacios, Moreno, ve Román, 2013).

1.3 Sosyal Desteğin Gelişimsel Sonuçlardaki Doğrudan ve Düzenleyici Rolü

Sosyal destek, bireylerin, çevresindeki kişilerle kurduğu ilişkilerden beslenen arkadaşlık, yardım, karşılıklı duyarlık gibi özellikleri kapsayan ve kişilerin davranış, sosyal biliş ve değerlerinde değişiklikler yaratan, destek gören kişideki stres seviyesini azaltan bir süreç olarak tanımlanmaktadır (Danielsen, Samdal, Hetland, ve Wold, 2009). Alanyazında, yakın arkadaş, ebeveyn, öğretmen, okul gibi çeşitli sosyal destek kaynakları bulunmaktadır (Rueger, Malecki, ve Demaray, 2010). Algılanan sosyal destek çocukların sorun davranışlarının başlamasını geciktirir ve daha az içselleştirme-dışsallaştırma sorunları göstermelerini yordar (Appleyard, Egeland, ve Sroufe, 2007). Sosyal destek risk altındaki çocukların gelişimi için de koruyucu rol oynamaktadır. Örneğin, yoksulluk, tehlikeli çevre, doğal afete maruz kalma, stres gibi durumlara karşı sosyal desteğin koruyucu rolü olduğu görülmektedir (Malecki ve Demaray, 2006; Murray, Nettles, Mucherah, ve Jones, 2000).

Sosyal desteğin akademik başarı üzerindeki etkisine bakıldığında, ebeveynlerden algılanan desteğin okul başarısını, motivasyonunu ve not ortalamasını olumlu yönde etkilediği görülmektedir (Cutrona, Cole, Colangelo, Assouline, ve Russell, 1994; Song, Bong, Lee, ve Kim, 2015). Öğretmenlerden ve sınıf arkadaşlarından algılanan

sosyal destek de çocukların akademik motivasyonlarını artırmaktadır (Wentzel, Battle, Russell, ve Looney, 2010). Sosyal destek, yaşam koşullarının akademik sonuçlar üzerindeki etkisinde de düzenleyici bir rol oynamaktadır. Örneğin, düşük sosyoekonomik desteğin notlar üzerindeki olumsuz etkisi ebeveynlerden algılanan sosyal destek ile azalmaktadır (Ong, Phinney, ve Dennis, 2006).

Sosyal destek aynı zamanda akran ilişkileri üzerinde de etkilidir. Örneğin, öğretmen desteği ve akranlar tarafından sevilme arasında olumlu yönde bir ilişki bulunmaktadır (Hedrickxa, Mainharda, Boor-Klipb, Cillessenb ve Brekelmans, 2016). Anne sosyal desteği ile akran kabulü, reddi ve zorbalığa maruz kalma arasındaki ilişkiyi inceleyen çalışmaya rastlanılmamıştır. Fakat akran ilişkileri ile oldukça ilişkili olabilecek davranış sorunları ve sosyal yetkinlik anneden algılanan sosyal destek tarafından anlamlı olarak yordanmaktadır (Bender ve Lösel, 1997).

Sosyal desteğin akran ilişkilerindeki düzenleyici rolü, cinsiyet ve akran reddi arasında çalışılmıştır ve erkeklerin kızlara göre daha fazla akran reddi rapor ettikleri, ebeveyn desteğinin bu cinsiyet farkını ortadan kaldırdığı görülmüştür (Ato, Galian, ve Fernandez-Vilar, 2014). Fakat alanyazında, sosyal desteğin düzenleyici rolü olumsuz çevre koşulları ile akran kabulü, reddi ve zorbalığa maruz kalma arasındaki ilişkide araştırılmamıştır.

1.3.1 Mizaç Özelliklerinin Gelişimsel Sonuçlardaki Doğrudan ve Düzenleyici Rolü

Çevresel faktörlere ek olarak, mizaç özellikleri de gelişimsel sonuçları etkilemektedir. Doğuştan gelen ve görece kalıcı olan mizaç bireylerin durumlara yaklaşımları, tepkileri ve deneyimleri üzerinde etkilidir (Rothbart ve Bates, 2006). Bu çalışma kapsamında, mizaç özellikleri arasından kendini denetleme becerisi (effortful control) ve algısal hassasiyetin doğrudan etkisi, olumsuz duygulanımın ise düzenleyici rolü ele alınmıştır. Mizacın düzenleyici etkisine yönelik çeşitli modeller bulunmaktadır. Bu çalışmada odaklanılan farklılaşan hassasiyet teorisine göre, olumsuz duygulanım mizaç özelliği çocukların çevresel koşullara hassasiyeti artırmaktadır (Belsky, 2005).

Çocukların mizacı akademik başarılarını yordayan faktörlerden biridir. Örneğin, sebatkarlık ve uyumluluk çocukların notlarını pozitif yönde; olumsuz duygulanım ve dikkati toplamada güçlük negatif yönde yordamaktadır (Mullola ve ark., 2010). Kendini denetleme mizaç özelliğine bakıldığında, cinsiyet fark etmeksizin kendini denetleme becerisi yüksek olan çocukların akademik başarıları daha yüksektir (Morris ve ark., 2013).

Mizacın düzenleyici rolüne bakıldığında, kendini denetleme becerilerinin sosyoekonomik düzey ve matematik-okuma başarısı arasındaki ilişkide düzenleyici bir rolü olduğu görülmektedir (Liew, Chen, ve Hughes, 2010). Farklılaşan hassasiyet teorisi kapsamında, zor mizacın düzenleyici etkisini ele alan çalışma sayısı oldukça azdır. Var olan çalışmalara göre, zor mizaç özelliği ve tepkisellik çocukları çevresel koşullara daha duyarlı yaparak onların bilişsel-akademik işlevleri ve yürütücü işlevleri üzerinde düzenleyici rol oynamaktadır (Pluess ve Belsky, 2010).

Çocukların mizaç özellikleri onların akran ilişkileri üzerinde de etkilidir. Örneğin, zor mizaçlı çocukların akranları tarafından sevilme ihtimali daha yüksektir (Szewczyk-Sokolowski ve Bost, 2005). Olumsuz duygulanım sosyal ve işbirlikçi davranışları ters yönde yordadığından akran ilişkileri de olumsuz etkilenebilir. Çocukların kendini denetleme özellikleri daha olumlu akran ilişkilerini yordarken, kendini denetleme güçlükleri daha çok akran zorbalığına maruz kalmalarını yordamaktadır (Spinrad ve ark., 2006).

Çevresel faktörlerin akran ilişkileri üzerindeki etkisinde mizaç düzenleyici rol oynamaktadır. Örneğin, kendini denetleme becerileri yüksek olan çocuklarda, aile içi çatışmanın akran ilişkileri üzerindeki olumsuz etkileri daha az görülmektedir (David ve Murphy, 2007). Olumsuz duygulanımı yüksek olan çocuklar, olumsuz ebeveynlik karşısında sosyal işlevsellikte daha fazla güçlük çekmektedir (Pluess ve Belsky, 2010).

1.4 Sosyal Destek ve Mizacın Kurum Bakımı Altındaki Çocukların Gelişimsel Sonuçlarına Etkisi

Kurum bakımı altındaki çocuklara bakıldığında, çocukların aynı çevresel koşullardan farklı şekilde etkilendiği görülmektedir (van IJzendoorn ve ark., 2011). Genetik, mizaç, bakım geçmişi, cinsiyet gibi pek çok neden bu bireysel farklılıklarda etkili olabilir. Algılanan sosyal destek ve mizacın akademik başarı ve akran ilişkileri üzerindeki etkisini kurum bakımındaki çocuklarda inceleyen bir çalışmaya rastlanılmamıştır. Mevcut çalışma alanyazındaki bu boşluğu doldurmayı amaçlamıştır. İlk olarak, kurum bakımı altındaki çocukların akademik başarı ve akran ilişkileri ailesi ile kalan çocuklarla kıyaslanmıştır. Ardından, sosyal destek ve mizacın doğrudan etkisi ele alınmıştır. Doğrudan etkiye ek olarak, sosyal desteğin ve olumsuz duygulanımın düzenleyici rolleri incelenmiştir. Son olarak, sosyal destek, mizaç ve yetiştirilme koşulları arasındaki üçlü etkileşim etkisi ele alınmıştır.

2. Yöntem

2.1 Katılımcılar

Bu çalışmanın katılımcıları koruma altında olan çocuklar, bakım personelleri, bu çocukların sınıf öğretmenleri, sınıf arkadaşları ve annelerinden oluşmaktadır. İlköğretim 3., 4., 5., ve 6. sınıfa giden 400 çocuk çalışmaya katılmıştır. Bu çocuklardan 35 tanesi ölçeklerinde %5'ten fazla kayıp veri olduğu için çalışmadan çıkarılmıştır. Dolayısıyla, mevcut çalışma 142 kurum bakımı altında, 223 aile yanında olmak üzere toplam 365 çocuğu kapsamaktadır. Çocukların yaşları 7 ile 13 arasındadır ($Ort = 10.18$, $SS = 1.20$).

Kurum bakımı altındaki çocuklar için, bakım süresi 4 ile 121 ay arasında değişmektedir ($Ort = 37.94$, $SS = 27.11$). Koruma altına alınma nedenleri ihmal, istismar, ebeveyn kaybı gibi olumsuz durumları içermektedir. Bakım personellerinin yaş aralığı 22 - 53, eğitim düzeyleri ise lise ($N = 93$) ve üniversite ($N = 68$) olarak belirtilmiştir.

2.2 Ölçekler

2.2.1 Akran Zorbalığını Belirleme Ölçeği

Bu ölçek Gültekin ve Sayıl (2005) tarafından akran zorbalığını belirlemek amacıyla geliştirilmiştir. “Çok Boyutlu Akran Zorbalığı Ölçeği” nde (Mynard ve Joseph, 2000) yer alan maddeler kullanılarak ve yeni maddeler eklenerek bu form oluşturulmuştur. Ölçek korkutma/sindirme, alay, ilişkisel saldırı, kişisel eşyalara saldırı ve açık saldırı olmak üzere 5 alt boyuttan oluşmaktadır. Toplam puan olarak ele alınan akran zorbalığına maruz kalma ölçeğinin iç tutarlılık katsayısı .93 olarak bulunmuştur.

2.2.2 Akran Kabul/Akran Ret Ölçümü

Akran kabulü “Çocuklar için Benlik Algısı-Sosyal Kabul Alt ölçeği” (Harter, 1985) ve yeni eklenen maddeler ile akran reddi “Çocuk Davranışları Ölçeği-Dışlama Alt ölçeği” (Ladd ve Profilet, 1996) ile ölçülmüştür. İç tutarlık katsayıları akran kabulü için .77, akran reddi için .72 olarak bulunmuştur.

2.2.3 Notlar

Çocukların matematik, Türkçe, sosyal bilimler ve fen bilgisi derslerinden aldıkları notlar karnelerinden öğrenilmiştir. 4.5. ve 6. Sınıfa giden öğrenciler için notlar 100 üzerinden değerlendirilirken, üçüncü sınıfların notları “çok iyi, iyi ve geliştirilmeli” şeklinde belirtilmiştir. Tüm puanları eşitlemek amacıyla üçüncü sınıfa devam eden öğrencilerin notları 33 ile çarpılmıştır.

2.2.4 Akademik Katılım

Çocukların sınıf içi derse katılımları öğretmen formu ile değerlendirilmiştir. Bu form 15 maddeden oluşmaktadır. 10 madde “Davranışsal Akademik Katılım Ölçeği (Hughes ve Coplan, 2010)” nden alınmıştır. Diğer beş madde araştırmacılar tarafından yazılmıştır. Ölçeğin iç tutarlık katsayısı .96 bulunmuştur.

2.2.5 Çocuk-Ergen Sosyal Destek Ölçeği

Bu ölçek Malecki ve Demaray (1999) tarafından çocukların ebeveynleri, sınıf arkadaşları, okulu ve yakın arkadaşlarından algıladıkları sosyal desteği ölçmek amacıyla geliştirilmiştir. Yardımcı ve Başbakkal (2009) bu ölçeği Türkçe' ye uyarlamışlardır. Mevcut çalışmada, anneden ve öğretmenden algılanan sosyal destek kullanılmış olup iç tutarlık katsayısı sırasıyla .88 ve .89 bulunmuştur.

2.2.6 Orta Çocukluk Döneminde Mizaç Ölçeği

Bu ölçek Simonds ve Rothbart (2004) tarafından 7-10 yaş arasındaki çocukların mizaç özelliklerini değerlendirmek amacıyla geliştirilmiştir. Bu çalışma kapsamında, mizacın engelleme denetimi, algısal hassasiyet ve azalan tepkisellik/sakinleşme alt boyutları seçilmiştir. İç tutarlık katsayıları sırasıyla .76, .84 ve .82 olarak bulunmuştur.

2.2.7 Erken Ergenlik Mizaç Ölçeği

Bu ölçek 9-15 yaş arasındaki çocukların mizaç özelliklerini değerlendirmek amacıyla Capaldi ve Rothbart (1992) tarafından geliştirilmiştir. Mevcut çalışmada mizacın dikkati odaklama, harekete geçme kontrolü, ve saldırganlık alt boyutları bu ölçekten alınmıştır. Belirtilen alt ölçeklerin iç tutarlık katsayıları sırasıyla .73, .78 ve .71 olarak bulunmuştur.

2.2.8 Deneyim Hikayesi

Bu formda, kurum bakımı altındaki çocukların bakım geçmişlerini ve demografik bilgilerini değerlendiren sorular yer almaktadır. Çocukların cinsiyeti, yaşı, kurum bakımı altına alınma nedenleri, bakım süresi gibi bilgiler çocukların dosyalarından ya da sosyal hizmet çalışanlarından elde edilmiştir.

2.2.9 Demografik Bilgi

Anneler tarafından doldurulan demografik bilgi formu anne-babanın yaşı, eğitim düzeyleri, meslekleri, gelirleri, medeni halleri gibi bilgilerden oluşmaktadır.

2.3 İşlem

İlk olarak, Orta Doğu Teknik Üniversitesi Etik Komisyonu'ndan etik izin, Aile ve Sosyal Politikalar Bakanlığı ve Milli Eğitim Bakanlığı'ndan çalışma izinleri alınmıştır. Bu araştırma kapsamında, çocuklara ve bakım personellerine ilişkin ölçümlerin tamamlanması amacıyla çocuk evleri ve sevgi evleri ziyaret edilmiştir. Katılımcı olmayı kabul edip onam veren bakım personelleri ve çocuklar ölçekleri doldurmuşlardır. Kurum bakımındaki çocukların okulları ziyaret edilerek aileleri ile yaşayan sınıf arkadaşlarından bir kaçı çalışmaya kontrol grubu olarak dahil edilmiştir. Ölçekler okuldaki uygun sınıflarda 2-3 kişilik gruplar halinde çocuklara uygulanmıştır. Ardından, öğretmenler çalışmaya katılan çocukların akademik başarılarına ilişkin ölçümleri doldurmuştur. Dönem sonunda araştırmacı okulları tekrar ziyaret ederek müdür yardımcısından çocukların notları hakkında bilgi almıştır.

3. Bulgular

3.1 Veri İncelemesi ve Ön Analizler

Analizlere geçmeden önce, eksik veriler incelenmiş olup %5'ten az eksik veriler Beklenti Büyütme tekniği ile doldurulmuştur. Ardından, uç değer analizi her grup için ayrı ayrı incelenmiş olup -3.29 ve 3.29 aralığında olmayan değerler kabul edilebilir en yakın z puanına karşılık gelen puanlar ile değiştirilmiştir.

3.2 Tek Yönlü Gruplar Arası Çok Değişkenli Varyans Analizi (MANOVA) Sonuçları

Çocukların akademik başarılarını (akademik katılım ve notlar) ve akran ilişkilerini (akran kabulü, reddi ve zorbalığa maruz kalma) gruplar arasında karşılaştırmak amacıyla çok değişkenli varyans analizi yapılmıştır. Kurum bakımı altındaki çocuklar ile ailesi yanında kalan çocuklar akademik başarı yönünden anlamlı olarak farklılaşmaktadır, $\lambda = 0.53$, $F(2, 345) = 153.03$, $p < .001$. Devlet koruması altındaki çocukların sınıf içi katılımları ($Ort = 2.56$, $SS = .05$) ve notları ($Ort = 66.81$, $SS = 1.06$), ailesi yanında kalan çocukların katılımları ($Ort = 3.48$, $SS = .04$) ve notlarından ($Ort = 88.20$, $SS = 0.84$) anlamlı olarak daha düşüktür. Akran ilişkilerini değerlendiren

MANOVA analizi sonucuna göre, gruplar arasında anlamlı farklılıklar bulunmaktadır, $\lambda = 0.93$, $F(3, 361) = 8.82$, $p < .001$. Devlet koruması altındaki çocukların akran-red ($Ort = 1.64$, $SS = .73$) ve zorbalığa maruz kalmaları ($Ort = 0.42$, $SS = .41$), ailesi yanında kalan çocukların ret algıları ($Ort = 1.35$, $SS = .48$) ve zorbalığa maruz kalmalarından ($Ort = 0.30$, $SS = .29$) anlamlı olarak daha yüksektir. Akran kabulünde gruplar arasında fark bulunmamaktadır.

3.3 Hiyerarşik Regresyon Analizleri

Çocukların algıladıkları sosyal desteğin ve mizaç özelliklerinin doğrudan ve düzenleyici etkilerini görmek amacıyla bir dizi hiyerarşik regresyon analizi yapılmıştır. Moderasyon analizlerinde grup, sosyal destek kaynakları (anne/bakım personeli ve öğretmen) ve mizaç (olumsuz duygulanım) arasındaki iki yönlü ve üç yönlü etkileşimleri yer almaktadır.

3.3.1 Akademik Başarıyı Yordayan Hiyerarşik Regresyon Analizleri

İlk olarak, akademik katılım için yapılan analizlerde, grup anlamlı olarak akademik katılımı yordamıştır ($\beta = .61$, $p < .001$). Mizaç özellikleri modele eklendiğinde ise kendini denetleme becerilerinin akademik katılımı pozitif yönde anlamlı yordadığı görülmektedir ($\beta = .22$, $p < .01$). Sosyal destek kaynaklarının doğrudan rollerine bakıldığında, yalnızca öğretmen sosyal desteğinin akademik katılımı olumlu yönde yordadığı görülmüştür ($\beta = .12$, $p < .05$).

Grup, olumsuz duygulanım ve öğretmen sosyal desteğinin üç yönlü düzenleyici değişken analizi yapıldığında ise, bu etkileşimin marjinal olarak akademik katılımı yordadığı görülmüştür ($\beta = .10$, $p = .07$). Etkileşim etkisi yorumlandığında, kurum bakımı koşulunda, olumsuz duygulanımı düşük olan çocuklarda öğretmen desteğinin yüksek olması akademik katılımı pozitif yönde yordamıştır; ev ortamında yaşayan çocuklar için bu etkileşim anlamlı değildir. Ayrıca, sosyal desteğin yetiştirilme koşulları üzerindeki koruyucu etkisi sadece düşük olumsuz duygulanımı olan çocuklarda anlamlı bulunmuştur.

Not sonuç deęiřkeni için yapılan analizlerde, yetiřtirilme kořulu anlamlı olarak notları yordamıřtır ($\beta = .62, p < .001$). Mizaç özellikleri modele eklendięinde ise, kendini denetleme becerileri çocukların notlarını pozitif yönde yordamıřtır ($\beta = .20, p < .001$). Ancak, sosyal destek kaynaklarının (öęretmen ve anne desteęi) notlar üzerinde doęrudan etkisi bulunmamıřtır. Sosyal destek ve olumsuz duygulanımın düzenleyici rolleri de not deęiřkeni için anlamlı bulunmamıřtır.

3.5.2 Akran İliřkilerini Yordayan Hiyerarřik Regresyon Analizleri

Akran zorbalıęına maruz kalma sonuç deęiřkeni için yapılan regresyon analizlerinde, ailesi ile yařayan çocukların kurumda kalan çocuklara göre akranları tarafından daha az zorbalıęa maruz kaldıęı bulunmuřtur ($\beta = -.16, p < .01$). Çocukların mizaçı açıklanan varyans üzerinde etkili olsa da ($R^2 = .07, p < .01$), mizaç özellikleri bu sonuç deęiřkenini anlamlı olarak yordamamaktadır. Destek kaynakları modele eklendięinde, hem öęretmen desteęinin ($\beta = -.20, p < .001$) hem de algılanan anne desteęinin ($\beta = -.23, p < .001$) akranları zorbalıęına maruz kalmayı olumsuz yönde yordadıęı görölmüřtür. Algılanan sosyal destek, yetiřtirilme kořulları ve olumsuz duygulanım arasındaki iki ve üç yönlü etkileřim etkileri anlamlı bulunmamıřtır.

Akran kabulü sonuç deęiřkeni için yapılan hiyerarřik regresyon analizlerinde, yetiřtirilme kořulları akran kabulünü anlamlı olarak yordamamıřtır. Mizaç özellikleri eklendięinde ise, algısal hassasiyet ($\beta = .15, p < .01$) ve kendini denetleme becerileri ($\beta = .12, p = .08$) akran kabulünü pozitif yönde yordamıřtır. Dięer bir adımda modele destek kaynakları eklendięinde, algılanan anne desteęi ($\beta = .23, p < .001$) ve öęretmen desteęinin ($\beta = .25, p < .001$) akran kabulünü pozitif yönde anlamlı olarak yordadıęı görölmüřtür. Mizaç özelliklerinin anlamlı etkileri bu adımda kaybolmuřtur. İki yönlü ve üç yönlü etkileřimler akran kabulünü anlamlı olarak yordamamıřtır.

Akran reddi sonuç deęiřkeni için yapılan hiyerarřik regresyon analizlerinde, kurum bakımında kalmanın akran reddini negatif yönde yordadıęı görölmüřtür. ($\beta = -.24, p < .001$). Modele mizaç özellikleri eklendięinde, algısal hassasiyet ($\beta = -.15, p < .01$) ve kendini denetleme ($\beta = -.16, p < .05$) negatif yönde akran reddini yordamıřtır. Benzer

şekilde, sosyal destek kaynakları modele son adımda eklendiğinde, anne ($\beta = -.13, p < .05$) ve öğretmen ($\beta = -.14, p < .05$) desteği negatif yönde akran reddini yordamıştır.

İki yönlü etkileşim etkisi analizlerinde, anne desteği ve öğretmen desteğinin düzenleyici rolü analizlerde ayrı incelendiğinde her iki analizde de, yetiştirilme koşulları ve olumsuz duygulanım etkileşiminin akran reddini marjinal olarak yordadığı görülmüştür ($\beta = .15, p = .06; \beta = .13, p = .09$, sırasıyla).

Kurum bakımı altındaki çocuklar ve aileleri ile yaşıyan çocuklar arasında, sadece düşük olumsuz duygulanım koşulunda akran reddi açısından gruplar arası anlamlı bir fark bulunurken, yüksek olumsuz duygulanım koşulunda bu fark kaybolmuştur.

4. Tartışma

4.1 Sonuçların Tartışılması

4.1.1 Yetiştirilme Koşullarının, Sosyal Desteğin ve Mizacın Doğrudan Etkileri

Kurum bakımı altındaki çocukların gelişimsel sonuçları değerlendirildiğinde, bakım altındaki çocukların ailesi yanında kalanlara kıyasla daha düşük akademik başarı göstermeleri, yetiştikleri ortamın uyaran açısından fazla zengin olmaması, bakım personellerinin çocukların akademik aktivitelerine katılımının az olması ve bilişsel gelişimlerdeki gecikmeler ile açıklanabilir (Fan ve Chen, 2001; van IJzendoorn ve ark., 2011). Çocukların akran ilişkileri gruplar arasında incelendiğinde, akran kabulünde herhangi bir fark çıkmazken, kurum bakımındaki çocukların daha fazla akran reddi ve zorbalığa maruz kalma bildirdikleri görülmektedir. Erken dönemde bakım veren ile kurulan güvenli ve duyarlı bir ilişki çocukların ilerleyen dönemlerdeki akran ilişkilerini şekillendirmektedir (Bohlin ve ark., 2005). Bu çocukların güvenli ilişki kuracakları bir yetişkin olmadığından, arkadaş edinme ve arkadaşlık ilişkilerini sürdürme konusunda güçlükleri bulunmaktadır. Ayrıca, akran ilişkilerinde önemli rol oynayabilecek bakış açısı alma ve duygu düzenleme becerileri kurum bakımındaki çocuklarda daha düşük olduğundan, daha fazla reddedilme ve zorbalık kurbanı olma gözlemlenebilir (Tarullo ve ark., 2007).

Sosyal destek ve mizacın çocuk sonuçları üzerindeki doğrudan etkilerine bakıldığında, öğretmenlerden algılanan sosyal desteğin akademik katılımı olumlu yönde yordadığı görülmüştür. Öğretmenlerden sosyal destek algılamak, çocukların sınıf içinde daha rahat hissetmesine yol açacağından çocuklar derse daha çok katılım gösterebilirler (Klem ve Connell, 2004). Sosyal desteğin notları yordamaması, sınav başarılarının daha çok bilişsel faktörlerle ilişkili olabileceği ile açıklanabilir (Bull, Espy ve Wiebe, 2008). Öte yandan, anne ve öğretmen desteği daha fazla akran kabulü, daha az akran reddi ve zorbalığa maruz kalmayı yordamaktadır. Algılanan sosyal destek, çocukların sosyal becerilerini geliştirebileceğinden akran ilişkileri de olumlu yönde etkilenebilir (Bender ve Lösel, 1997).

Mizacın ana etkisine bakıldığında, kendini denetleme becerilerinin çocukların akademik katılım ve notlarını olumlu yönde yordadığı görülmektedir. Alanyazın ile tutarlı olarak, dikkatini sürdürebilen, davranışlarını düzenleyebilen ve öz-disiplini yüksek olan çocuklar daha başarılı olmaktadır (Rothbart ve Bates, 2006). Akran ilişkileri ile mizaç özellikleri arasındaki ilişkiye bakıldığında, kendini denetleme ve algısal hassasiyetin yalnızca akran reddini olumsuz yönde yordadığı görülmüştür. Kendini denetleme becerileri düşük olan çocuklar daha fazla problem davranış göstermeye ve arkadaşları tarafından daha az sevmeye yatkın olarak düşünülmüşlerdir (Murray ve Kochanska, 2002). Algısal hassasiyeti yüksek olan çocuklar da sosyal ipuçlarını ve başkalarının duygularını daha iyi anlayabileceğinden akranları tarafından dışlanmaya daha az maruz kalabilirler.

4.1.2 Yetiştirilme Koşulları, Sosyal Destek ve Mizacın Etkileşim Rollerini

Sosyal desteğin kurum bakımı altındaki çocukların akademik başarıları ve akran ilişkileri üzerindeki koruyucu etkisi incelendiğinde, yalnızca akademik katılım için öğretmen sosyal desteğinin kısmi bir koruyucu rolü olduğu görülmüştür. Kurum bakımı altındaki çocuklar ile ailesi ile kalan çocuklar arasındaki akademik katılım farkı, çocuklar öğretmenlerden sosyal destek algılandığında azalmaktadır. Sosyal desteğin yalnızca çocukların sınıf içi katılımlarında koruyucu rolünün olması gelişimsel sonuçların kalıcılıkları ile ilişkili olabilir. Akademik katılım, çocukların sınıf içindeki davranışları ile değerlendirildiğinden çevresel faktörlerden daha kolay

etkilenebilir. Fakat çocukların notları daha çok bilişsel gelişimleri ile akran ilişkileri de sosyoduygusal gelişimleri ile ilişkili olabileceğinden eş zamanlı olarak ölçülen sosyal destek bu sonuç değişkenlerinde koruyucu rol oynamamış olabilir.

Farklılaşan hassasiyet teorisi kapsamında, çocukların olumsuz duygulanımları ile çevresel faktörlerin etkileşimine bakıldığında, yetiştirilme koşulları ve olumsuz duygulanımın akran reddini yordamada marjinal olarak anlamlı olduğu görülmüştür. Kurum bakımı altındaki çocuklar ile ailesi yanında yaşayan çocukların akran reddi yalnızca düşük olumsuz duygulanıma sahip olanlar için farklılaşmaktadır.

Buna ek olarak, akademik katılım yordanırken, olumsuz duygulanım ile öğretmen sosyal desteği arasında marjinal bir etkileşim etkisi bulunmaktadır. Öğretmen algılanan sosyal destek yalnızca düşük olumsuz duygulanımı olan çocukların akademik katılımları anlamlı olarak artırmaktadır.

Etkileşimlere bakıldığında, farklılaşan hassasiyet teorisi desteklenmemiştir. Olumsuz duygulanımı düşük olan çocukların, yetiştirilme koşullarından ve sosyal destekten daha fazla etkilenmesi bu mizaç özelliğinin gruba göre işlevselliğinin değişmesi ile açıklanabilir. Üç yönlü etkileşimlere bakıldığında, öğretmen sosyal desteği yalnızca düşük olumsuz duygulanımı olan çocuklar için koruyucu bir rol oynamaktadır. Çocukların olumsuz duygulanımının düşük olması kurum ortamında onların daha fazla gözardı edilmesine sebep olabileceğinden işlevsel bir mizaç özelliği değildir. Bu çocuklar başka bir kaynaktan yani öğretmenlerinden destek algıladıklarında akademik katılımlarında daha fazla bir artış gözlemlenebilir.

4.2 Çalışmanın Katkıları ve Doğurguları

Bu çalışma, aile-temelli bakım türlerindeki çocukların akran kabulü/reddi ve zorbalığa maruz kalmaları gibi daha önce çalışılmamış sonuç değişkenlerini incelemesi ile alanyazına önemli bir katkı sağlamaktadır. Aynı zamanda sosyal destek ve mizacın etkileşim etkileri daha önce akademik başarı ve akran ilişkilerinde değerlendirilmediğinden, bu çalışma gelişimsel sonuçlardaki bireysel farklılıkları incelemek adına büyük önem taşımaktadır.

Çalışmadan elde edilen bulgular ışığında, sevgi evi ve çocuk evlerindeki çocukların ailesi ile yaşayan çocuklara göre daha olumsuz sonuçlar göstermesi sosyal politikalara bu değişkenlere yönelik kurum özelliklerinin geliştirilmesi gerektiği konusunda yol göstermektedir. Aynı zamanda sosyal desteğin olumlu etkileri bakım personellerine anlatılarak, çocuklara nasıl yaklaşımları gerektiğine yönelik eğitimler verilebilir.

4.3 Çalışmanın Sınırlılıkları ve Gelecek Çalışmalara Tavsiyeler

Akran kabulü, reddi ve zorbalığa maruz kalma ile ilgili çocuklardan bilgi alınırken, hangi arkadaş çevresini düşüneceklerine yönelik bir yönerge verilmemiştir. Çocukların okul, ev ya da mahalle arkadaşlarının onlara karşı yaklaşımı farklılık gösterebileceğinden, sonuçlar yorumlanırken dikkat edilmelidir. Buna ek olarak çocukların sosyometrik statüleri yalnızca onların algıları ile değerlendirilmiştir. Öğretmen bildirimini ya da aday gösterme tekniği de bu değişken için ek bilgi sağlayabilir.

Gelecek çalışmalar, sosyal destek ve mizacın uzun süreli etkileri açısından boylamsal çalışmalar yapabilir. Aynı zamanda, başka okulla ilgili değişkenler de incelenerek daha bütüncül bir yaklaşım sağlanabilir.

Appendix G: Thesis Permission Form/Tez İzin Formu

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YAZARIN / AUTHOR

Soyadı / Surname : Erel Gözağaç

Adı / Name : Sema

Bölümü / Department : Psikoloji

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English) : Academic Achievement and Peer Relationship of Children in Care: The Moderator Role Of Temperament And Social Support

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master Doktora / PhD

1. **Tezin tamamı dünya çapında erişime açılacaktır.** / Release the entire work immediately for access worldwide.
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A copy of the Decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.

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