

SIBLING BULLYING AND PEER BULLYING RELATIONS  
TO EMPATHY, MORAL DISENGAGEMENT, PROBLEM SOLVING  
AND  
PARENTAL ACCEPTANCE-REJECTION

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## **ABSTRACT**

### **SIBLING BULLYING AND PEER BULLYING RELATIONS TO EMPATHY, MORAL DISENGAGEMENT, PROBLEM SOLVING, AND PARENTAL ACCEPTANCE-REJECTION**

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This study aimed to investigate the relationships between parental (parental acceptance-rejection), personal (empathy, moral disengagement, problem solving) factors, and sibling bullying; and also peer bullying through sibling bullying. A structural equation model which theoretically based on Social Cognitive Theory and Parental Acceptance-Rejection Theory was tested. Elementary school children (n=716) enrolled in 4<sup>th</sup> and 5<sup>th</sup> grades (51.5% were boys) were the participants. Revised-Sibling Bullying Questionnaire, Peer Relations Questionnaire, Moral Disengagement Scale, KASI Empathic Tendency Scale, Problem Solving Inventory for Children and Parental Acceptance-Rejection Questionnaire were the data collection instruments of this study along with a demographic information form. The applicability of the integration of Social Cognitive Theory and Parental Acceptance-Rejection Theory as a theoretical framework in understanding sibling and peer bullying was supported by the tested SEM model. The results of SEM revealed the support for hypothesized model that children have higher levels of parental rejection perception showed also higher levels of moral disengagement; whereas, lower levels of empathic tendency and problem solving skills which resulted in higher levels of

both sibling and peer bullying behaviors. In addition, sibling bullying was found to be significantly and positively related to peer bullying. Results were discussed in the light of the relevant literature, and in addition to implications for theory, research and practice; the recommendations for the further studies were introduced.

**Keywords:** sibling bullying, peer bullying, parental acceptance-rejection, moral disengagement, structural equation model test

## ÖZ

### KARDEŞ ZORBALIĞI VE AKRAN ZORBALIĞININ EMPATİ, AHLAKİ ÇÖZÜLME, PROBLEM ÇÖZME VE EBEVEYN KABUL-REDDİ İLE İLİŞKİSİ

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Bu çalışmanın amacı, ebeveynle ilgili (ebeveyn kabul-reddi) ve kişisel (empati, problem çözme, ahlaki çözölme) özellikler ile kardeş zorbalığı; ayrıca kardeş zorbalığı yoluyla akran zorbalığı arasındaki ilişkileri incelemektir. Bu amaçla, Sosyal Bilişsel Kuram ve Ebeveyn Kabul-Red Teorisi'ni temel alan bir yapısal eşitlik modeli (YEM) oluşturulup test edilmiştir. Bu çalışmanın katılımcıları 4. ve 5. sınıflarda öğrenim gören 716 öğrencidir. Öğrencilerin %51.5'i erkektir. Yenilenmiş Kardeş Zorbalığı Ölçeği, Akran İlişkileri Ölçeği, Ahlaki Çözölme Ölçeği, KASİ Empatik Eğilim Ölçeği, Çocuklar için Problem Çözme Envanteri, Ebeveyn Kabul-Red Ölçeği ve demografik bilgi formu bu çalışmada veri toplama aracı olarak kullanılmıştır.

Test edilen YEM modeli; Sosyal Bilişsel Kuram ve Ebeveyn Kabul-Red Teorisi'nin birlikte kullanılarak, kardeş ve akranlara zorbalık yapma davranışlarını açıklamada, kuramsal bir çerçeve oluşturabileceğini desteklemiştir. YEM analizi sonuçları hipotez modeli destekler şekilde; ebeveyn red algısı yüksek olan çocukların, empati ve problem çözme düzeyleri düşükken, ahlaki çözölme düzeylerinin yüksek

olduğunu; bunlar aracılığıyla da yüksek düzeyde kardeş ve akran zorbalığı davranışı sergilediklerini ortaya koymuştur. Ayrıca, kardeş zorbalığının akran zorbalığı ile pozitif yönde anlamlı ilişkili olduğu bulunmuştur. Sonuçlar ilgili alanyazın ışığında tartışılmış ve bu sonuçların kurama, araştırmaya ve uygulamaya yönelik katkıları açıklanarak; ileride yapılacak çalışmalara yönelik öneriler sunulmuştur.

**Anahtar Kelimeler:** kardeş zorbalığı, akran zorbalığı, ebeveyn kabul-reddi, ahlaki çözülme, yapısal eşitlik modellemesi

Çocukluğuma...

ve

Canım kızım temsilinde tüm çocuklara;

“Zorbalık” sız/ “Şiddet” siz bir yaşam dileğiyle...



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## CHAPTER 1

### INTRODUCTION

*“Bullying is not a reflection of the victim’s character, but rather a sign of the bull’s lack of character. Thus, instead of teaching kids to learn how to deal with bullies, how about we teach them not to be bullies!”*

*Anonymous*

#### 1.1. Background of the Study

One of the most basic and longlasting interactions over a lifespan is sibling relationship. Because of its nature, it is not a choice but an obligatory relationship (Bayram, 2014). As well as its support and positive contribution (e.g., Lam, Solmeyer, & McHale, 2012), it also has a potentially negative effect on children’s development (e.g., Gamble, Yu, & Kuehn, 2011). Sibling bullying is one of the negative behavior of siblings which mostly effects negatively children’s social-emotional development.

*Bullying* is described as a global subtype of aggressive behavior children and adolescents confront regularly in the context of schools (Salmivalli, Peets, & Hodges, 2011; Smith, Morita, Junger-Tas, Olweus, Catalano, & Slee, 2000) and also in other settings such as at home (Menesini, Camodeca, & Nocentini, 2010; Smith et al., 2000). Bullying is generally described as repetitive, harm intending and significant distress leading negative actions (e.g., physical, verbal, relational) and performed by more powerful individual through a less powerful one. Bullying is in both contexts; at home and at school is so common. Although each bullying incidents

has special characteristics in each setting (e.g. group nature in peer environment not at home), bullying in two context “sibling bullying and peer bullying” embody several features like *form* (physical, verbal, relational), *intentional nature*, *persistence (repetition)*, and *power imbalance*. Bullying is differentiated from aggression and conflict by the help of these criteria (Jolliffe & Farrington, 2006; Menesini, et al., 2010). Despite bullying at home setting is a significant predictor for bullying at school setting (Johnson, Duncan, Rothman, Gilreath, Hemenway, Molnar, & Azrael, 2015), it has not significantly been taken into consideration of the researchers yet.

Contrary to popular belief, sibling bullying is more likely prevalent than peer bullying. The prevalence of sibling bullying experience was 2.5 times more likely than peer bullying experience and sibling bullying is strongly and significantly related to peer bullying (Johnson et al., 2015). According to results of a recent study, 40% of the children between 2-17 years old reported to experienced aggression by siblings (Tucker, Finkelhor, Turner, & Sattuck, 2013). Similarly, Tanrikulu and Campbell (2015) reported the rate of sibling bullying perpetration as 31.6% whereas peer bullying perpetration rate was 9.8% among 455 students from the grades 5 to 12. Moreover, in a number of studies, bullying between peers was found to be predicted by bullying between siblings (e.g., Johnson et al., 2015; Wolke & Samara, 2004). Duncan (1999a) supported this statement with the result that 60% of children participated in peer bullying episodes reported that they are also experienced sibling bullying at home.

Bullying is a prevalent social problem that negatively effects physical, social, emotional, psychological, and educational developments of children and adolescence (e.g., Collins, McAleavy, & Adamson, 2004; Salmivalli, 1999; Smith & Brain, 2000). It found to be linked to violence, aggression, poor social adjustment, later misconduct, psychological disorders, and sickness (Olweus, 1993). Moreover, several psychosocial difficulties had been found to be related to both sibling and peer bullying such as failure in social interactions (Wolke & Samara, 2004), externalizing problems (Natsuaki, Ge, Reiss, & Neiderhiser, 2009), and internalizing problems, as well as psychological difficulties (Duncan, 1999a) such as higher levels of anxiety, depression (Duncan, 1999a; Ferguson, San Miguel, & Hartley, 2009; Seals & Young,

2003), loneliness, and lower levels of self-esteem (Duncan, 1999a; Seals & Young, 2003), psychosomatic symptoms and substance use (Kaltiala-Heino, Rimpelä, Rantanen, & Rimpelä, 2000). Besides, because the sibling relationship is long-lasting throughout development, it has few opportunities for victims to escape, and so experience of sibling bullying resulted twice more likely in depression, anxiety and self-harm (Bowes, Wolke, Joinson, Lereya, & Lewis, 2014). In addition, the limited previous study results showed that most negatively efficient consequence of sibling bullying is peer bullying (e.g., Ostrov, Crick, & Stauffacher, 2006). Therefore, focusing on sibling bullying is crucial in obtaining a deeper understanding about peer bullying.

Bullying is a social problem and it occurs between the individual and his/her social environment (Swearer, Wang, Berry, & Mayers, 2014). Thus, bullying has been explained by several theoretical perspectives considering social environment of the individual. For instance, *Social Cognitive Theory (SCT)* is thought to be beneficial to explain bullying behavior. It specifically explains that as well as siblings (Bandura, 1973; Brody, 2004; Slomkowski, Rende, Conger, Simons, & Conger, 2001), parenting behaviors play a crucial role on sibling relationships and highly correlated with sibling bullying (Bayram, 2014), because children learn aggressive behaviors by observing others (e.g., siblings, parents) successfully reach their desired goals by using aggressive strategies (Salmivalli et al., 2011). It also proposes reciprocal determinism (Bandura, 2001) that there is continues and reciprocal interplay among social environments (e.g., family members, witnessing behavior of others), personal determinants/internal stimuli (e.g., biological traits, cognitions, feelings, expectations, beliefs, desires, and cognitive skills etc.), and behaviors (Bayrakçı, 2007; Swearer, et al., 2014). For example, expectations, beliefs, and cognitive skills (internal stimuli) developed and shaped by social environment, whereas these expectations, beliefs, and cognitive skills (internal stimuli) direct and shape behaviors. In addition, these behaviors affect the different dimensions of social environment as well as are shaped by the social environment (Bayrakçı, 2007).

In parallel with social cognitive theory but specifically focusing on parental love-expressions, impact, and origins; *Parental Acceptance Rejection Theory (PART)* is the evidence-based theory of socialization and lifespan development (Rohner, 2004).

Rohner's PARTheory claims that children need parental acceptance from parents or attachment figures, and who perceive themselves to be rejected by their mothers or fathers tend to show much more behavioral problems than accepted ones. In addition, if acceptance need of children is not met, they also appear to be more psychologically maladjusted, mentally unhealthy, affected depression (Rohner, Khaleque, & Cournoyer, 2005). Parental rejection can be expressed by four ways: cold and unaffectionate, the opposite of being warm and affectionate; hostile and aggressive; indifferent and neglecting; and undifferentiated rejecting. Undifferentiated rejecting refers although there is no clear indicators of behaviors of parents are unaffectionate, neglecting, or aggressive toward children, children believe that parents do not care about or love them (Rohner, et.al, 2005). In the present study, by considering the significance of Social Cognitive Theory and PARTheory on aggressive behaviors -specifically "bullying"- of children, this current study integrates these theories and explains sibling bullying as a primary source of peer bullying and explains some parental and personal factors as a source of sibling bullying; and also peer bullying through sibling bullying.

One of the personal factors has a potential role to be a risk for bullying behaviors (e.g. sibling bullying) is *empathy* (Olweus, 1993). Empathy is described as identifying and communicating each other's emotions (Cohen & Strayer, 1996). It provides prosocial behaviors as well as prevents antisocial behaviors (Jolliffe & Farrington, 2006). Olweus (1993) stated that children, who bully, have a lack of empathy. Additionally, most of the bullying studies investigating the empathy relationship stated that lower level of empathy is associated with sibling and peer bullying and also lack of comprehending siblings' and others' states of minds and feelings exist in hostile sibling relationship contexts (e.g., Gini, Albiero, Benelli, & Altoe, 2007; Menesini et al., 2010). That is to say, those who have high level of empathy were most likely not to have bullying behavior (Menesini et al., 2010) and bullying behavior was predicted by low levels of empathy (Jolliffe & Farrington, 2006). On the contrary, Sutton, Smith, and Swettenham (1999) proposed that bullies got significantly higher scores on empathy skills (related to cognitive empathy) which provide them effective bullying to reach the goals easily by understanding the mind of victim and to engage others in bullying episodes. As it is seen, there are

conflicting results about empathy and bullying relationship. Therefore, empathy was chosen for this current study as a first personal variable related to sibling and peer bullying.

*Moral disengagement* is another personal variable linked to bullying which helps individuals to justify the actions for their negative or immoral behaviors (Bandura, 2002). The cognitive mechanisms such as -cognitive restructuring, obscuring or minimizing one's agentic role in the harm caused, disregarding or distorting the consequences of negative action, and dehumanizing/ blaming the victim- help individuals for justifying the immoral behaviors. Moral disengagement and bullying was found positively related (Gini, Pozzili, & Bussey, 2014) that bully children have higher moral disengagement levels than victims or other children (Menesini, Sanchez, Fonzi, Ortega, Costabile, & Feudo, 2003). As a result, bully children have a positive point of view toward violence (Olweus, 1993).

As well as lack of perspective taking (Sutton et al, 1999) as mentioned above related to empathy, deficiencies of social *problem solving skills* are another personal factor in relation to bullying (Pellegrini, 2002). Social problem solving is a process which is composed of cognitive and behavioral parts that helps individuals to find effective and usable solutions to daily problems (D'Zurilla, Nezu, & Maydeu-Olivares, 2004). Children generally experience social problems related to prosocial behaviors and aggressive behaviors. Lack of problem solving skills results in children to become psychologically stressful and incompatible (Heppner & Baker, 1997; Nezu & Ronan, 1985). Several study results indicated that problem solving skills significantly and negatively related to aggressive behaviors; in other words, high problem solving skills related to low levels of aggressive behaviors (McMurran, Blair, & Egan 2002; Warden & Mackinnon, 2003). In addition to impulsive and disruptive behaviors, children experience bullying have insufficient social and problem-solving skills. Therefore, they generalize this insufficiency of adaptive social problem solving skills to other contexts and resulting in being punished by parents, disliked by their teachers and exposed to group exclusion by peers (Berger, 2007). They take vengeance on their attackers by provoking and loose other friends causing hostility (Salmivalli & Nieminen, 2002). Therefore, in the present study, the relationship between problem solving and sibling and peer bullying was considered.

The family is the first setting in which the child experience and learn about relationships. Parenting behaviors, parenting styles, and parenting practices mostly called as “parenting” in the literature (Bayram, 2014) and parenting generally mentioned one of the environmental effects on children’s and adolescent’s development-physical, cognitive, psychological, social, and emotional development from birth through adult years (Bornstein, 2013; Rowe, 2002). Additionally, an extensive body of research makes it obvious that parent-child relationships interfere with the development of children’s and adolescents’ interpersonal skills and their socialization. Thus, parents’ attitudes and interactions with children also have an important role on bullying behaviors. For example, not only getting little emotional support by parents (Rigby, 1994), but also having poor relationships with their parents and unhealthy family functioning were reported by bullies (Rigby, 1993). On the other hand, bully-victims reported their parents as very strict, controlling and overinvolved (Olweus, 1993). Moreover, their parents psychologically and physically treated toward them in a harmful way (Duncan, 1999b).

As mentioned, one of the significant factors determines the the nature of sibling bullying is perceived *acceptance and rejection of parents*. According to PARTheory, parental acceptance refers warmth, affection, care, comfort, concern, nurturance, support, or simply love that children can gained from their parents and other caregivers; while parental rejection refers insufficiency or withdrawal of these feelings and behaviors, as well as existence of a various physically and psychologically hurtful behaviors and affects (Rohner, 2004). In childhood, everyone experience more or less love and acceptance of parents or major caregivers. Thus, PARTheory incorporate the parental rejections and warmth dimensions of parenting. PARTheory describes an aggression as “any behavior with the intention of hurting someone, something, or oneself (physically or emotionally).” (Stavrinides, Tantaros, Georgeou, & Tricha, 2018, p.3) and generally, aggression is the results of parental hostility, anger, and hatred. Additionally, parents may show some verbal aggression (e.g. being sarcastic, swearing, teasing, shouting, saying thoughtless, humiliating, or disparaging things to or about the child) or physical aggression (e.g. hitting, pushing, throwing things, and pinching) toward their children (Stavrinides, et al., 2018). Therefore, rejected children tend to have some behavioral problems –specifically



sibling and peer bullying- and in the current study, by the origin of PARTheory, parental acceptance-rejection was examined.

Furthermore, previous study findings showed that being accepted or rejected by parents also related to separately empathy, moral disengagement and problem solving skills of children. Some results indicated that support, warm, high responsiveness and demand of parents are associated with active problem solving (e.g. interpersonal conflict), and enhanced competencies; on the other hand, rejection and neglect of parents are more likely related to anxiety, depression, and depersonalization of children (Brand, Hatzinger, Beck, & Holsboer-Trachsler, 2009; Smits, Soenens, Lyuckx, Duriez, Berzonsky, & Goossens, 2008). Furthermore, children of cherish and warm parents have an opportunity to be in appropriate environment to develop empathy skills by observing and experiencing emotional concern and perspective taking (Eisenberg, Spinrad, & Sadovsky, 2006). Similarly, moral knowledge and accordingly moral behaviors develops positively when the relationship between children and parents is positive (Özyürek & Tezel-Şahin, 2015). Therefore, the role of parental rejection relation to some negative cognitions (e.g. moral disengagement) and negative social skills (empathy, problem solving) in explaining the nature of bullying behavior (sibling and peer) was examined.

All in all, the background of the current study based on previous research reporting that parental acceptance-rejection and a number of personal characteristics (empathy, moral disengagement and problem solving) influence bullying behaviors of children (e.g., Ergün, 2015; Kim & Kim, 2016; Mitsopoulou & Giovazolias, 2015; Pelligrini, 2002; Smith, 2016); in addition to research reporting that most of the peer bullies showed sibling bullying behaviors at home (Menesini et al., 2010; Wolke, Tippet, & Dantchev, 2015). *Social Cognitive Theory (SCT)* which originally provide ‘reciprocal determinism’ to explain the interaction between behaviors and personal and environmental factors applied in this current research in order to shed light on whether such interaction may help to explain bullying behaviors as well. In other words, SCT used to explain the interaction between rejecting parenting, empathy, moral disengagement and problem solving and bullying behaviors. Parenting rejection was also accounted for sibling and peer bullying according to the *Parental Acceptance-Rejection Theory* point of view that absence or lack of basic need of

acceptance cause some personality and behaviors problems of children. Additionally, the relationship between sibling and peer bullying is explained by also *Social Cognitive Theory* that behaviors learned in an environment are generalized to other environments. Investigating the existing research shows that the relationships between the parental and personal factors and both types of bullying mentioned above have not been examined yet. If these associations are uncovered, what parental and personal characteristics lead children to bully their siblings and peers can be detected. Such information can be used to develop efficient bullying prevention and intervention services in addition to its potential to contribute more effective counseling help to targeting sibling and peer bullies.

For readers, there is a cautionary note that; children's perception of just *maternal acceptance-rejection* was taken into consideration in the present study, since previous research findings indicated that perception of maternal acceptance and rejection was directly related to psychological adjustment problems (e.g., Lila & Gracia, 2007) and aggression (e.g., MacKinnon-Lewis, Starnes, Volling, & Johnson, 1997) of children. However, paternal acceptance and rejection was indirectly related to psychological adjustment problems and aggression of children through mother acceptance. In addition, there are also some other results showed that there was the similar patterns of maternal and paternal rejection through their children (e.g., Gülay, 2011). Therefore, the responses of children just related to perception of "maternal acceptance- rejection" were considered as a parental factor called as "parental acceptance-rejection".

## **1.2. Purpose of the Study**

The aim of the present research is to examine the relationships among parental (parental acceptance-rejection), personal (empathy, moral disengagement, and problem solving) variables and sibling bullying; and the links with peer bullying via sibling bullying. Therefore, the purpose of this study is to investigate: *mainly* 1) the indirect links between parental acceptance-rejection, empathy, moral disengagement, problem solving and peer bullying via sibling bullying; and 2) the direct link between sibling bullying and peer bullying; *additionally* 3) the direct links between parental acceptance-rejection, empathy, moral disengagement, problem solving and sibling

bullying; and 4) the indirect links between parental acceptance-rejection and sibling bullying by the mediation of empathy, moral disengagement, problem solving.

### **1.3. Significance of the Study**

The present study explored the role of different parental and personal variables in sibling bullying and in peer bullying through sibling bullying, and its significance due to the contributions of theory, research and practice.

To begin with, the main significance of present research comes from its contribution to theoretical knowledge by explaining peer and sibling bullying. Researchers have benefited from various approaches to explain both peer and sibling bullying including *Social Cognitive Theory-SCT* (e.g., Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004; Swearer et al., 2014) and *Parental Acceptance-Rejection Theory-PART* (e.g., Kim & Kim, 2016; Stavrinides et al., 2018). However, the number of these investigations intending to build a theoretical reasoning for specially sibling bullying is quite limited. Furthermore, these studies have theoretically assessed; antecedents and consequences of peer and sibling bullying.

Nevertheless, the impact of parental rejection via mediating role of personal factors on sibling and peer bullying, as well as the impacts of parental and personal factors on peer bullying through sibling bullying have not been theoretically considered yet. To fill these gaps, this study integrated social cognitive and parental acceptance-rejection theories and provided scientific evidence proposing that combination of these theories can offer a theoretical understanding to both sibling and peer bullying and their relations with the predictive variables. In other words, in the present study, the researcher integrated these two theories to explore not only the effect of combination of independent constructs (parental and personal) on sibling and peer bullying, but also examine the role of personal variables (empathy, moral disengagement, and problem solving) as mediators between parental acceptance-rejection and bullying variables.

Although parental acceptance-rejection has been examined in relation to aggression (e.g., Aytekin, 2015), sibling relationships (e.g. Kanyas, 2008), peer bullying behaviors (e.g. Ergün, 2015), or behavior problems (e.g. Yakmaz-Basılğan, 2012);

far less is known about how it is correlated with sibling bullying. By utilizing PARTheory, peer bullying and especially sibling bullying behaviors can be conceptualized applying the knowledge that individuals' dissatisfaction needs of parental acceptance, warmth or love result in bullying behaviors as well as negative social-cognitive personal characteristics. To the best of the knowledge of the researcher, the present study is one of the pioneer investigations which included both sibling and peer bullying as well as organized and tested under the guidance of the integration of both theories. The findings of this study provided evidence suggesting that besides Social Cognitive Theory, Parental Acceptance-Rejection Theory introduces a new perspective in understanding sibling and peer bullying behaviors.

The focus of this present research on sibling and also peer bullying behaviors has provided significance to the research. Until recently, sibling bullying was assumed as a conflict like normal part of sibling relationship rather than a crucial problem. Therefore, although peer bullying has been widely paid attention and searched, sibling bullying has been considerably neglected by researchers especially in Turkey (Tippet & Wolke, 2015). However, due to the discussions all over the world defending that sibling bullying is prevalent more than peer bullying (e.g., Erdur-Baker & Cilalı, 2014; Tanrıku & Campbell, 2015; Linares, 2006; Tucker et al., 2013) and has many negative outcomes for children (e.g. Duncan, 1999a; Wolke & Samara, 2004), the topic has been found to be valuable to investigate for years. Nevertheless, it has been still very new topic for Turkish literature.

Recent evidence proposes that sibling bullying is linked to academic underachievement (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001; Ma, Phelps, Lerner, & Lerner, 2009; Sassu, Elinoff, Bray, & Kehle, 2004), psychiatric disorders; depression, anxiety, self-harm (Duncan, 1999a; Bowes et al., 2014), in addition to poor mental health (Wolke & Skew, 2012). Furthermore, bullying toward sibling was found associated with peer bullying (Erdur-Baker & Cilalı, 2014; Wolke et al., 2015). Children generally carry sibling bullying behaviors to peer contexts and Ostrov et al. (2006) pointed out this transference as the most serious consequences of sibling bullying. Therefore, along with peer bullying; the nature, the extent and the effects of sibling bullying should be understood for more efficient prevention and intervention strategies against both sibling and peer bullying.

Therefore, this investigation is one of the first studies filling the nature part of this gap by bringing the research on parental and personal characteristics of sibling bullies and peer bullies by considering the connections between them. Putting the research on the parental and personal factors of sibling bullying and peer bullying together important because researchers currently have not had a sufficient knowledge about the potential relations between certain parental, personal characteristics and both bullying types yet. This knowledge is intended to guide professionals to detect the significant factors easily and by integrating these factors from home and school to develop more efficient prevention and intervention programs for bullying problem. Therefore, by utilizing a structural equation model testing, these connections were empirically tested and validated for the first time by this current research.

This study also contributed to the research of bullying with its measurement instruments which were adapted and revised. *Sibling Bullying Questionnaire* (Wolke & Samara, 2004) was adapted then revised in this present research; and renamed as *Revised Sibling Bullying Questionnaire (R-SBQ)* after the revision process. Thus, the Turkish literature gained a validated sibling bullying scale for the research which could be more appropriate with the sample involving elementary school children. In addition, translation and adaptation of *Peer Relations Questionnaire* (PRQ) (Rigby & Slee, 1993), and *Moral Disengagement Scale* (MDS) (Caprara, Pastorelli, & Bandura, 1995) into Turkish were done in this current study. These measurement instruments were psychometrically validated in this study and need further studies for evidences of validation. The instrument can help the researchers conducting studies on diverse topics such as aggression or violence including sibling bullying or peer bullying among the students of elementary schools in Turkey.

In addition to contributions for theory and research, as stated, this current investigation has a number of significances on the practice. First of all, the main aim of this present study was to discover more about sibling and peer bullying perpetration and to explore the associations between some parental and personal characteristics in relation to sibling and peer bullying. Thus, by the help of this current research, a deeper understanding about sibling and peer bullying will be accomplished. This understanding can provide assistance to the professionals targeting to carry out professional counseling to the children especially in the late

childhood and early adolescence period. This transferring characteristic of bullying from home to school may draw a road for professionals to follow. Working on extensively, not just focusing on school context but also home context, especially sibling relationships, may help professionals to detect the origins of the problem easier and to treat them in a more efficient way, and in a more short time.

Another practice related significant contribution of this research is for school counselors that it provides help for children who have engaged in aggressive behaviors at the school. Some parental and personal related factors as well as sibling bullying perpetration of the children are seemed to play an important role in their peer bullying behaviors. Therefore, children have certain parental and personal characteristics such as low empathy and problem solving skills, but high moral disengagement and parental rejection may more prone to sibling bullying perpetration, and as a result, peer bullying perpetration. With the help of this knowledge, peer bullying can be conceptualized as a result to having low empathy and problem solving skills level and high moral disengagement and parental rejection level as well as bullying sibling. Therefore, parents can be included in the prevention and intervention programs of sibling and peer bullying.

The last but not the least, studying on the interaction among personal and parental determinants and sibling bullying, indirectly peer bullying will help raising awareness of parents about the seriousness of sibling bullying, because parents are mostly not aware what bullying is and they mostly normalize the problematic (bullying) situations between siblings. Thus, with this knowledge, parents can detect bullying problems among their children and they can involve in the process to protect their both children from the negative outcomes of bullying and so that bully child from the peer bullying engagement.

#### **1.4. Hypothesis of the study**

The purpose of the study was testing the following proposed hypotheses;

*General hypothesis:*

The hypothesized structural equation model exploring the relations among parental, personal factors and sibling bullying, and peer bullying via sibling bullying, fits the data.

*Specific hypotheses:*

H 1.1: Higher levels of parental rejection were negatively correlated with empathy.

H 1.2: Higher levels of parental rejection were negatively correlated with problem solving.

H 1.3: Higher levels of parental rejection were positively correlated with moral disengagement.

H 2.1: Higher levels of parental rejection were positively correlated with sibling bullying

H 2.2: Higher levels of empathy were negatively correlated with sibling bullying.

H 2.3: Higher levels of moral disengagement were positively correlated with sibling bullying.

H 2.4: Higher levels of problem solving were negatively correlated with sibling bullying.

H 3: The effect of parental rejection on sibling bullying is mediated by empathy, moral disengagement and problem solving.

H 4: Higher levels of sibling bullying were positively correlated with peer bullying.

H 5: The effect of empathy, moral disengagement and problem solving on peer bullying is mediated by sibling bullying.

H 6: The effect of parental rejection on peer bullying via sibling bullying is mediated by empathy, moral disengagement and problem solving.

### 1.5. Definitions of the Terms

*Sibling bullying* is defined as “any undesirable aggressive behavior by a sibling that includes power imbalance, repetition multiple times or highly probably being repeated, and intention to physical, psychological, or social harm or distress” (Wolke et al., 2015, p. 918).

*Peer Bullying* is defined by Olweus (1993) as “student is being bullied or victimized when he or she is exposed, repeatedly and overtime, to negative actions on the part of one or more other students” (p. 197).

*Parental acceptance-rejection* is defined as “a bipolar dimension, with acceptance defining one end of the continuum and parental rejection defining the other. *Parental rejection* may be expressed in any combination of four ways, namely in the form of coldness/lack of affection (the opposite of warmth and affection), hostility/aggression, indifference/neglect and undifferentiated rejection” (Rohner, 2005, p.43)

*Empathy* is defined as “an emotional response that stems from another’s emotional state or condition’ which’ is congruent with the other’s emotional state or situation’, and it thought to have two dimensions, cognitive and affective empathy” (Eisenberg & Strayer, 1987).

*Moral disengagement* is defined as “the cognitive processes to justify harmful behaviors, which normally do not conform to one’s internal moral standards” (Bandura, 2002).

*Problem solving* is defined as “a self-directed cognitive-behavioral process used for identifying and exploring efficient solutions for specific problems confronted in daily life” (D’Zurilla & Nezu, 1982).



## **CHAPTER 2**

### **LITERATURE REVIEW**

This present study aimed to examine the mediating role of personal variables on the relationship between parental rejection and sibling bullying; and also peer bullying through sibling bullying. Although there are many factors that can be related as parental or personal elements, the parental acceptance-rejection as a parental variable; and empathy, moral disengagement, and problem solving as personal variables were included in this study on account of their significant importance for bullying literature. The relationships between these parental and personal variables and bullying was examined separately in the previous research studies; however, parental and personal variables specified in this study and sibling and peer bullying have not been incorporated yet, in a single research.

The literature review chapter of this study was mainly established on existing research that reporting about specifically sibling and peer bullying. Under this chapter of the study, five main sections were presented for the review of the literature. In the first section, sibling relationship and the terminology of sibling relationship was introduced in short. In the second section, with regards to “bullying” issue as a global and widespread problem in recent years, the definition and the prevalence of peer and sibling bullying, the relationships between both types of bullying, and the consequences of bullying behaviors were detailed. Theoretical framework of this study was provided in detail in the third section. In the fourth section, literature review on the variables of proposed model was discussed in relation to sibling and peer bullying. Finally, the literature review was summarized in the last section.

## **2.1. Sibling Relationship**

Siblings' potential effect on one another's well-being and development is significant that they spend large amount of time with each other and know each other well (Pike, Coldwell, & Dunn, 2006). In the last decay, researchers have widely recognized the fact that siblings have a critical impact on children's development and adjustment, and research studies on siblings have increased significantly (Boer, Dunn, & Dunn, 2013). In the US, nearly 80% of children have a sibling and relationship with sibling which is one of the longest lasting relationships over a life span (Sanders, 2004). According to research studies, the positive relationship between siblings supports their social and cognitive developments. This relationship reinforces children to understand themselves and others, to promote their empathy skills, and to acquire a shape of their personal characteristics. In this way, they have a chance to compare self with their siblings and have an opinion about self-skills and abilities (e.g. Dunn, 2013; Sanders, 2004). Practicing negotiation skills, learning cooperation, competing and establishing territoriality, and learning others may have different needs and rights in different times are some of the other advantages of having siblings (Lamb & Sutton-Smith, 2014). In childhood period, children see their siblings as playmates (Yenes, Olabarrieta, Arranz, & Artamendi, 2000), while, in adolescence period, siblings are much more perceived as support and intimacy source for children in their socio-emotional and cognitive chance process (Oliva & Arranz, 2005). Warmth and support of sibling are associated with social competence and peer acceptance (e.g., Bank, Snyder, Prescott, & Rains, 2002; Stormshak, Bellanti, Bierman, & Group, 1996), educational achievement and academic engagement (Melby, Conger, Fang, Wickrama, & Conger, 2008). In addition, intimate relationships in adolescence and young adulthood are also predicted by supported and warmth sibling relationships in childhood (Noland, Liller, McDermott, Coulter, & Seraphine, 2004).

On the other side, having sibling can result in dysfunction provocation as well as growth encouragement and much document on sibling relationships has tended to concentrate on negative aspects like 'sibling rivalry' (Lamb & Sutton-Smith, 2014). Having negative sibling relationships may cause negative influences on children by causing some adjustment problems (Özman, 2018). For instance, children grow up

with aggressive older siblings are significantly under the risk of developing behavior problems, having many negative experiences in their peer relations as well as having poor school performance (Bank, Patterson, & Reid, 1996). Studies showed that sibling aggression is related to aggression in other relationships that it may be forerunner of other violence forms (e.g. peer bullying) (Caffaro & Conn-Caffaro, 1998; Ensor, Marks, Jacobs, & Hughes, 2010; Garcia, Shaw, Winslow, & Yaggi, 2000). Accordingly, violent behavior of sibling “set the stage for violent interactions with peers, and later with spouses and children” (Caffaro & Conn-Caffaro, 1998, p.82).

Variety of terms has been used by researchers to reflect aggressive sibling interactions. Caspi (2012) stated in his book that since there is no universal definition of aggression and it has not been consistently used in the literature, “Sibling aggression is used in the book as an all-encompassing term to refer to all types of aggressive behavior ranging from competition to abuse. “ (p. 2). Thereby, different terms including bullying (e.g. Wolke et al., 2015), conflict (e.g. Graham-Bermann, Cutler, Litzenberger, & Schwartz, 1994), violence (e.g. Reid & Donovan, 1990), victimization (e.g. Finkelhor & Jones, 2006), maltreatment (e.g. Whipple & Finton, 1995), hostility (e.g. Stocker, Ahmed, & Stall, 1997), abuse (e.g. Caffaro, 2014), and rivalry (e.g. Prochaska & Prochaska, 1985; Ross & Milgram, 2014) has been used in the literature.

### **2.1.1. What are the terms: aggression, violence, and bullying?**

In the literature, there is a general tendency to combine or use interchangeably such terms; aggression, violence, conflict, and abuse (Jensen, 1998), especially violence and bullying (Limber, 2014). For instance, in English-speaking countries, there is a tendency to use ‘abuse’ in order to refer ‘bullying’ especially encountered at home (Smith et al., 2000). Abuse is unidirectional and involves a perpetrator and a victim as in bullying that the purpose of perpetrator is to control and overpower victim, whereas, violence involves mutual aggression (Caspi, 2012). In fact, aggression, violence, and bullying have a nested structure; however, bullying is the most prevalent and crucial form of aggressive behavior (Griffin & Gross, 2004; Limber, 2014) and has been identified as a serious problem in many countries (Kokkinos &

Kipritsi, 2012). In aggressive behavior, the perpetrator's intention is to use harmful behaviors rather than leading to the target being injured; thereby, aggression is described as "the intentional use of harmful behaviors that are threatened or actual" by Limber (2014, p.10). The definition of violence was done by The World Health Organization as "the intentional use of physical force or physical power, threatened or actual, against another person or against a group or community" (Dahlberg & Krug, 2002, p. 5). Thus, violence and bullying overlap with each other; however, those two are not synonyms.

### **2.1.2. Negative sibling relationships: normal or problematic?**

During the childhood years, some degree of sibling conflict seems to be an unavoidable issue of family life. It can be seen as a valuable experience for children for the reason that children learn to take perspective of other, argue their opinions, to come to an agreement, and so on. However, when conflict between siblings goes up violent interactions or the physical or mental damage of a weaker sibling by a stronger one, the maladaptive sibling relationship occurs and can be severely harmful (Cicirelli, 1995).

In all forms of child abuse, sibling violence is one of the most frequently occurring one (Finkelhor, Ormrod, Turner, & Hamby, 2005). Repeated occurrence of such behavior is expressed precisely as sibling bullying (Tucker & Finkelhor, 2017). Despite many parents regard siblings' aggressive behaviors and fights toward each other (Kramer, 2004), there has been a tendency to be silent about the issue of sibling aggression (Caspi, 2012; Shadik, Perkins, & Kovacks, 2013). On the other hand, parents do not concern hostile interactions of siblings as problematic and they do not realize the potential dangerous, although sibling interactions sometimes abusive and violent (Caspi, 2012). They regarded sibling aggression as normal and as a part of development. Therefore, such behavior considered as ordinary, typical, and not problematic or destructive. Eventually, this minimizing the seriousness of sibling aggression causes seeing violence as normal sibling rivalry, and may support continuing victimization (Phillips, Phillips, Grupp, & Trigg, 2009). Indeed, sibling violence is the most widespread type of interpersonal aggression and cruel treatment of child. Emerging research has also showed that, in addition to negative results,

sibling aggression is damaging (Duncan, 1999a). Furthermore, sibling aggression is not a problem only related to childhood, but also related to other social problems appear in throughout the life (Caspi, 2012). Experiencing sibling violence in childhood may cause individuals to accept such behaviors in their own and other children (Hardy, Beers, Burgess, & Taylor, 2010). Individuals experienced serious aggressive behaviors have a tendency to label the clearly violent behaviors as ‘rivalry’ and ‘conflict’ (Kettrey & Emery, 2006).

In the interpersonal and family literature, although sibling aggression is the most widespread form of violence in family (Straus, Gelles, & Steinmetz, 2006), sibling violence has received relatively less attention than other forms of violence (e.g. intimate partner abuse, older abuse, child abuse, peer violence) (Perkins & Shadik, 2018). Tucker, Finkelhor, Shattuck, and Turner (2013) proposed that 37.6% of the children had experience at least one form of violence (physical or/and emotional) of sibling. Moreover, current estimates suggested that one in every three 0-17 years old children probably experience sibling assault sometime in their childhood years (Finkelhor, Turner, Shattuck, & Hamby, 2015).

Researchers considered sibling violence in childhood in their studies has found its relation to peer bullying and poor peer relations (Duncan, 1999a; Ensor et al., 2010), physical aggression with peers (MacKinnon-Lewis, et al., 1997), academic difficulties (Kingston & Prior, 1995), behavioral and emotional problems (Deater-Deckard, Dunn, & Lussier, 2002), school misconduct (Garcia et al., 2000), and anxiety and depression (Duncan, 1999a). As a result, as other types of interpersonal violence (e.g. child abuse, peer bullying), a new understanding of the prevalence and dangers of sibling bullying is essential and it cannot be seen as a normal part of development. All in all, sibling bullying is considered as not normal but as a serious problem and its associations with various variables were investigated in this study.

## **2.2. Research on Peer and Sibling Bullying**

### **2.2.1. Peer and sibling bullying: definition, types, and prevalence**

*Bullying* is described as a global subtype of aggressive behavior children and adolescence confront regularly in the context of schools (Salmivalli et al., 2011; Smith et al., 2000). Researchers agree upon three fundamental criteria proposed by Olweus (1993a) in order to identify the behavior as ‘bullying’. Olweus defined bullying behavior as “student is being bullied or victimized when he or she is exposed, repeatedly and overtime, to negative actions on the part of one or more other students” (1993a, p. 197). He suggested *repetition*, *intention* to hurt, and *power imbalance* as criteria for an action to called as bullying behavior (Olweus, 1993a). Besides, these three criteria also differentiate bullying from conflict (Jolliffe & Farrington, 2006).

Bullying is encountered in two modes; directly and indirectly, as well as in three types generally; physical (e.g. hitting, kicking, damaging victim’s property), verbal (e.g. name calling, threats), and relational (e.g. social exclusion, rumour spreading) (Monks & Smith, 2006; Olweus, 1993a; Smith, 2014; Wolke et al., 2015). However, some researchers (e.g. Kristensen & Smith, 2003; Wolke et al., 2015) supposed attack on property of victim as an independent form of bullying rather than just being under the physical bullying. Additionally, direct bullying refers to “relatively open attacks on a victim”, while indirect bullying refers to “social isolation or intentional exclusion from a group” (Olweus, 1994, p.1173). Besides, cyberbullying (Erdur-Baker, 2010) and sibling bullying (Menesini et al., 2010) have been the most recent types of bullying attacks through Internet and new technologies and by siblings at home, respectively.

*Sibling bullying* is also defined as any undesirable aggressive behavior by a sibling that includes power imbalance, repetition multiple times or highly probably being repeated, and intention to physical, psychological, or social harm or distress. As well as (peer) bullying, sibling bullying occurs directly and indirectly in four types; physical, verbal, relational, and damage to property (Wolke et al., 2015). As seen from the above, apart from the settings (at home vs. at school in general) and the

subjects (sibling vs. peer) sibling and peer bullying share similar definitions and characteristics. In other words, there is a difference solely on group nature of peer bullying which is mostly absent in the settings of family, so, peer and sibling bullying share lots of features (Menesini et al., 2010).

The prevalence rates of bullying are of global concern, thus, the researchers unanimously agree that children and adolescents universally experience bullying. However, there are some warnings for readers about evaluating the prevalence of peer or sibling bullying. At first, because bullying is not limited to a certain gender and age, previous research has been carried out with both boys and girls and with different age groups. There are researchers have considered single gender or age as well as combined different age groups or involved both boys and girls in their investigation. Furthermore, since bullying research has extensively conducted with cross-sectional data comprised of convenience sample, exact percentages cannot be provided with this non-representative data. Additionally, the measurement of bullying has been complicated and there has been no consistency. Variety of time frames (e.g. in the past month, in this school term), and different types of strategies (e.g. including bullying definition) used by different instruments. Most widely used measurement instruments start with the definition of bullying proposed by Olweus and then continue with related questions (Bauman, 2016); however, others do not include definition. For instance, when definition is given, participants could report lower levels of victimization, whereas, perpetration is reported in higher levels (Vaillancourt, McDougall, Hymel, Krygsman, Miller, Stiver, & Davis, 2008) and giving definition does not provide more accurate findings (Ybarra, Boyd, Korchmaros, & Oppenheim, 2012). In a nutshell, the present rates of prevalence are fundamentally outcomes of the studies involved non-random and non-representative samples, and different time frames and measurement methods. Therefore, the reader should keep in mind that presented prevalence rates of peer and sibling bullying cannot be generalized; however, they can provide some knowledge about the extensiveness of bullying issue.

The report of World Health Organization (2012) represented the average of rate of children being bullied as 32% across 38 countries/regions and this rate displays that bullying is a universal problem. Studies from US with the prevalence rate of 29.9%

bullying experience (either bullied by others or bullying others) among 6<sup>th</sup>-10<sup>th</sup> grade students (Espelage & Swearer, 2004), from England with 75% of being bullied physically among 4,700 children between the ages 11 and 16 (Glover, Gough, Johnson, & Cartwright, 2000), from Dutch with 60.6 % of bullying experience as a bully or victim among 2,755 elementary school students aged in 9-11 (Fekkes, Pijpers & Verloove-Vanhorick, 2005), from Brazil with 39.7% of being bully among 10-15 year olds (Zottis, Salum, Isolan, Manfro, & Heldt, 2014) have pointed out that bullying is an international problem which negatively influence the well-beings of children and adolescents. Besides, according to some other research results, the prevalence rates of bullying experience were 15% among secondary school children in Italy (Baldry & Farrington, 1999), were between 17-50% among 38,000 primary and secondary school children in Australia (Rigby & Barnes, 2002), and were 7% among 3-18 year olds in Sweden, and 43% in Italy (Jimerson, Swearer, & Espelage, 2010).

Sibling bullying is also widespread even much more than peer bullying. The study of Linares (2006) presented empirical evidence found that between 28-41% of the participants reported to participate in sibling fights, whereas 11-29% of the participants participated in peer fights. Sixty-nine % of siblings had exposed to physical aggression, while 30% of them had frequently been victims of verbal bullying (e.g. name calling or being picked on), and 22 % of them stated often pushed around and being hit. Similarly, Tanrikulu and Campbell (2015) conducted a study with 455 students in grades 5 to 12 and found that sibling bullying perpetration was more prevalent (31.6%) than peer bullying perpetration (9.8%). Another recent study reported that 40% of the 2-17 year old children experience aggression by siblings (Tucker et al., 2013). Additionally, Skinner and Kowalski (2013) confirmed the results showed the widespread prevalence of sibling bullying and found that 85% of the participants reported bullying their sibling and 78% of them reported being bullied by their sibling during their childhood period. The study findings by Tippet and Wolke (2015) also presented that 35.6% of the children between the ages 10 to 15 bullied their siblings quite a lot and 45.8% of the children was bullied by their siblings quite a lot during last 6 months.



In a similar vein, bullying has become an important subject for research and studied intensively in recent years in Turkey. Different rates but high levels of prevalence of bullying events among children and adolescents were also revealed through research studies in our country. Kapcı (2004) studied with 4th and 5th grades children and examined types and prevalence rates of bullying experiences as well as the relationship between bullying and some demographic and psychological variables. The results showed that the rate of children reported their exposure to physical, verbal, emotional and sexual bullying was 40%. In another research, Burnukara (2009) studied with 868 adolescents and investigated the nature of traditional and cyber bullying experiences. Results demonstrated that 31.8% of the adolescents somehow experienced traditional bullying.

One of the most comprehensive research about bullying in our country was done by Dölek in 2002. The findings showed the widespread existence of bullying among children with the rates as 51% for victims and 38% for bullies. Furthermore, other prevalence rates were 21.2% for victims, 4.6% for bullies, and 6.5% for bully-victims in the research findings by Atik (2006); 27% for victims, 10% for bullies, and 21% for bully-victims in the study results of Gökler (2007); 35.1% for victims, 30.2% for bullies, and 6.2% for bully-victims in the study results of Pişkin (2010).

Moreover, in Turkey, researchers have mostly focused in their studies on victims' related variables rather than bullying perpetrators (e.g. Çetinkaya, Nur, Ayvaz, Özdemir, & Kavakcı 2009; Gültekin & Sayıl, 2005; Şirvanlı, 2006). This may be due to the thought of researchers that victims are at a desperate pass more than perpetrators, and by investigating the cases related to victimization, they intend to solve bullying victimization problem and to protect victims. However, in order to dissolve bullying problem away, not just matters related to victims but also perpetrators related matters should be examined. All in all, this universality and different but crucially high prevalence rates -also in our country- of the bullying problem emphasizes on the significance of improving our knowledge in understanding the bullying in order to provide and advance solutions to prevent them. In addition, the consideration of present study that being closely acquainted with children engaged in sibling and peer bullying in terms of triggered factors (personal and parental) is also essential.

### **2.2.2. The relationship between peer bullying and sibling bullying**

Although sibling bullying is more likely widespread than peer bullying (Skinner & Kowalski, 2013) and bullying at home is an important marker for bullying at school (Johnson et al., 2015), it has not significantly been taken attention of researchers yet, especially in our country. Peer bullying and cyberbullying among peers have been extensively investigated (e.g. Erdur-Baker, 2010; Hemphill, Kotevski, Tollit, Smith, Herrenkohl, Toumbourou, & Catalano, 2012; Lovegrove, Henry, & Slater, 2012; Tanrikulu, 2015; Topcu & Erdur Baker, 2012); however, little is known about sibling bullying such as the frequency and the risk factors (Duncan, 1999a; Skinner & Kowalski, 2013). In some studies, bullying between siblings was found to be as a predictor of bullying between peers (e.g. Duncan, 1999a; Menesini et al., 2010; Wolke, et al., 2015) that peer bully or victim children reported the highest frequency of sibling bullying either perpetrator or victim (Duncan, 1999a). The rate of those children was 60% and who participated in peer bullying episodes reported that they were also experienced sibling bullying at home. In other words, sibling bullying increased the risks of peer bullying (Bar-Zomer, & Brunstein Klomek, 2018; Tippet & Wolke, 2015).

One of the most current investigations was conducted by Kim and Kim (2016) in order to investigate the direct and indirect relations of parental rejection/neglect, sibling victimization, and friendship quality to peer victimization with the sample composed of 584 children in 3<sup>th</sup> to 6<sup>th</sup> grades. The strong direct correlation of sibling victimization with peer victimization for both sexes, and an indirect influence of sibling victimization on peer victimization via poor friendship quality just for males were proved. In their research, Tanrikulu and Campbell (2015) also examined the associations of the traditional and cyber forms of sibling bullying with gender, grade, trait anger, moral disengagement, and peer bullying perpetration among 455 students in ranging grade from 5 to 12. According to the results, sibling bullies reported participating in complex behaviors of victimization and perpetration in both cyber and in physical settings. In addition, they found that peer bullying is significantly linked with sibling traditional bullying perpetration.

### **2.2.3. The relationship of gender with peer and sibling bullying**

Gender has been stated as a significant variable in the existing literature of bullying. However, disagreement arising from the study findings has created complicated discussions in bullying research. Therefore, the role of gender on both sibling and peer bullying has been examined in previous studies.

Although, in general, gender has been found as having a significant predictive role in bullying involvement (Atik & Yerin-Güneri, 2013), a group of researchers focusing on gender differences in sibling or peer bullying has found no significant differences between girls and boys. For instance, Duncan (1999a) presented findings of non-significance related to gender differences regarding sibling bullying perpetration, whereas Wolke and Skew (2011) documented no gender difference for peer bullying.

In another group, some of the researchers have explored that boys are bullying their siblings and peers significantly more than girls. Eriksen and Jensen (2009), Tippet and Wolke (2015), Wolke and Skew (2011), and Menesini et al. (2010) are among the existing studies stated males are bullying their siblings more than females. Similarly, Baldry (2003), Gofin, Palti, and Gordon (2002), Erdur-Baker (2010), Pellegrini & Long (2002), Robson and Witenberg (2013), and Ryherd (2014) are the researchers who noted males as peer bullies. However, according to the research results by Tanrikulu and Campbell (2015), girls are more likely to be sibling bullies than boys.

### **2.2.4. Consequences of peer and sibling bullying**

Previous research emphasized that children actively engaged in bullying and victimization are inclined to develop different psychological problems. By a comprehensive research, experiencing bullying has been consistently found to be related to the problems concerning physical, social, emotional, psychological, and educational developments of children and adolescence (e.g., Collins et al., 2004; Salmivalli, 1999; Smith & Brain, 2000) in both roles; bully and victim (Salmivalli, 1999; Smith & Brain, 2000). Bullying has been found to result in some behavior problems at home, failure in social interactions (Natsuaki et al., 2009; Wolke &

Samara, 2004) as well as psychological difficulties such as higher levels of loneliness (Duncan, 1999a), anxiety (e.g., Craig, 1998; Duncan, 1999a; Kaltiala-Heino et al., 2000), depression (e.g., Duncan, 1999a; Ferguson et al., 2009; Seals & Young, 2003), and lower levels of self-esteem (Duncan, 1999a). Empirical study results also demonstrated that in addition to peer bullying, sibling bullying was found in relation to both internalizing and externalizing problems (Finkelhor, Turner, & Ormrod, 2006; Turner, Finkelhor, & Ormrod, 2010). Furthermore, due to the sibling relationship is durable throughout development, and has few opportunities for victims to escape, experience of sibling bullying result twice more likely in depression, anxiety and self-harm (Bowes et al., 2014).

Additionally, bullying has been stated likely as one of the risk factors for maladjustment of bullies (Carroll, 2014), and also was found to lead suicidal tendencies both on idea and action forms (e.g. Fisher, Moffitt, Houts, Belsky, Arseneault, & Caspi, 2012; Kaminski & Fang, 2009; Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2008; Winsper, Lereya, Zanarini, & Wolke, 2012). In both settings (at school and at home), bullies were found having the lowest mental health than children who are not bully or bully in only one setting (Wolke & Skew, 2012), and behaving as a bully increased the likelihood of failure at school (Nansel et al, 2001; Ma et al., 2009; Sassu et al., 2004).

Moreover, bullies tend to violate the rules (Menesini et al., 2003), tend to be unhappy with school (Forero, McLellan, Rissel, & Bauman 1999), show school avoidance (Jacobs, 2008), and aggressive actions towards others (e.g. Camodeca, Goossens, Meerum Terwogt, & Schuengel, 2002) and also have increased behavior problems (e.g. Cook, Williams, Guerra, Kim, & Sadek, 2010; Wolke, Woods, Bloomfield, & Karstadt, 2000). In adulthood, bullies are at a risk of having mental disorders (Kaltiala-Heino et al., 2000), facing to failure in work life, and experiencing substance use (Ttofi & Farrington, 2010; Olweus, 2004; Bender & Löseli, 2011; Kim, Catalano, Haggerty, & Abbott, 2011), and having antisocial personality disorder (Copeland, Wolke, Angold, & Costello, 2013).

On the other hand, the results of the study carried out by Nansel et al. (2001) demonstrated that victims have poor social and emotional adjustment, difficulty of

making friends, limited peer relationships, and loneliness as a result. Victims also may show internalizing problems (Zwierzynska, Wolke, & Lereya, 2013), depression, anxiety (Arseneault, Bowes, & Shakoor, 2010), low self-esteem (Seals & Young, 2003), and low academic performance (Ma et al., 2009).

### **2.3. Theoretical Framework of This Study**

In the related literature, several theories aim to explain bullying behaviors of children and adolescents, and to identify the associated factors. Considering the current literature, some of the theoretical approaches generally used for describing, interpreting and predicting bullying are attachment theory, social-ecological theory, and social learning theory or social cognitive theory. Attachment theory (Bowlby, 1980) argues that children's relationships with parents significantly affect other relationships such as peer and sibling relationships. Thus, if the secure ties with parents especially with mother are built, the probability of building secure and positive relationships with peers or siblings increases. Accordingly, it explains bullying as a result of unsecure ties between a child and a primary caregiver. Ecology of human development model proposed by Bronfenbrenner (1977) called as social-ecological model also has been widely used in the area of bullying, in order to understand how children's individual characteristics related to environmental contexts or systems to improve or prevent perpetration and victimization (Espelage, 2012; Hong & Espelage, 2012). From a social-ecological perspective, bullying behavior is influenced by multiple relationships with peers, families, teachers, neighbors, and interactions with societal influences (e.g., media, technology) as well as by the individual characteristics (Bronfenbrenner, 1977).

In the current study, broad approach was employed, as a theoretical roadmap, to children's bullying experiences by engaging Social Cognitive Theory and Parental Acceptance-Rejection Theory, and the present study took into consideration the bullying issue thoroughly with its relations to all possible dynamics.

### 2.3.1. Theories of Social Cognitive and Parental Acceptance-Rejection

One of the theories widely used in order to clarify and predict sibling relationship (Brody, 1998), behavior of bullying (e.g., Hymel, Rocke-Henderson, & Bonanno, 2005; Toblin, Schwartz, Hopmeyer, Gorman, & Abou-ezzeddine, 2005; Xiao & Wong, 2013), and aggression (e.g., Anderson & Huesmann, 2003) is *Social Cognitive Theory (SCT)* which is relabeled form of social learning theory suggested by Bandura (Rosenstock, Strecher, Becker, 1988). Bandura (1977) proposed that individuals learn new behaviors by observing behaviors of others. Each individual in the family is an important model for social learning. Due to siblings are in a much more relationship in childhood and adolescence, they reciprocally give a shape to both positive and negative behaviors of each other (McHale, Updegraff & Whiteman, 2012).

How aggression is developed and learned also explained by Bandura (1986) that children learn aggression by observing behavior patterns engaged in during a relationship. That is, children learn through observation of an adult, a sibling and a peer models (Bandura, 1977), “to use aggressive means to achieve their goals” (Espelage, Bosworth, & Simon, 2000, p. 326). Additionally, social skills learned in one relationship (e.g. in sibling relationship) are generalized to interactions in other relationships (e.g. peer relationship). In other words, children likely have a similar experience with peers, if they experience bullying at home or not (Tucker et al., 2014). Therefore, *Social Cognitive Approach* was a potential roadmap for this study by proposing congruence between the relationships experienced in different environments (Oliva & Arranz, 2005) and providing a framework for predicting, understanding, and changing human behavior (Bandura, 1986). SCT describes human functioning as an interaction of behavioral, environmental and personal factors; called as “reciprocal determinism” (Bandura, 2001; Orpinas & Horne, 2006). It suggests that both personal (in such forms: cognitive, affective, and biological events) and environmental factors (such as parent support or peer rejection) can influence and shape the individual’s behavior development (Bandura, 1978). Thereby, the researcher of this current investigation made a prediction that empathy, moral disengagement and problem solving (as personal factors) and parental

acceptance-rejection (as parental factor) are in relation with peer and sibling bullying behaviors of children. In addition, it could provide explanations for the precursor role of sibling bullying for peer bullying.

*Parental acceptance-rejection theory (PART)*, a socialization theory developed by Rohner (1980), is the other theoretical framework for this research. Its objective is to predict and explain important antecedents, consequences and other interactions of parental acceptance and rejection the world over (Rohner & Khaleque, 2010). Particularly, PARTheory accepts that acceptance and rejection of parents in childhood influence the behavioral, social-emotional, and cognitive development of individuals (Rohner, 1986). The basic assumption of the PARTheory is that human beings are born with a need to acquire warmth from and being loved by significant others especially by parents. This parental acceptance need is innate regardless of race, social class, culture etc., and inadequacy or absence of it will result in negative emotional and behavioral consequences (Rohner, 2004). Parental rejection and low parental support are linked to aggression and hostility in childhood ages (Edens, 1999; Garbarino, 1999; Ojha & Pramanick, 1995; Patterson, Kupersmidt, & Griesler, 1990). Furthermore, rejection of parents has bad and serious influences on development of personality and personality functioning of children and adults, like various forms of academic, psychological adjustment, and behavior problems; troubled personal relationships, psychopathology, attachment disorders, substance abuse, psychophysiological reactions (Rohner & Britner, 2002).

PARTheory includes in three subtheories: personality subtheory, coping subtheory, and sociocultural systems subtheory (Rohner, 2004). In the personality subtheory, “personality” refers to responses of individuals in various situations. Similarly with Social Cognitive Approach, PARTheory supposes that internal and external factors motivate the human behavior. Hence, a need for positive response from parents is powerful motivator. Accordingly, personality subtheory suggests that “rejection” causes psychological problems of individuals. For instance, hostility, aggression, low self-adequacy, low self-esteem, and emotional instability are some of the negative outcomes (Kanyas, 2008).

On the other side, it was also proposed that parental acceptance-rejection is specifically effective on seven dimensions of personality, and individuals perceive themselves rejected by parents likely to develop problems of: (1) dependency and defensive independency (depending on the form, frequency, intensity, duration, and timing of perceived rejection); (2) emotional unresponsiveness; (3) hostility, aggression, passive aggression, anger or management of hostility and aggression; (4) negative self-esteem; (5) emotional instability; (6) feelings of inadequacy; and (7) negative world-view (Khaleque & Rohner, 2012; Rohner, 2004). The other subtype of PARTheory-coping subtheory- deals with the reasons for different coping levels for different people subjected to parental rejection experience. Finally, the sociocultural systems subtheory examines the specific society, community, familial and psychological factors that affect the parental acceptance-rejection.

The researcher of the present study reasoned that if personality subtheory of PARTheory could present explanations for the personality and aggressive behaviors like bullying; it also could explain the skills of empathy, problem solving, and moral disengagement and bullying behaviors of children. Additionally, links between these personal (empathy, problem solving, and moral disengagement) characteristics, parental acceptance-rejection and bullying were separately investigated in previous studies. However, these aforementioned personal and parental determinants could be combined and empirical knowledge could be provided about the role of them on bullying. While making this combination, Social Cognitive Theory could help the researcher that it explains the shaping effects of personal (intrinsic) and parental (environmental) factors on behavior as well as generalizing learned behaviors as bullying among different environments. The researchers could benefit from this knowledge to make predictions about how personal and parental factors give shape bullying behaviors of children and which personal factors more likely make children to participate in bullying behaviors. Besides, how the sibling and peer bullying are related also could be explained. In addition, professionals could offer prevention and intervention programs focusing on sources of bullying behavior not just related to school environment but also related to home environment. If parental and personal factors could be combined with bullying, and empirical knowledge could be provided, important information could be accomplished with regards to both sibling



and peer bullying prevention. Eventually, because children who bully others display a complex array of psychological, cognitive, and social characteristics (Swearer et al., 2014) and PARTheory also has a deterministic point of view to the aggressive behaviors (e.g. bullying); *Social Cognitive Theory* suggested by Bandura (2001) and *Parental Acceptance-Rejection Theory* suggested by Rohner (1986) were utilized as a theoretical framework for guiding this present research.

## **2.4. Study Variables of Proposed Model**

Under this section, the related current literature of the variables suggested by the hypothesized model of this study is presented. The following sections were planned in accordance with the suggestions of *PARTheory* and *Social-Cognitive Theory*.

In describing the reasons of behavior problems; specifically bullying and victimization, researchers has focused on the regulation and controlling mechanism roles of cognitive and social-emotional processes for aggressive behaviors (Kokkinos & Kipritsi, 2012). In fact, aggressive children were found to have inadequacy in social determinants of aggression, problem solving skills (Pakaslahti, Asplund-Peltola, & Keltikangas-Jarvinen, 1996), and empathy in their relations with others (Jolliffe & Farrington 2006). Accordingly, there were three personal and a parental variables investigated in this present research. While the personal variables involved empathy, moral disengagement, and problem solving; the parental acceptance-rejection was the only variable concerning parental factors.

### **2.4.1. Empathy**

For this research, the first selected antecedent personal factor of bullying was empathy, which has received adequate research attention. Empathy is a significant component of social cognition, affecting one's ability to recognize emotions of others and to respond in an appropriate manner (Carroll, 2014). Accordingly, it refers to the ability to comprehend and share another's emotional state or context (Cohen & Strayer, 1996). Its multidimensional construct comes into existence by cognitive and affective aspects (Batanova & Loukas, 2014; Eisenberg & Sulik, 2012). The cognitive empathy is defined as skills of understanding others' emotions and taking

their perspectives, whereas the affective empathy refers to sharing others' feelings (Carroll, 2014)

Empathy is the fundamental personal trait influences antisocial and prosocial behaviors of children and adolescents (van Noorden, Haselager, Cillessen, & Bukowski, 2014) as well as anti-bullying and pro-bullying behaviors (Caravita, Di Blasio, & Salmivalli, 2009). Widely accepted point of view is that empathy promotes prosocial behavior (Warden & Mackinnon 2003), whereas it inhibits or reduce aggressive or antisocial behavior (Jolliffe & Farrington 2006). Empathy and aggressive behavior relationship in childhood and adolescence has been extensively studied from the past to the present (e.g. Miller & Eisenberg, 1988); however, the relationship between empathy and bullying had not been given much attention until 2000s years (Gini et al., 2007).

In recent literature, the findings of the links between empathy and bullying are somewhat controversial (van Noorden et al., 2014) that, while studies mostly found negative relationship between empathy (overall, affective, and cognitive) and bullying in childhood and adolescence (e.g. Mitsopoulou & Giovazolias, 2015); some others reported positive link (e.g. Caravita et al., 2009) or no link (e.g. Espelage, Mebane, & Adams, 2004). For instance, according to the study of Espelage et al., (2004) empathy was negatively associated with bullying among males, but not among females. Similarly, Caravita et al., (2009) also partially supported the negative links between empathy and bullying that there was a negative relationship between affective empathy and bullying only among adolescent boys, while cognitive empathy was found positively related to bullying for both females and males. This may be because of bullies' need a certain level of cognitive empathy for manipulating others and involving in bullying (Dautenhahn & Woods, 2003). In details, having high level of cognitive empathy makes bully perpetrators better at bullying others by helping them to understand the emotions and predict the consequences, herewith; they know how to hurt victims (Sutton et al. 1999).

On the contrary, regarding cognitive empathy, bullying seems to be negatively related according to some research results (e.g. Poteat, DiGiovanni, & Scheer, 2013; Williford, Boulton, Forrest-Bank, Bender, Dieterich, & Jenson, 2015) or not having

any link (e.g. Caravita et al., 2009). For instance, Kokkinos and Kipritsi (2012) investigated the associations between bullying, victimization and empathy, self – efficacy, and emotional intelligence with 6th graders. Results showed that bullying was negatively associated with cognitive empathy and while victimization was negatively correlated with both affective and cognitive empathy. In other words, bullying was significantly predicted by cognitive empathy whereas affective empathy predicted victimization. This is because, if the children know which behaviors will disturb others (as a result of cognitive empathy), but do not experience the same feelings (as a result of lack of affective empathy), the tendency of behaving in an aggressive way can increase (Lovett & Sheffield, 2007).

Additionally, Gini et al. (2007) carried out a SEM analysis with the data of 7<sup>th</sup> and 8<sup>th</sup> graders to test the role of empathy for bullying and defending behavior. The model fitted well only with boys but not with girls; eventually, low levels of empathic responsiveness (both affective and cognitive sides) of boys were found to be associated to students' perpetration of bullying others. In the similar vein, another study findings showed that only girls bullying peers indirectly get significantly lower scores in affective and total empathy than non-bully girls, whereas among males, the empathy levels of violent bullies were lower (Jolliffe & Farrington, 2006).

As well as direct relation, empathy indirectly associated to bullying. For instance, by applying multiple mediation analysis, Topcu and Erdur-Baker (2012) investigated how cognitive and affective empathy explain gender differences in bullying with the sample of 795 adolescents between the ages 13 to 18. They found that in addition to unique impact of affective empathy, the overall effect of cognitive and affective empathy mediated the gender differences in traditional bullying. That is, females are more empathetic than males, thus, males tend to behaving in bully way more than females not because of only their genders, but also because of their low empathetic levels.

To sum up, the role of affective and cognitive empathy as well as overall empathy in bullying involvement was investigated by the researchers, and different findings were reported. In recent literature, the findings of the link between empathy and bullying is controversial (Jolliffe & Farrington, 2004; van Noorden et al., 2014) that;

while studies mostly found a systematic negative association between both affective and cognitive empathy as well as overall empathy and bullying during in childhood, early adolescence and adolescence (e.g. Caravita et al., 2009; Warden & MacKinnon, 2003; van Noorden et al., 2014), some others reported no link (Espelage et al., 2004), and some reported positive relationship between cognitive empathy and bullying (Sutton, 2003).

#### **2.4.2. Moral disengagement**

The second personal factor examined as a precursor of bullying was moral disengagement, in the present study. Moral disengagement is the cognitive processes which grounded in social cognitive theory (Bandura, Barbaranelli, Caparara, & Pastorelli, 1996) to justify harmful and immoral behaviors, which are normally against one's internal moral standards (Bandura, 2002; Gini, Pozzoli, & Hauser, 2011). It was defined as the "individual's tendency to use mechanisms conducive to a selective disengagement of moral censure" (Paciello, Fida, Tramontano, Lupinetti, & Caprara, 2008, p. 1288). Social Cognitive Theory supports the idea that personal standards of moral behavior dissuade people from misbehaviors opposite to personal standards and conduce to guilt and self-censure (Detert, Trevino, & Sweitzer, 2008). Thus, moral disengagement includes a gradual weakening of those self-sanctions and guilty as well as leads to inactivation of personal standards of moral behavior mentioned above (Bandura, 1999). As a result, it diminishes the self-sanction and guilt feelings by finding ways to justify behaving immorally.

There are eight different mechanisms express moral disengagement and disengage individuals from self-sanctions and guilty (Bandura, 2002): *Moral justification* (i.e. validation of immoral behavior), *advantageous comparison* (i.e. distinction between negative and worse behavior), *euphemistic labeling* (i.e. use of language that moderates and subsides the significance of censured behavior), *diffusion or displacement of personal responsibility* (i.e. concealing or decreasing one's important role in the produced damage), *minimizing or misconstruing responsibility* (i.e. reducing or misinterpreting the aftermath of one censured behavior), *dehumanization of victims* (i.e. removing the human properties from the victims), *blaming of victims* (i.e. attributing responsibility to the victim for the aggressive

behavior), and *distortion of consequences* (i.e. minimizing or distorting the outcomes of one's actions) (Bandura et al., 1996; Paciello et al., 2008). Moral disengagement is a self-regulatory and socio-cognitive strategy individuals resort to justify immoral behaviors so the individuals abstain cognitive dissonance and participate in immoral actions (Gini et al., 2011). Therefore, while justifying immoral actions, also bullying behaviors, individuals utilize various mechanisms mentioned above and refrain of guilt and sanctions arising from bullying behavior. For example, rejecting parents play a role model with their attitudes that support bullying others and reinforce the action by minimizing individual responsibility for and blaming or devaluing the victim of such negative action, as well as disregarding the outcomes of bullying others (Hodgdon, 2009).

As a result, since moral disengagement is deemed to increase the likelihood of delinquent behaviors' emergence and development (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001), it has been expected to affect bullying behaviors in a similar way. Therefore, researchers have investigated the relation of morality to aggression and bullying (e.g., Caravita, Gini, & Pozzoli, 2012; Hymel & Perren, 2015; Wang, Lei, Yang, Gao, & Zhao, 2017).

A recent meta-analytic review was carried out by Gini, Pozzoli, and Hymel (2014) with 27 independent studies from the existing literature. They aimed to show the relationship between moral disengagement and various types of aggressive behaviors also bullying of the school aged children and adolescents. A significant correlation between moral disengagement and bullying was found (Smith, 2016). Similarly, Kokkinos, Voulgaridou, Mandrali, and Parousidou (2016) investigated the interplay among relational aggression, moral disengagement, and theory of mind of 120 Greek preadolescents. Results demonstrated that relational aggression was significantly and positively correlated with moral disengagement, while negatively with theory of mind. Moral disengagement was found as having a mediator role between theory of mind and relational aggression of boys. In a like manner, moral disengagement also found to be directly affected on relational aggression for boys.

Bullying is defined as an immoral behavior (Gini et al., 2011) and both individual and social aspects of morality impact bullying (Menesini, Palladino, & Nocentini,

2015). Various cross-sectional studies with children and adolescents (Gini et al., 2014; Kokkinos et al., 2016; Thornberg, Pozzoli, Gini, & Jungert, 2015) have presented that bullies show high levels of moral disengagement (e.g. Almeida, Correia, & Marinho, 2010; Barchia & Bussey, 2011; Hymel & Bonanno, 2014; Obermann, 2011;). Carroll (2014) conducted an investigation with the sample involved 282 middle school students between the ages of 10 and 15, and in grades 6 to 8. The purpose of the study was to investigate the association between social cognitive variables which consisting also empathy, and moral disengagement, and verbal bullying behaviors. The findings showed that moral disengagement significantly predicts verbal bullying, that is, moral disengagement increases the likelihood of verbal bullying participation of the students. Moral disengagement also have an impact on bullying behavior; not only in individual level, but also in the socio cognitive level, In their investigation, Menesini et al., (2015) studied with a large sample included in 1009 Italian adolescents (13–18 years of age). The goal of the investigation was to examine the predictor roles of both individual and group moral indices on bullying behaviors of students. The results proved that moral disengagement and bullying behavior are related. In details, more morally disengaged students participated in bullying events in higher levels. Additionally, children in the classroom where students support bullying through their direct or indirect feedbacks tended to display bullying behaviors much more than students in other classes.

In another research, Perren, Gutzwiller-Helfenfinger, Malti, and Hymel (2012) examined different aspects of moral development of adolescents in roles of bully, victim, and bully-victim. The participants were 516 Swiss adolescents in ages from 12 to 18; grouped as (14.3%), victim (9.7%), and bully-victim (3.9%). Findings revealed that the group more morally disengaged than non-involved ones was bullies. The group more often demonstrated violation of moral rules was bully-victims. However, victims showed victim-oriented justifications (i.e. more empathy) much more. As a further support, the investigation aimed to explore bullying among siblings both in traditional and cyber forms through the links of gender, grade, trait anger, peer bullying perpetration, and moral disengagement conducted by Tanrikulu and Campbell (2015). The sample involved 455 children from 5<sup>th</sup> to 12<sup>th</sup> grades.

Results indicated that moral disengagement and peer bullying perpetration are significantly related to sibling traditional bullying perpetration. In addition, a research conducted in order to investigate the interplay between moral disengagement and bullying, as well as the prediction roles of gender and grade for moral disengagement and bullying (Wang, Ryoo, Swearer, Turner, & Goldberg, 2017). The findings supported previous research results that moral disengagement predicted bullying behavior.

### **2.4.3. Problem solving**

The last personal factor examined in this present investigation was social problem solving which refers to solving the problems as it occurs in the natural social environment. In detail, social problem solving is a self-directed cognitive-behavioral process used for identifying and exploring efficient solutions for specific problems confronted in daily life (D’Zurilla & Nezu, 1982). Existing research studies yielded empirical result that deficiencies in problem solving skills might cause aggressive solutions to be used (e.g. Dodge & Price, 1994). That is, aggressive children and adolescents produced less effective solutions to the problems and they have tended to choose using aggressive behaviors more than nonaggressive ones (e.g., Jaffee & D’Zurilla, 2003; McMurran, Blair & Egan, 2002). This may be because problem-solving needs an evaluation of possible consequences, however, both bullies and victims tend to be changeable emotionally and to behave aggressively without thinking about the consequences (Pellegrini, 2002).

Şahan (2007) examined the predictive role of problem solving, self-esteem and peer pressure levels on aggressive behaviors of high school children. The results showed that problem solving ability, self-esteem and peer pressure levels explain the 34% of the total variance of aggressive behavior scores. Moreover, Keltikangas and Pakaslahti (1999) carried out a longitudinal study with 47 participants (out of 120) to investigate the development of their social problem solving skills and the change of aggressive behaviors from childhood to adolescence (during 7 years). They presented findings showing the correlation between development of problem solving skills and aggressive behaviors. In addition, Gökbüzoğlu (2008) also found negative link between problem solving skills and aggressiveness of adolescents.

In order to explore the relationship between aggressive behaviors and anger and social problem solving skills of adolescence, Albayrak-Sargin (2008) also made a research with the sample involving 654 adolescents. The results indicated that there is a negative relationship between problem solving and aggression. In a similar vein, there are investigations presented that specifically bullies also show lack of social problem solving skills (Andreou, 2001; Slee, 1993). In their study, Warden and Mackinnon (2003) examined the relationship between social behaviors of children and their sociometric status, empathy and social problem-solving strategies. Their sample involved 131 children in ages 9-10. They categorized children and made comparisons among bully, victim, and prosocial children. They found that more than bullies, prosocial children significantly more popular, reveal better empathic awareness, respond to socially difficult situations in a constructive manner, and show more awareness of their actions' possible negative consequences. Because prosocial children are not provoked and feel stressed easily (Nelson & Crick, 1999) and they can regulate their emotions (Eisenberg, Wentzel, & Harris, 1998), they do not need to resort to misbehaviors. By the help of findings mentioned above, it can be concluded that, bully children are unsuccessful at regulating their emotions and be provoked easily by ambiguous stimulus as well as not aware of the negative consequences of their aggressive behaviors.

#### **2.4.4. Parental acceptance-rejection**

Child rearing styles of parents, involving all of the interactions between parents and child such as parents' attitudes, values, interests, beliefs as well as nurture and education behaviors towards their children play a crucial role in socialization process of children which shape their current and future behaviors. Therefore, parent-child relationship has been regarded as the most efficient factor on personality (Yeşilyaprak, 1993) and hence on behaviors. For this reason, parental dimension was considered in this present study. The concept of *parental acceptance and rejection*, as an only variable related to parental factor of the study, comes from the theory of parental acceptance-rejection (PART) proposed by Rohner (1980). The main assumptions of PART are that human beings born with a need to receive warmth from parents and that removal or deficiency of acceptance will result in negative



outcomes for individuals' development such as behavioral and psychological problems (See PARTheory in Section 2.3.1.). *Parental rejection* has, for example, been related to various forms of psychopathology and problems related to behaviors, psychological adjustment, and personal relationships (such as problems with peer, friendship, and partner) as well as academic problems, substance abuse, and psychophysiological reactions. For instance, unipolar depression and depressed affect; behavior problems (such as conduct disorder, externalizing behavior, and delinquency); and substance abuse are three mental health problems that parental acceptance-rejection resulted in. The researchers frequently use interchangeably such concepts as behavior problem, conduct disorder, delinquency, and externalizing behavior. All these terms tend to include elements of aggression and hostility (e.g., fighting physically and verbally, bullying), noncompliance (e.g., disobedience), and sometimes craftiness and theft (Rohner & Britner, 2002). However, *parental acceptance* has been linked to a range of positive consequences such as prosocial behavior development (e.g., empathy, generosity, and helpfulness) in children; positive relationships with peers in adolescence; and general psychological well-being in adulthood involving a sense of life satisfaction, happiness, and low distress psychologically (Rohner & Britner, 2002).

The deterministic role of parental acceptance-rejection on children's psychological adjustment, behavior problems, and social-emotional development were confirmed by also existing research studies (such as Erkman & Rohner, 2006; Finkenauer, Engels, & Baumeister, 2005; Jones, Forehand, & Beach, 2000; Lila et al., 2007). Meta-analyses of cross-cultural and intercultural studies were conducted by Khaleque and Rohner (2002) and Khaleque (2013) and a significant link between parental acceptance rejection and behavior problems, psychological adjustment, and personality trends of children was found. In another research, Dwairy (2010) studied with 2884 Arabian, Indian, French, and Polish adolescence in order to test the impact of parental acceptance rejection on the psychological problems of adolescents and parental acceptance and psychological well-being were found to be related. In contrast to psychological results but in parallel to behavior problems; Marse (2002) found no relationship between total parental rejection and depression level, but found significant positive relationship between the neglect/indifference and rejection levels

of parents and aggressive behaviors of children. The sample was included in 128 children between 7 and 12 ages.

As a further support, parent-child relationship was examined during 4 years with 451 children between 12-14 years old and their parents. According to the findings, accepted children who have warm relationship with their parents establish positive relationships with their siblings and peers, while rejected children experience problems in their social relationships and they are disliked by their peers (Paley, Conger, & Harold, 2000). MacKinnon-Lewis et al., (1997) also concluded, with the sample composed of seventy one 8-10 years old boys and their siblings that siblings with more rejecting mothers reported to be more aggressive toward each other. Besides, these boys were appointed by their peers as to be aggressive and less accepted by their peers. In details, the linkage between mother's rejection and peer aggression was significantly mediated by sibling aggression. In other words, sibling aggression was identified to increase the prediction of mothers' rejection to peer outcomes.

Similarly, research studies in Turkey also confirmed the correlate of the parental acceptance rejection and the social-emotional development, behavior problems and psychological well-being of children. A research, the sample consists of 247 children in ages 6 and their parents, was conducted by Gülay in 2011. The results showed that parental acceptance rejection related to the levels of social development, aggression in peer relationship, positive social behavior, isolation, and victimization of peer violence of children. In another study, Aytakin (2015) investigated the aggression levels of 373 elementary school students related to parental acceptance rejection and demographic variables such as gender, number of siblings, socio-economic level, and education level of parents. At the end of the study, significant positive relationship was found between children's aggression and parental rejection. Yakmaz-Basilgan (2012) also examined the links between mothers' acceptance-rejection level and behavioral and emotional problems of their children. Sixty mothers and their 60 children between the ages 10 and 15 were involved in the study as a sample. The results showed that both behavioral problems and psychological adjustment of children mostly related to maternal acceptance rather than educational level or job status of mothers.

Being rejected reveals some feelings such as distress and anger, thus, children may close themselves emotionally for protected from distress emerged from being rejected. Moreover, as well as low levels of self-esteem and self-efficacy, they can display some violence or aggression problems while manifesting their anger also emerged from being rejected (Khelaque & Rohner, 2002). Therefore, Olweus (1980) suggested that cold, negative attitudes of parents towards their children were at least some degree responsible for bullying behaviors of children. As a result, the study results also display the link between parental acceptance rejection and specifically bullying behavior. Turgut (2005) examined the relationship between bullying tendency, parental acceptance-rejection, and self-concept considering gender and school types of the 205, seventh grade children. Findings represented that bullying and parental rejection were correlated positively with each other and boys reported higher levels of both tendency for bullying and perception of parental rejection than girls.

In addition, one of the latest research was conducted by Ergün (2015) to examine paternal acceptance-rejection and bullying and victimization behaviors of early adolescence in terms of some demographic and socio-economic variables such as: age, gender, socio-economic status, the relationship status of parents, exposing to violence, school love. The sample consisted of 550 children from 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades (9-14 year olds). The findings displayed that both bullying and victimization were negatively related to warmth/affection sub-dimension of paternal acceptance-rejection, and positively correlated with the sub-dimensions of hostility/aggression, neglect/indifference, and undifferentiated rejection. That is, if the child is rejected by parents, tendency of bully or being bullied is increases. Furthermore, in their study, Kim and Kim (2016) confirmed the study findings stated above. They reported that parental rejection influence peer victimization; however, in their study, they also investigated the mediator role of sibling victimization in this relationship by utilizing a structural equation modeling with a sample composed of 584 students from 3 to 6 grades. The findings indicated that neglecting/ rejecting parenting has an indirect impact on peer victimization through sibling victimization for both females and males.

As aforementioned, parental acceptance and rejection is correlated to social-emotional development as well as behavior problems of children. Children having rejecting/neglecting parents develop insecure attachment and they present undesirable traits such as a lack of concern or empathy for other's feelings as well as a lack of social competence, and a need to get approval and please others, and low self-esteem (Ainsworth & Bowlby, 1991). An empirical support for the relations between parental acceptance-rejection and social skills of children was presented by (Köseoğlu, 2013). The researcher investigated the relationship between parental acceptance-rejection and empathic tendency levels of 493 elementary school students from grades 4 and 5. The negative moderate relationship between the children's parental acceptance-rejection and empathic tendency levels was proved. That is, if there is an increase in parental rejection, the aggressive behaviors also increases and if there is a decrease in warm behaviors of mothers, the empathic tendency of children also decrease. Similarly, Sayın (2010) conducted a study with 360 students from 4<sup>th</sup> and 5<sup>th</sup> grades to examine the relationships between empathy skills and some parental and personal traits of children. They concluded that acceptance by parents significantly and positively linked to higher levels of empathy skills of children. On the contrary, no relationship was found between mothers' acceptance-rejection levels and empathy skills of the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> grade children (387 participants) according to the research results of Önder and Gülay (2007).

Similarly, Davidov and Grusec (2006) studied with children, their parents, their peers and their teachers in order to examine the reflection of children's relationships with parents to the relationships with their peers. The sample consisted of 106 children between the ages 6 and 8. The researchers concluded that the children not gain acceptance and warm responds from parents but experience maternal responsiveness to distress were evaluated to have more emphatic skills. The most current study was conducted by Avcı and Sak (2018) to investigate the relationship between empathy and aggressive levels of 634 children from 4<sup>th</sup> grades. They also investigate the children's perception of their parents' parenting styles. According to the results, aggressiveness of children was negatively associated to perception related to all of the dimensions of parenting styles; acceptance/involvement, psychological autonomy, and strictness/supervision. However, no significant relationship was

found between levels of empathy and perceptions of parenting styles as well as involving acceptance.

As well as empathy, although there has been not much direct empirical evidence, problem-solving skills are also related to parental acceptance-rejection. Tepeli and Yılmaz (2013) carried out an investigation with 359 children in ages 5 and 6 with the aim of exploring relationships between accepting-rejecting parenting and problem solving skills of children. Results demonstrated that being accepted by their mothers positively contributes to the improvement of problem solving skills of children. Another study conducted by Çınar (2016) with the sample of 200 students from 3<sup>rd</sup> and 4<sup>th</sup> levels in order to examine the impacts of children's perception related to their parents' attitudes on problem solving skills and aggressiveness levels of children. The researcher reported that in the presence of authoritative attitude of parents, the levels of problem solving increased while the levels of aggressiveness decreased. However, in the presence of authoritarian attitude of parents, children showed lower levels of problem solving skills, but higher levels of aggressiveness. Considering the full of love, respect, indulgence, independence and child-centered nature of authoritative parenting style, in contrast to resulting in punishment, fear, and anxiety nature of authoritarian parenting style; these findings may be interpreted as accepted children are successful at solving social problems, thus do not tend to behave in an aggressive way. However, because children with authoritarian parents feel unsafe, lack of love and being rejected, they may not develop healthy problem solving skills and they also more prone to behave aggressively. Besides, Uyaroğlu (2011) reported that authoritative (or democratic) attitudes of mothers also supported elementary school children's ability of understanding others' emotions. That is, mothers' democratic attitudes towards their children increased the empathic levels of normally developed children.

In addition to empathy and problem solving skills, moral disengagement is also related to parental acceptance-rejection. A positive moral development might be fostered by positive parent-child relationship by supporting children to internalize parental moral values, thus declining the tendency of morally disengaged attitudes, and increasing the avoidance of both external and internal sanctions (e.g. punishment and guilt, respectively) (Halgunseth, Perkins, Lippold, & Nix, 2013). Previous

studies have displayed that social skills (e.g., moral disengagement) which are affected by accepting-rejecting parenting may play a mediator role to help explaining the relationship between family risks (e.g., negative parenting) and problem behaviors (e.g., Pelton, Gound, Forehand, & Brody, 2004). Hyde, Shaw, and Moilanen (2010) conducted a longitudinal study to investigate the developmental antecedents of children's moral disengagement and the impacts of moral disengagement on the antisocial behavior development. They followed 187 boys in a prospective manner from ages 1.5 to 17, and they discovered significant positive correlation between parental rejection and moral disengagement while significant negative correlation between empathy and moral disengagement. They proposed that learning opportunities in early familial environments have already been related to later outcomes, thus, rejecting parenting may contribute to disengaged beliefs of individuals.

The most recent research was carried out by Campaert, Nocentini, and Menesini (2018) which proves the relationship between moral disengagement and parenting in populations under the risk of aggressive behavior. The researchers collected two-way longitudinal data from 609 students in late childhood and early adolescence (in the grades 4<sup>th</sup> to 7<sup>th</sup>). The study results presented that negative moral development was influenced by expected parental approval for hurtful behavior and this expectation make even good children disengage morally rather than acting according to moral standards. They concluded that parental approval can be crucial for moral disengagement since the moral cognitions of children may not have clear yet in childhood years on age-specific aggression types.

## **2.5. Summary of the Literature Review**

As this present study concentrated mainly on bullying behaviors of children, the literature focusing on sibling and peer bullying is detailed in the review of literature section. The extensive literature review fulfilled for this current study has indicated that as well as peer bullying, sibling bullying has become a worldwide problem. Furthermore, sibling bullying is more prevalent than peer bullying according to the reports from all over the world. This fact reveals that sibling bullying is not just a developmental issue occurs between siblings as conflict, but it is a crucial problem

with its social, emotional and psychological negative consequences. The most serious consequence of sibling bullying is found as peer bullying, because bully children mostly reported to engage in also sibling bullying at home and sibling bullying and peer bullying found to be related in different studies.

The guiding theoretical framework of this current study involved *Social Cognitive Theory* and *Parental Acceptance-Rejection Theory*. The *Social Cognitive Theory* suggested the triadic reciprocal determinism that human behaviors are shaped by both individual (e.g., biological, cognitive) and environmental traits. In addition, *Parental Acceptance-Rejection Theory* proposed that the basic need of acceptance by parents shapes the characteristics and behaviors of the individuals. If this need of being accepted or loved, exist from birth, is not met and the child feels being rejected by parents, s/he develops unhealthy or undesired behaviors as well as negative personality characteristics. Therefore, in this research, the anticipated links between parental (parental rejection), personal (empathy, moral disengagement, and problem solving) factors and sibling and peer bullying behaviors were conceptualized by combining these theories. Accordingly, based on the theoretical background of this study, parental rejection was anticipated in relation to sibling and peer bullying as well as personal characteristics of the children. In addition, these personal factors were supposed to play a mediator role between the relations of parental rejection to sibling and peer bullying. The relationship between sibling and peer bullying was also anticipated in the light of Social Cognitive Theory that children supposed to generalize behaviors to different environments.

In terms of study variables, the associations among parental rejection, empathy, moral disengagement, and problem solving were reported by the studies in the literature. Also, empirical studies displayed the relationships of these variables with both sibling and peer bullying. The previous research has reported that parental rejection was negatively related to both empathy and problem solving, whereas positively related to moral disengagement and bullying behaviors. Additionally, empathy, problem solving were also found negatively related to bullying behaviors, while moral disengagement was found positively linked with bullying behaviors. Moreover, sibling bullying was reported to in relation to peer bullying.

All in all, the aim of this research is to model the links among parental, personal characteristics and sibling and peer bullying behaviors. In the model tested, the relationships between these variables are combined and investigated in the light of *Social Cognitive Theory* and *Parental Acceptance-Rejection Theory* to have a comprehensive perspective of both sibling and peer bullying in a Turkish sample.



## CHAPTER 3

### METHOD

This chapter involved overall research design, data collection procedures, pilot and main phases, data collection instruments, description of variables, data analysis, and the limitations of the study.

#### 3.1. Overall Research Design of the Study

This is a quantitative correlational research design study suggested and presented a comprehensive model which aimed to investigate the nature of sibling and peer bullying behaviors. Correlational research study design was appropriate for the study because a correlational study defines the degree of relationship between two or more quantitative variables by using a correlation coefficient (Fraenkel, Wallen, & Hyun, 2012). Thus, the purpose of this study was to investigate the associations through a model testing in which the mediating effects of personal (empathy, moral disengagement, and problem solving) variables in the relationship between parental rejection and bullying behaviors. Additionally, sibling bullying relation to peer bullying was also examined. In other words, various ways of engaging in bullying have been found to be related in separate research studies to both interpersonal and individual variables such as parenting accepting and rejecting (e.g., Papadaki, & Giovazolias, 2015), empathy (e.g., Topcu & Erdur-Baker, 2012), and social problem solving skills (e.g., Warden & MacKinnon, 2003). In the present study, different personal and parental factors, as well as sibling and peer bullying, were brought together and investigated through a hypothesized model in order to shed light on sibling and peer bullying issues.

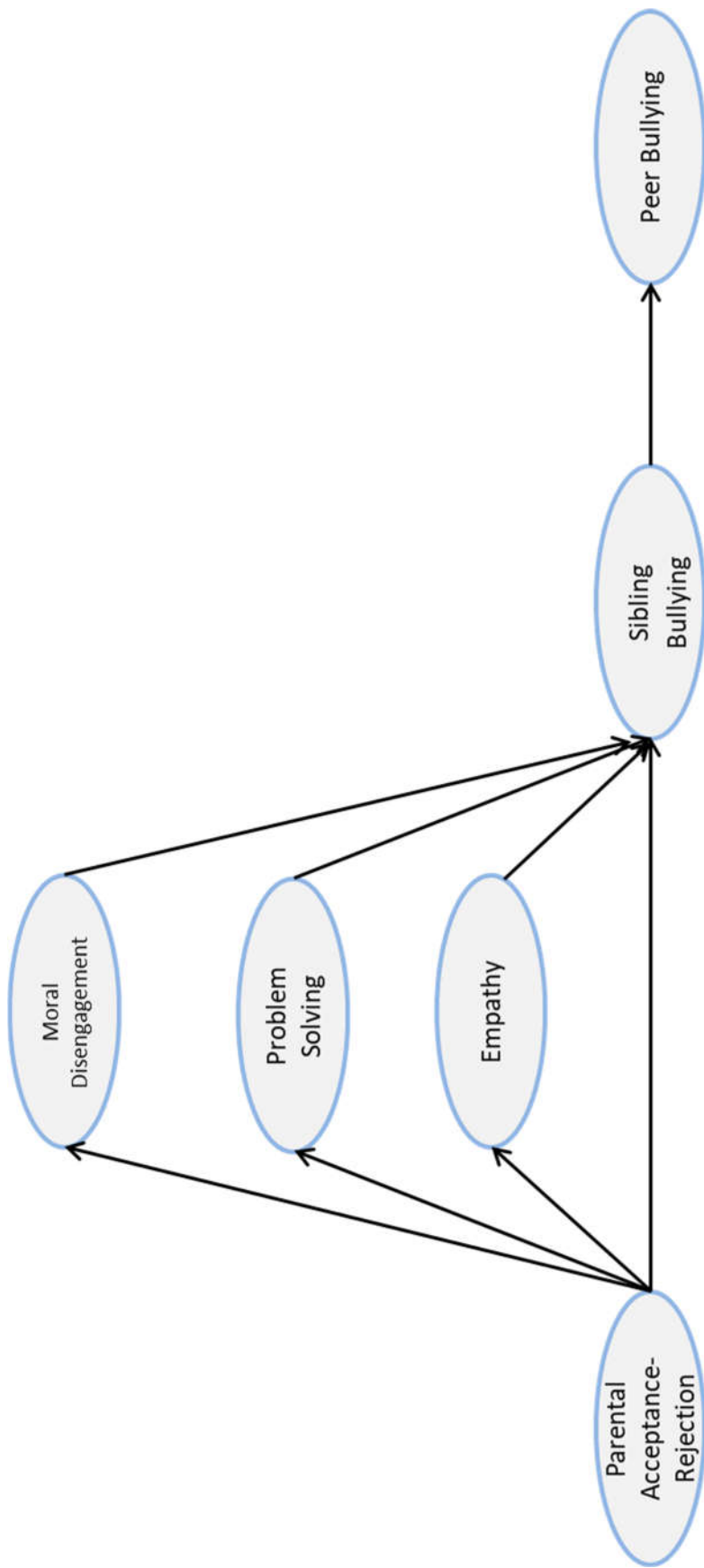
As the data collection instrument, a questionnaire booklet which consisted of the *Revised-Sibling Bullying Questionnaire (R-SBQ)*, *Peer Relations Questionnaire (PRQ)*, *Moral Disengagement Scale (MDS)*, *Problem Solving Inventory for Children*

(PSIC), *Child KA-SI Empathic Tendency Scale (KASI)*, and *Parental Acceptance-Rejection Questionnaire/ Child Short Form (PARQ/Child Short Form)* and a demographic information form was administered to 716 students at ten different elementary schools in Afyonkarahisar. Convenience sampling method was used to collect two sets of data from 4<sup>th</sup> and 5<sup>th</sup> grades students. The main analysis was Structural Equation Modeling strategy to simultaneously test the relations among variables of personal and parental factors and sibling and peer bullying.

Two main studies generated this study; pilot and main study. At first, a pilot study was carried out to investigate the reliability and validity properties of the instruments. *Sibling Bullying Questionnaire (SBQ)* was revised and renamed as *Revised-Sibling Bullying Questionnaire (R-SBQ)* by the researcher. *Peer Relations Questionnaire* and *Moral Disengagement Scale (MDS)* were adapted into Turkish by the researcher of this study. *Parental Acceptance-Rejection Questionnaire (PARQ/Child Short Form)* was employed as its translated form into Turkish by Yılmaz and Erkman (2008).

A total of 289 students (134 girls and 155 boys; 140 4<sup>th</sup> and 149 5<sup>th</sup> graders) for PRQ and MDS and 269 students (124 girls and 145 boys; 132 4<sup>th</sup> and 137 5<sup>th</sup> graders) for R-SBQ were recruited to test reliability and validity of the data collection instruments of the study.

Secondly, the main study was conducted with the data from 716 participants (347 girls and 369 boys; 319 4<sup>th</sup> and 497 5<sup>th</sup> graders) which was gathered with similar strategies. The hypothesized model was tested with this data set. The main analysis was composed of (1) descriptive analysis of the variables, (2) bivariate correlations among variables in the model, (3) the measurement model, (4) the structural model. Model illustrated in Figure 3.1 shows the hypothesized associations among the variables.



*Figure 3.1* Hypothesized structural model of the relationships among parental, personal, and bullying variables.

### 3.2. Data Collection Procedures and Participants

Initially, necessary ethical approval from METU Human Subjects Ethics Committee (HSEC) (Appendix A) and permission from National Education Directorate of Afyonkarahisar were received (Appendix B). The directors of elementary schools from different regions of the city were visited, and then the purpose and the procedure of the study were explained to them by the researcher. After gaining directors' collaboration, teachers of the classrooms also were informed about the study by the researcher. Lastly, students' voluntariness were asked in addition to sending (passive) consent letters to parents (Letter can be viewed in Appendix C).

The survey packed contained *Sibling Bullying Questionnaire*, *Peer Relations Questionnaire*, and *Moral Disengagement Scale* and a demographic information form in the pilot study, and the survey packed contained *Revised-Sibling Bullying Questionnaire*, *Peer Relations Questionnaire*, *Moral Disengagement Scale*, *Problem Solving Inventory for Children*, *Child KA-SI Empathic Tendency Scale*, and *Parental Acceptance-Rejection Questionnaire* and a demographic information form in the main study were given to each students during regular classroom hours. In each classroom, both the standard information about the aim of the study and the detailed instructions about the scales were given by the researcher, and student's questions were also answered at the beginning and during the survey administration process.

A large age gap may be associated with different patterns of relationship and may not be related with bullying dynamics (Brody, 1998). Therefore, children have more than one sibling were wanted to select only one sibling, who is not elder or younger more than 4 years than themselves (Menesini, et al., 2010). In addition, as mentioned at the end of the Chapter 1-introduction section, children's perception of just maternal acceptance-rejection was taken into consideration as a parental acceptance-rejection variable of this study. This is because previous research findings indicated that perception of maternal acceptance and rejection was directly related to psychological adjustment problems (e.g., Lila & Gracia, 2007) and aggression (e.g., MacKinnon-Lewis et al., 1997) of children; however, paternal acceptance and rejection was indirectly related to psychological adjustment problems and aggression of children through mother acceptance. In addition, there are some other results showed that

maternal and paternal rejection through their children displays similar pattern (e.g., Gülay, 2011).

Moreover, considering confidentiality, the data were collected anonymously. The importance of their honesty in their responses was verbally emphasized and students were reminded that they could not participate or they could leave answering the survey if they felt uncomfortable. To prevent the missing values, participants were verbally reminded at the beginning of the implementation and the surveys were controlled by the researcher one by one while collecting the finished surveys. The completion of the questionnaires took approximately 15-20 minutes in pilot study and approximately 35-45 minutes in main study. After completing the survey, students and classroom teachers were thanked for their participation by offering candies by the researcher.

Pilot study for the instrument validation and main study for testing the hypothesis composed the data collection procedure of the study.

### **3.2.1. Pilot study**

A pilot study was carried out to check the validity and reliability of the instruments; *Sibling Bullying Questionnaire (SBQ)*, *Peer Relations Questionnaire (PRQ)*, and *Moral Disengagement Scale (MDS)*. Through convenient sampling method, the researcher obtained the data during the spring semester of 2017-2018 academic year. The pilot data set consisted of 289 students (134 girls and 155 boys; 140 4<sup>th</sup> and 149 5<sup>th</sup> graders) enrolled to six elementary schools in Afyonkarahisar. Twenty of the students had no sibling. Therefore, the data of 269 students (124 girls and 145 boys; 132 4<sup>th</sup> and 137 5<sup>th</sup> graders) were used for testing of the validity and the reliability of *Sibling Bullying Questionnaire (SBQ)*.

Among the participants, 134 (46.4%) of them were girls and 155 (53.6%) of them were boys; 140 (48.4%) of them were from 4<sup>th</sup> grade and 149 (51.6%) of them were from 5<sup>th</sup> grade with the ages 9 (5 students; 1.7%), 10 (140 students, 48.4%), 11 (143 students, 49.5%), and 12 (1 student, 0.3%). Participants' mothers aged between 27 and 49 ( $M=35.15$ ,  $SD=4.53$ ). Twenty (6.9%) of the participants had no sibling; however, 124 (42.9%) of them had one sibling, 108 (37.4%) of them had two

siblings, 27 (9.3%) of them had three siblings, 8 (2.8%) of them had four siblings, and 2 (0.6%) of them had five and more siblings. Mothers of the participants were consisted of 226 (78.2%) housewife, 27 (9.3%) civil servant, 25 (8.7%) worker, and 10 (3.5%) others, and one of the participants did not know the job of the mother. Eighty-nine (30.8%) of the participants' mothers were graduated from primary school, 91 (31.5%) of them were graduated from secondary school, 64 (22.1%) of them were graduated from high school, 39 (13.5%) of them were graduated from university, and two (0.7%) of them were graduated from master or Phd. Two (0.7%) of the mothers were illiterate, and two of the participants did not report the graduation level of the mothers. Table 3.1 shows details of the participants' demographic characteristics in pilot study. The data of these participant students were not included in the main study.

Table 3.1

*Demographic Characteristics of the Participants (Pilot Study)*

	<i>F</i>	<i>%</i>
Gender		
Girls	134	46.4
Boys	155	53.6
Age		
9	5	1.7
10	140	48.4
11	143	49.5
12	1	0.3
Grade Level		
4 <sup>th</sup> Grade	140	48.4
5 <sup>th</sup> Grade	149	51.6
Number of Sibling		
No sibling	20	6.9
1	124	42.9
2	108	34.6
3	27	7.1
4	8	2.9
5 and more	2	0.4
Mother Education Level		
Illiterate	2	0.7
Primary School	89	30.8
Secondary School	91	31.5
High School	64	22.1
University	39	13.5
Master or Phd	2	0.7
Occupation of Mothers		
Housewife	226	78.2
Civil Servant	27	9.3
Worker	25	8.7
Others	10	3.5
Unknown	1	0.3

Data were screened for missing values and wrong data entries. Because the pilot data was gathered by the researcher and all the surveys collected by checking one by one, there were no missing values in the pilot data set. For checking possible outliers, univariate (via Z-scores) and multivariate (via Mahalanobis Distance) outlier analyses were conducted. The results of univariate outlier analysis showed that Z-scores of too few cases were out of the range of  $\mp 4.00$  (Hair, Black, Babin, & Anderson, 2010). These outlier scores belonged to the cases of the Sibling Bullying

Questionnaire and Peer Relations Questionnaire. As a result of the nature of bullying, it was expected to have several outlier cases. Additionally, the results of the analyses with and without outliers did not differ. Therefore, the cases were decided to be kept in the data set by the researcher in order not to lose variation in the sample. Multivariate outliers were checked by Mahalanobis distance ( $\chi^2=16.27$ ) (Kline, 2011; Tabachnick & Fidell, 2013). There were no multivariate outlier cases in the pilot data set.

Skewness and kurtosis values were checked for normality and violation was observed (Kline, 2011). Sample distribution has not perfect normality because there were deviations from normal distribution especially in the items of peer and sibling bullying. However, in the pilot study, the researcher chose to continue with the original reports of the students rather than manipulated data (e.g. transformation technique for non-normal data) because manipulation may cause some problems for interpretation for the findings (Tabachnick & Fidell, 2013).

Before CFA, as well as influential outliers and normality, linearity and multicollinearity assumptions should be tested. For linearity, residual plots and scatterplots were checked and no violation was observed on visual inspection of the plots. For multicollinearity, bivariate correlations were checked. Since all of the correlations were less than .90, there was no multicollinearity assumption violation (Tabachnick & Fidell, 2013). To better investigation of multicollinearity, VIF and tolerance values were also examined towards the suggestions of Kline (2011). VIF values should be less than 10 whereas tolerance values should be higher than .20 (Tabachnick & Fidell, 2013). All of the values were falling into the expected ranges, hence, multicollinearity assumption was not violated.

After checking and satisfying the assumptions, the previously established factor structures of the *Sibling Bullying Questionnaire (SBQ)*, *Peer Relations Questionnaire (PRQ)*, and *Moral Disengagement Scale (MDS)* were validated by using LISREL 8.7. (Jöreskog & Sörbom, 2004). Confirmatory Factor Analysis (CFA) was carried out for each measurement.

The CFA, validity and reliability results in both pilot and main study are involved in 3.2. Data Collection Instruments section with other instruments used in main study.



### 3.2.2. Main study

Data for hypothesis testing was collected from 876 students at ten different elementary schools in Afyonkarahisar. One hundred thirty-four cases were excluded from the study because participants either were single child (not having any sibling) and had single parent (father) or left survey questions blank. Moreover, there were immigrant children in some classes and the researcher also gave them surveys not to create disunity in the class and not to exclude the children. However, their questionnaires were not included in the data set. Among the rest of the participants (N=742) 26 of the cases (9 univariate, 17 multivariate outliers) were deleted from the data set because analyses were performed with and without outliers and it was noticed that the results were effected by the outliers. Finally, the number of eligible participants became 716. Based on the criterion proposed by Kline (2011), the present study had sufficient number of participant because the sample for the studies employing structural equation model should be at least 200. Considering the sample size was satisfactory for the study, the data collection was terminated after visitation of 10 schools.

The researcher obtained the data during the spring semester of 2017-2018 academic year, through convenient sampling method. There were 347 (48.5%) girls and 369 (51.5%) boys; and 319 (44.6%) 4<sup>th</sup> graders and 397 (55.4%) 5<sup>th</sup> graders in the sample of the study. Of the participants, 20 (2.8%) of them were 9, 338 (47.2%) of them were 10, 340 (47.5%) of them were 11, and 18 (2.5%) of them were 12 years old. Among the participants, 391 (54.6%) of them had 1, 248 (34.6%) of them had 2, 51 (7.1%) of them had 3, 21 (2.9%) of them had 4, 3 (0.4%) of them had 5, and 2 (0.3%) of them had 6 siblings.

Ages of the participants' mothers ranged from 25 to 61 with a mean age of 36.60 (SD= 4.97). However, 36 of the participants reported not knowing the ages of their mothers. About the mothers' graduation levels, 6 (0.8%) of them were illiterate, 138 (19.3%) of them graduated from elementary school, 152 (21.2%) of them graduated from secondary school, 180 (25.1%) of them were graduated from high school, 178 (24.9%) of them graduated from university, and 44 (6.1%) of them were master or Phd graduates. Eighteen of the participants stated that they do not know their

mothers' education level. Considering the jobs of the participants' mothers, 474 (66.2%) of them were housewife, 145 (20.3%) of them were civil servant, 59 (8.2%) of them were worker, and 35 (4.9%) of them had other jobs, and three of the participants did not know the job of the mother. Table 3.2 shows details of the participants' demographic characteristics in hypothesis testing process.

Table 3.2

*Demographic Characteristics of the Participants (Main Study)*

	<i>F</i>	<i>%</i>
Gender		
Girls	347	48.5
Boys	369	51.5
Age		
9	20	2.8
10	338	47.2
11	340	47.5
12	18	2.5
Grade Level		
4 <sup>th</sup> Grade	319	44.6
5 <sup>th</sup> Grade	397	55.4
Number of Sibling		
1	391	54.6
2	248	34.6
3	51	7.1
4	21	2.9
5	3	0.4
6	2	0.3
Mother Education Level		
Illiterate	6	0.8
Elementary School	138	19.3
Secondary School	152	21.2
High School	180	25.1
University	178	24.9
Master or Phd	44	6.1
No Answer	18	2.5
Occupation of Mothers		
Housewife	474	66.2
Civil Servant	145	20.3
Worker	59	8.2
Others	35	4.9
No Answer	3	0.4

### 3.3. Data Collection Instruments

For the aim of this research, *Sibling Bullying Questionnaire*, *Peer Relations Questionnaire*, and *Moral Disengagement Scale* were adapted into Turkish by the researcher of present study. Sibling Bullying Questionnaire was also revised. At first, the adaptation and revision procedure of these three instruments is presented below. *Problem Solving Inventory for Children* and *Child KASI Emphatic Tendency Scale* originated from Turkish. *Parental Acceptance Rejection Questionnaire* was already translated into Turkish by Yılmaz and Erkman (2008) and its adapted form was used. A demographic information form was also administrated. Detailed information about each measurement tools used in this research is given below.

#### 3.3.1. Translation procedure of Sibling Bullying Questionnaire, Peer Relations Questionnaire, and Moral Disengagement Scale

Translation into Turkish of the originally created in English scales; *Sibling Bullying Questionnaire* (SBQ) (Wolke & Samara, 2004), *Peer Relations Questionnaire* (PRQ) (Rigby & Slee, 1993), and *Moral Disengagement Scale* (MDS) (Caprara et al., 1995) were accomplished in this study. Before starting the translation procedure, e-mails sent to owners of the instruments to obtain written permissions for the using of the instruments (Appendix D). Initially, items of each three instruments mentioned above translated from English to Turkish by three academicians who were advance in English proficiency and had Phd degrees at Educational Sciences. Next, in order to choose the best fitting items among three translations for each instrument, the researcher and her advisor compared and contrasted translated items. However, because there were some incompatibilities for the items of Moral Disengagement Scale, opinions from three other experts fluent in English were taken for the Turkish translation of items of MDS before last decision. Then, in order to provide the equivalence of the instruments in two languages, items of each scale were given to two English and Turkish language teachers with the Phd degrees. The items of each scale were checked in terms of equivalence and also in terms of accuracy (i.e. grammar, sentence formation, understandability). After the modification of the items needed, the final version of the translations of *Sibling Bullying Questionnaire* (SBQ)

and *Peer Relations Questionnaire* (PRQ) were administered in order to assess the factor structure, validity, and reliability of the instruments, in the pilot study. On the other hand, for *Moral Disengagement Scale*, additional focus group (discussion group) lasted for nearly 40 minutes was carried out with two 4<sup>th</sup> grade and four 5<sup>th</sup> grade students. Focus group participants worked on each items in terms of comprehensibility, content, and choice of words by answering them. The last modification was done according to the corrections get from the focus group. Eventually, Moral Disengagement Scale with its Turkish translated items was administered to assess its psychometric characteristics, in the pilot study.

#### **3.3.1.1. Sibling Bullying Questionnaire (SBQ)**

*Sibling Bullying Questionnaire* was developed by Wolke and Samara (2004) by adapting the questions from the widely used bullying questionnaire by Olweus (1991). The questionnaire starts with the definition of bullying and children are asked the frequency they had bullied siblings or had been victimized by their siblings using any of the following four methods: (1) hit, kick, or push; (2) take belongings; (3) call nasty names; (4) make fun off. In addition to these 4 methods; (5) exclude/ignore, and (6) spread humors to make others dislike him/her methods were used for peer bullying scale. Questions; (1) and (2) relate to physical; (3) and (4) relate to verbal; (5) and (6) relate to relational bullying. Children are asked *how often* [(1) never, (2) only once or twice, (3) 2 or 3 times a month, (4) about once a week, (5) several times a week] bullying behaviors above happened at home in the last 6 months.

Menesini et al., (2010) reformulated the items of *Sibling Bullying Questionnaire* (SBQ) by Wolke and Samara (2004) by using all 6 methods (so items) mentioned above not only for peers but also for siblings bullying measurements. In this research study, the reformulated 6 items (i.e., I excluded my sibling, ignored her/him; Appendix E) of *Sibling Bullying Questionnaire* were used. Reliability coefficient of *sibling bullying* was  $\alpha=.65$ , and fit indices of *sibling bullying* were ( $\chi^2=5.31$ ,  $df=5$ ,  $p=.38$ ;  $\chi^2/df = 1.06$ ; CFI= 1.00, RMSEA= .02, WRMR= 0.59) according to the results of the study performed by Menesini et al., (2010). Eventually, the Turkish translation and reliability, and validity measurements of the SBQ were done by the researcher. Since the questionnaire needed a revision after the reliability and validity

analyses (Details in section 3.3.1.1.1.), Turkish form was called as *Revised Sibling Bullying Questionnaire* by the researcher.

#### **3.3.1.1.1. Validity and reliability evidence for SBQ**

A pilot study was conducted to test the validity, and the reliability of Turkish version of *SBQ*. Confirmatory Factor Analysis was used to assess construct validity of *SBQ*. One-factor solution was tested. CFA confirmed the unidimensional factor structure of *SBQ* ( $\chi^2 = 19.37$ ,  $df = 9$ ,  $p = .02$ ;  $\chi^2/df = 2.15$ ; GFI = .98, CFI = .95, TLI = .91, SRMR = .05, RMSEA = .07). Although factor loading of item 2 is  $\lambda = .20$  (should be  $>.3$  according to Harrington, 2009), the item was not eliminated in order to check it in the revision and the main studies because all other conditions were met (i.e. fit indices, t-values).

Cronbach's alpha coefficient was computed in order to investigate the internal consistency coefficient of *SBQ*. It was  $\alpha = .59$ . After eliminating item 2, Cronbach's alpha was increased to  $\alpha = .61$ ; however, for the reason that mentioned above, item 2 was kept and a revision of the *SBQ* was decided to be done by the researcher and her advisor in order to get the instrument with higher reliability and validity.

#### **3.3.1.1.2. Revision procedure and the validity and reliability results of the Revised Sibling Bullying Questionnaire**

Wolke and Samara developed *Sibling Bullying Questionnaire* in 2004. Menesini et al. (2010) reformulated the questionnaire by generating two new items from *Peer Bullying Questionnaire* of Wolke and Samara (2004). *SBQ* confirmed a one factor structure. Inter-item reliability coefficient (Cronbach's alpha) was presented as .65 (Menesini et al., 2010). In the pilot study of present research study, Cronbach's alpha value was also low,  $\alpha = .59$ . Therefore, in this revision, the researcher and the advisor discussed the methods for increasing the reliability of the instrument. They concluded that because the sample size is sufficient, adding more items could increase the reliability of the scale according to suggestions of Miller, McIntire, and Lovler (2011). Therefore, three questions from *the bullying scale* of *Peer Relations Questionnaire (PRQ)* were adapted for siblings and added to *Sibling Bullying Questionnaire (SBQ)*: "I like to show my sibling that I'm the boss", "I like to make my sibling scared of me", and "I give my sibling a hard time". Next, expert opinion

of two researchers previously experienced in bullying research was requested. Afterwards, focus (discussion) group of four 4<sup>th</sup> and 5<sup>th</sup> grades students was held, and discussion lasted for about 20 minutes. They completed *R-SBQ* and gave feedback about the content and the understandability of the items. At the end, the revised version of the *Sibling Bullying Questionnaire* was named as *Revised Sibling Bullying Questionnaire (R-SBQ)* by the researcher of the present study.

Second pilot study with 120 4<sup>th</sup> and 5<sup>th</sup> grade participants was carried out to investigate the validity and the reliability properties of *R-SBQ*. In order to accomplish construct validity, a Confirmatory Factor Analysis of *R-SBQ* was conducted and one-factor structure as suggested by Wolke and Samara (2004) and Menesini et al. (2010) was tested. The CFA confirmed the unidimensional factor structure ( $\chi^2 = 47.82$ ,  $df = 27$ ,  $p = .00$ ;  $\chi^2/df = 1.77$ ; GFI = .92, CFI = .95, TLI = .93, SRMR = .06, RMSEA = .08). After checking the modification indices, error terms of item 6 and item 8 were freely estimated and the results indicated improved fit ( $\chi^2 = 34.65$ ,  $df = 26$ ,  $p = .12$ ;  $\chi^2/df = 1.33$ ; GFI = .94, CFI = .98, TLI = .97, SRMR = .05, RMSEA = .05). Standardized estimates were between .38 and .72 for the model. The inter-item reliability coefficient (Cronbach's alpha) was .78 for *R-SBQ*.

In the main study, CFA results also confirmed the one factor structure of *R-SBQ* with poor fit data ( $\chi^2 = 143.34$ ,  $df = 27$ ,  $p = .00$ ;  $\chi^2/df = 5.3$ ; GFI = .96, CFI = .86, TLI = .81, SRMR = .06, RMSEA = .08). Modification indices were controlled and the error variances between items; 1 and 3, 4 and 9, and 8 and 9 were freely estimated, and the model fit was improved much ( $\chi^2 = 68.00$ ,  $df = 24$ ,  $p = .00$ ;  $\chi^2/df = 2.8$ ; GFI = .98, CFI = .96, TLI = .94, SRMR = .03, RMSEA = .05). The inter-item reliability for the scale was found .63 in this research.

### **3.3.1.2. Peer Relations Questionnaire (PRQ)**

The Peer Relations Questionnaire was developed by Rigby and Slee (1993) in order to assess three dimensions of interpersonal relations: to bully others, to be victimized by others and to relate to others in a prosocial and cooperative manner. Thus, the PRQ contains three subscales: (1) bullying (6 items), (2) victimization (6 items), and (3) pro-social behavior (4 items); and four filler items. The items are rated on a 4 point Likert scale ranging; never (1), once in a while (2), pretty often (3), very often

(4). Higher scores on each subscale mean greater frequencies. Children are asked: “How often the statements are true for you?”. Sample items are ‘I like to make others scared of me’ for bullying others, ‘I get picked on by other kids’ for being victimized by others, and ‘I share things with others’ for prosocial behavior (See samples in Appendix F). The values of internal consistency for all scales were ranging from .71 to .86 (Rigby & Slee, 1993), and ranging from .62 to .86 (Raskauskas, Gregory, Harvey, Rifshana, & Evans, 2010). The PRQ is one of the most commonly used measurements for children and was found to be the strongest indicator for bullying, victimization and pro-social behavior (Rigby, 1997). Therefore, in the present study, PRQ for children will be adapted into Turkish by the researcher; however, only bullying scale (6 items) was used in order to model testing of the research.

#### **3.3.1.2.1. Validity and reliability evidence for PRQ**

The validity and the reliability of Turkish version of the PRQ were tested in pilot study. To provide support for construct validity of PRQ, Confirmatory Factor Analysis was conducted. Three-factor solution was tested. According to Comrey and Lee (1992) factor loadings are considered as ‘excellent’ if exceeding .71 , ‘very good’ if exceeding .63 , ‘fair’ if exceeding .45 , and “poor” if exceeding .32. Based on this explanation, factor loadings of item 10 ( $\lambda=.22$ ) and item 13 ( $\lambda=.30$ ) were even below the limit of ‘poor’. In addition, results of the reliability analysis showed that Cronbach’s alpha values of the scales of victimization (item 13 belongs to) and prosocial behavior (item 10 belongs to) were increased respectively from  $\alpha=.81$  to  $\alpha=.84$ , and from  $\alpha=.43$  to  $\alpha=.49$  when two items were eliminated from the scale. On the other hand, while pilot study was being conducted, many children asked questions about item 13: ‘I get into fights at school’. They could not differentiate whether the sentence means that they get into fights in order to fight others or they get into fights in order to protect their friends or to prevent the fight become worse. Therefore, it was thought that there is a problem related with the comprehensive of the item 13. For all these mentioned reasons, item 10 and item 13 were eliminated from the instrument and from the study. The CFA results displayed poor fit for the data ( $\chi^2 = 180.90$ ,  $df = 77$ ,  $p = .00$ ;  $\chi^2 / df = 2.35$ ; GFI = .92, CFI = .94, TLI = .93, SRMR = .12, RMSEA =.07). Modification indices were investigated and the error covariance between item 3 and item 8, item 9 and item 17, and item 12 and item 19

were freely estimated. Improvement of the model fit indices was observed after the modification ( $\chi^2 = 130.87$ ,  $df = 74$ ,  $p = .00$ ;  $\chi^2 / df = 2.35$ ; GFI = .94, CFI = .96, TLI = .96, SRMR = .12, RMSEA = .05). The inter-item reliability coefficients (Cronbach's alpha) were found as .72 for bullying scale and .65 for the entire scale.

Confirmatory Factor Analysis of *PRQ* without the items of 10 and 13 was repeated in the main study. However, only *bullying subscale* was used for the main SEM analysis of the study. The results indicated that the three factor structure was confirmed by the CFA with good fit the data ( $\chi^2 = 133.91$ ,  $df = 75$ ,  $p = .00$ ;  $\chi^2 / df = 1.79$ ; GFI = .97, CFI = .98, TLI = .97, SRMR = .04, RMSEA = .03). Modification indices were checked, and the error covariance between item 3 and item 8, and item 12 and item 19 were freely estimated and the results demonstrated improved fit ( $\chi^2 = 101.66$ ,  $df = 73$ ,  $p = .00$ ;  $\chi^2 / df = 1.39$ ; GFI = .98, CFI = .99, TLI = .98, SRMR = .04, RMSEA = .02). Freely estimating the error covariances was theoretically appropriate because those items mentioned above assess the same construct. The inter-item reliability coefficients (Cronbach's alpha) were found as .51 for bullying scale, .83 for victimization scale, and .43 for prosocial scale. The inter-item reliability coefficient of the entire scale was .62 in this research.

### 3.3.1.3. Moral Disengagement Scale (MDS)

Caprara et al., (1995) developed and validated the 14-item version of Moral Disengagement Scale in order to measure the tendency of elementary children to use cognitive mechanisms that help justify the immoral actions and lessen self-sanctions of them. The 14-item version of MDS is a 5-point Likert scale ranging from *strongly agree* (5) to *strongly disagree* (0), and a four-factor structure scale: cognitive restructuring with six items, minimizing one's agentive role with three items, distorting consequences with two items, and blaming/dehumanizing the victim with three items. These factors represent the four cognitive mechanisms that conceptualized by Bandura and higher scores reveal a higher tendency to perform one or more of these mechanisms. Example items are "It is alright to fight when your group's honour is threatened" and "Teasing someone does not really hurt them" (Appendix G). Pozzoli, Gini, and Vieno (2012) reported the results of CFA as indicated an adequate fit ( $\chi^2 (71) = 203.17$ ,  $p < .001$ ,  $\chi^2 / df = 2.86$ , CFI = .90, GFI =



.95, AGFI = .93, RMSEA = .052 (90% CI: .04, .06), SRMR = .051). The percentage of 43% variance explained by cognitive restructuring, while 56% by minimizing one's agentive role, 29% by distorting consequences, and 44% by blaming/dehumanizing the victim. The 14-item four-factor structure of MDS was adapted into Turkish by the researcher in order to employ in model testing of the present study.

### **3.3.1.3.1. Validity and reliability evidence for MDS**

The validity and the reliability of Turkish form of MDS was tested by a pilot study. To provide support for construct validity of MDS, Confirmatory Factor Analysis was conducted. As suggested by Caprara et al., (1995), four-factor solution was tested. Results of the CFA indicated poor fit for the data ( $\chi^2 = 197.94$ ,  $df = 71$ ,  $p = .00$ ;  $\chi^2/df = 2.79$ ; GFI = .91, CFI = .94, TLI = .92, SRMR = .06, RMSEA = .08). Modification indices were investigated and the error covariance between items 1 and 4, and 1 and 5 were freely estimated which provide better fit ( $\chi^2 = 170.32$ ,  $df = 69$ ,  $p = .00$ ;  $\chi^2/df = 2.47$ ; GFI = .92, CFI = .95, TLI = .93, SRMR = .06, RMSEA = .07). The inter-item reliability coefficients (Cronbach's alpha) were found as .72 for cognitive restructuring, .46 for minimizing one's agentive role, .58 for disregarding/distorting the consequences, and .64 for blaming/dehumanizing the victim. The inter-item reliability coefficient for the whole instrument was found .83 in the pilot study.

In the main study, Confirmatory Factor Analysis for MDS was renewed, and four-factor structure was tested. Results of CFA pointed out poor fit for the data ( $\chi^2 = 399.33$ ,  $df = 71$ ,  $p = .00$ ;  $\chi^2/df = 5.62$ ; GFI = .93, CFI = .91, TLI = .88, SRMR = .06, RMSEA = .08). Modification indices were checked and the error covariance between items 1 and 4, items 1 and 5, items 1 and 6, items 4 and 6, items 7 and 9 were freely estimated. Freely estimating the error covariances was theoretically appropriate because those items mentioned above assess the same construct. The model fit indices improved after this modification ( $\chi^2 = 236.80$ ,  $df = 65$ ,  $p = .00$ ;  $\chi^2/df = 3.6$ ; GFI = .95, CFI = .94, TLI = .92, SRMR = .05, RMSEA = .06). The inter-item reliability coefficient for the entire instrument was found .76.

#### **3.3.1.4. Problem Solving Inventory for Children (PSIC)**

Problem Solving Inventory for Children (PSIC) was developed by Serin, Bulut-Serin, and Saygılı (2010) in order to measure the self-perception of primary school pupils (4<sup>th</sup> to 8<sup>th</sup> graders) about their problem solving skills. The original items of PSIC are in Turkish. PSIC is 5-point Likert scale ranging from *I never act like this* (1) to *I always act in this way* (5). PSIC involves three factors; self-confidence with 12 items, self-control with 7 items, and avoidance with 5 items. Sample items are “I tried to solve my problems rather than avoiding” and “In general, I am not successful at solving my problems” (Appendix H). Higher scores reflect greater levels of self perception related with problem solving skills, and the scores are calculated by summing up the responses by reversing all items of self-control and avoidance subscales. Scores range from 24 to 120. The Cronbach’s alpha internal consistency coefficient for self-confidence was .85, for self-control was .78, and for avoidance was .66. The Cronbach’s alpha internal consistency coefficient for the entire inventory was reported as .80.

##### **3.3.1.4.1. Validity and reliability evidence for PSIC**

To verify the factor structure of PSIC, Confirmatory Factor Analysis was conducted for testing construct validity. Three-factor solution (a total of 24 items) was tested; however, one item (Item 5) was eliminated from the study because of its low factor loading ( $\lambda=16 < .30$ , Harrington, 2009). Results of the CFA demonstrated a poor fit for the data ( $\chi^2 = 707.18$ ,  $df = 227$ ,  $p = .00$ ;  $\chi^2/df=3.12$ ; GFI = .92, CFI = .96, TLI = .96, SRMR = .06, RMSEA = .05). Modification indices were checked and the error covariance between item 1 and item 3, item 2 and item 8, item 2 and item 14, item 7 and item 11, item 6 and item 14, item 14 and item 16, and item 21 and item 23 were freely estimated. Freely estimation of the error covariances was theoretically appropriate since these pair items evaluate the same construct. The model fit indices showed good fit to data after the modification ( $\chi^2 = 454.43$ ,  $df=220$ ,  $p = .00$ ;  $\chi^2/df = 2.11$ ; GFI = .95, CFI = .98, TLI = .98, SRMR = .06, RMSEA = .04). The inter-item reliability coefficients (Cronbach’s alpha) were .88 for self-confidence of problem solving, .73 for self-control, and .64 for avoidance. The inter-item reliability coefficient for whole instrument was .84 in this research.

### 3.3.1.5. Child KASİ Empathic Tendency Scale (KASİ ETS)

Child KASİ Empathic Tendency Scale (KASİ ETS) is a Turkish culture-specific scale designed by Kaya and Siyez (2010) in order to evaluate the empathic tendencies for children and adolescents. KASİ ETS has two different forms; for children and for adolescents. The 13- item child form of KASİ ETS involves two subscales; emotional with 7 items and cognitive empathy with 6 items. Items are rated on a 4-point Likert scale ranging from *never suits me* (1) to *suits me perfectly* (4). Some item examples are “I feel also happy when my friend is happy” and “I can understand the feelings of my friend when s/he is lonely” (Appendix I). The CFA results showed that the two –factor model fits the data well ( $\chi^2 = 76.97$ ,  $df = 64$ ,  $p > .001$ ;  $\chi^2/df = 1.20$ ; GFI = .97, CFI = .99, SRMR = .04, RMSEA = .02). The Cronbach’s alpha internal consistency coefficients were reported as .79 for emotional empathy, and .72 for cognitive empathy and .84 for KA-Sİ (full scale). The test-retest reliability coefficients were founded as .69, .71, and .74, respectively.

#### 3.3.1.5.1. Validity and reliability evidence for KASİ ETS

In order to test construct validity of KASİ ETS, Confirmatory Factor Analysis was utilized. Two-factor solution was tested. CFA confirmed the two-factor structure of KASİ ETS with good fit data ( $\chi^2 = 102.82$ ,  $df = 64$ ,  $p = .00$ ;  $\chi^2/df = 1.61$ ; GFI = .98, CFI = .99, TLI = .99, SRMR = .03, RMSEA = .03). The inter-item reliability coefficient (Cronbach’s alpha) was found .83 for the emotional empathy subscale, .79 for the cognitive empathy subscale, and .89 for the full scale in this research.

### 3.3.1.6. Parental Acceptance-Rejection Questionnaire (Child PARQ/Short Form)

Rohner, Saavedra and Granum (1978) developed Parental Acceptance- Rejection Questionnaire (PARQ) in order to measure perceptions of adults or children, related to their experiences of acceptance and rejection by their mothers and fathers. . PARQ is 60 items and a 4-point Likert type scale consisting the following options: *almost always true* (4), *sometimes true* (3), *rarely true* (2), and *almost never true* (1). There are three versions of PARQ -adult, child, and parent- and all forms are nearly identical except for verb tense and referent subjects. All three versions have short forms and all short forms of PARQ have 24 items. These short forms are based on

subsample of items from the standard (long) form, and the excellent psychometric status is expected (Rohner, 2005). For the purposes of present study, The Child PARQ/short form which evaluates the perceived maternal warmth at the present, was used (Rohner, 2003). Four-subscales of PARQ are; *warmth/affection* with 8 items, *hostility/aggression* with 6 items, *neglect/indifference* with 6 items, and *undifferentiated rejection* with 4 items. Sample items are “S/he says nice things about me.” and “S/he hits me although I do not merit” (See Appendix J for more sample items). Reliability coefficients (Cronbach’s alpha) were computed as .90 for warmth/affection subscale, .87 for hostility/aggression subscale, .77 for neglect/indifference subscale, and .72 for undifferentiated rejection subscale (Rohner, 2003). To reach overall measure of perceived rejection of parents, all of the items of warmth/affection subscale and one of the items (which is worded positively) of indifference/neglect subscale in the short form should be reversed. High score means that the child or adult perceive high level of rejection of the parent.

Turkish translation study of PARQ was conducted by Polat (1988). Reliability coefficients of the subscales of PARQ were ranged from .76 to .89, and the Cronbach alpha value of the whole scale was .80 (Polat, 1988). Construct validity analysis of Turkish Child PARQ was performed by Erdem (1990) and the factor analysis yielded the original factor structure of PARQ. Internal consistency coefficients (Cronbach’s alpha) of the subscales were ranging from .78 to .90, whereas test-retest reliability coefficients of the subscales were ranging from .85 to .90 (Erdem, 1990). Yılmaz and Erkman (2008) were carried out the Turkish adaptation study of Child PARQ/short form conducted and the results showed that the scale has a sufficient reliability with the Cronbach alpha values as .88 for warmth/affection, .69 for hostility/aggression, .66 for indifference/neglect, and .53 for undifferentiated rejection. The Cronbach alpha for total score of Child PARQ/short form was .89.

#### **3.3.1.6.1. Validity and reliability evidence for Child PARQ/Short Form**

Confirmatory Factor Analysis was utilized to test construct validity of Child PARQ/Short Form. Four-factor solution was tested. Results of the CFA indicated a poor fit for the data ( $\chi^2 = 711.05$ ,  $df = 246$ ,  $p = .00$ ;  $\chi^2/df = 2.89$ ; GFI = .92, CFI = .96, TLI = .95, SRMR = .05, RMSEA = .05). Modification indices were checked and the

error covariances between items; 5 and 8, 9 and 18, 21 and 23, and 27 and 29 were freely estimated. Freely estimation of the error covariances was theoretically appropriate because the items measure the same construct. The model fit indices improved after the modification ( $\chi^2 = 668.54$ ,  $df = 242$ ,  $p = .00$ ;  $\chi^2/df = 2.76$ ; GFI = .93, CFI = .96, TLI = .95, SRMR = .05, RMSEA = .05). The inter-item reliability coefficient (Cronbach's alpha) was found .73 for the warmth/affection subscale, .62 for the hostility/aggression subscale, .63 for the indifference/neglect subscale, and .54 for the undifferentiated rejection subscale. The Cronbach's alpha was found as .85 for the whole scale in this research.

### **3.3.1.7. Demographic Information Form**

A demographic information form included questions related with the participants themselves, siblings and mothers were employed to the participants. Birth date, gender (*1=female, 2=male*), name of the enrolled school, and year (*4<sup>th</sup> or 5<sup>th</sup> grade*) level of the participants were asked. Number of sibling, gender and age of sibling (*only child, having elder sister, having elder brother, having little sister, having little brother*) were also inquired. Participants were additionally asked for the information of age, educational level (*1 = Illiterate, 2 = Primary school, 3 = Secondary school, 4 = High school, 5 = University, and 6= Masters or Ph.D.*), and job (*1 = Housewife, 2 = Civil servant, 3 = Worker, and 4 = Other*) of their mothers. Socioeconomic status was not directly measured. However, the sample of the study was comprised of children from a wide range of SES because the schools were chosen from different districts of the city by considering the representativeness of the sample.

## **3.4. Description of Variables**

Parental Acceptance-Rejection: The total score of the Parental Acceptance-Rejection Questionnaire

Empathy: The total score of the Child KASİ Emphatic Tendency Scale.

Problem Solving: The total score of the Problem Solving Inventory for Children.

Moral Disengagement: The total score of the Moral Disengagement Scale.

Sibling Bullying: The total score of the Revised-Sibling Bullying Questionnaire.

Peer Bullying: The total score of “bully” subscale of the Peer Relations Questionnaire.

### 3.5. Summary of the Instruments’ Validity and Reliability Analysis Findings

To sum up, the instruments used in the present study for a particular purpose were statistically supported via the results of the validity and reliability analyses. Table 3.3 illustrates the Summary for the findings of CFA (fit indices) and the reliability analysis (Cronbach’s alpha) of each measurement instruments of this research.

Table 3.3

*Summary of the CFA and the Reliability Analysis Findings*

	$\chi^2$	$df$	$p$	$\chi^2/df$	$GFI$	$CFI$	$TLI$	$SRMR$	$RMSEA$	$\alpha$
Revised Sibling Bullying Questionnaire	68.00	24	.00	2.8	.98	.96	.94	.03	.05	.78
Peer Relations Questionnaire	101.66	73	.00	1.39	.98	.99	.98	.04	.02	.65
Moral Disengagement Scale	236.80	65	.00	3.6	.95	.94	.92	.05	.06	.83
Problem Solving Inventory for Children	454.43	220	.00	2.11	.95	.98	.98	.06	.04	.84
KASİ Emphatic Tendency Scale	102.82	64	.00	1.61	.98	.99	.99	.03	.03	.89
Parental Acceptance/Rejection Questionnaire	668.54	242	.00	2.76	.93	.96	.95	.05	.05	.85

### 3.6. Data Analysis

The major goal of this study was to investigate the relationships among some parental and personal traits and the sibling bullying, and the peer bullying via sibling bullying. In order to examine the mentioned relationship, the data were analyzed by

carrying out Structural Equation Modeling (SEM). Finally, a Structural Invariance Analysis was conducted to investigate if the theoretical framework underlying the final structural model of this study was equivalent or invariant across girls and boys. Before analyses were conducted, data were screened and cleaned to determine wrong data entries and missing values. Afterwards, related assumptions (normality, outliers, multicollinearity) were checked by the use of Statistical Package for Social Sciences (SPSS) version 23. To describe the data, descriptive statistics were conducted. Finally, Structural Equation Modeling (SEM) and Structural Invariance Analysis were conducted via LISREL 8.7. (Jöreskog & Sörbom, 2004).

### **3.7. Limitations of the Study**

As well as some strength, this study has some following limitations that the findings should be evaluated by considering these limitations:

Findings were limited to selected variables of the study. There can also be some other parental or personal variables related with the hypothesized model.

Sample was specified by the use of convenient sampling method. Since the nonrandomized determination of the sample was a restriction for the representativeness of the sample, the findings cannot be generalized to all 4<sup>th</sup> and 5<sup>th</sup> grade students in Turkey. Besides, the hypotheses were tested on a sample of 4<sup>th</sup> and 5<sup>th</sup> graders, which restricts my findings to a specific population. Thus, further studies should enlarge this analysis both to earlier ages and to early and late adolescence to see whether this pattern of relationship is replicated among younger or older students.

The main data collection instruments were self-report measures. Emotional and behavioral control difficulties in puberty period and need for social desirability could confound the results. Thus, further studies should involve different sources of data (e.g. child, parent, and teacher).

The cross-sectional nature of the study did not provide to test the stability of the results over time. Thus, there is a restriction related to make any longitudinal prediction.

## CHAPTER 4

### RESULTS

This chapter presented the results emerged from the analyses of the study. Data sets of the main and the pilot studies were used for different goals. In the first step, a pilot study was carried out to examine the reliability and validity of the instruments; *Revised-Sibling Bullying Questionnaire (R-SBQ)*, *Peer Relations Questionnaire (PRQ)*, and *Moral Disengagement Scale (MDS)*. In the previous section, the findings of the pilot study were presented. In this section, findings of the main analyses were presented.

The result chapter started with the preliminary analysis; then continued with data screening involving missing data and influential outliers check. After all, required assumptions for Structural Equation Modeling (SEM); normality, linearity, homoscedasticity, and multicollinearity were investigated. Afterwards, descriptive statistics; gender and grade level differences, and also the correlations among the variables of the study were presented. Findings of the measurement and the hypothesized structural models, and then structural invariance analysis were reported at last. At the end of the chapter, study results were summarized.

#### 4.1. Preliminary Analysis

Before hypothesized model testing via Structural Equation Modeling (SEM) analysis, accuracy and appropriateness of the data were controlled. Data was screened via frequency tables, by SPSS version 23. Unusual numbers were corrected after checking the hardcopies of the instruments, and then reverse items were recoded.



#### **4.1.1. Missing data and outlier check**

At first step, missing values on the variables of the study in the data set were checked before the analyses. Two solutions generally suggested for handling missing data were listwise deletion and imputing missing data; and listwise deletion was robust to violation of missing at random assumption (Allison, 2002; Kline, 2011; Tabachnick & Fidell, 2013). Besides, Tabachnick and Fidell (2013) proposed any technique that dealing with missing data would generate similar outcomes, if missing values are less than %5 and if the sample size is large. Therefore, considering the large sample size for main study and the stated recommendations, listwise deletion was done in the data set of present study. Z scores (for univariate outliers) and Mahalanobis distances (for multivariate outliers) were checked as well (Kline, 2011; Tabachnick & Fidell, 2013). Z scores were investigated based on the criterion of exceeding -4 or +4 (Hair et al., 2010), whereas Mahalanobis distances were inspected based on the chi square value of 22.46 (Tabachnick & Fidell, 2013). Since there were (9 univariate and 17 multivariate) outlier cases, analyses were carried out with and without outliers and the comparison was made between results. The differences were observed between the results; thereby, the outlier cases were decided to be eliminated from the data set of the main study.

#### **4.2. Assumptions for SEM**

##### **4.2.1. Adequacy of the sample size**

Kline (2011) suggested using a sample above 200 while conducting model testing with SEM. The data including responses of 716 participants was employed for testing the hypothesized model of this study. Considering the recommendation by Kline (2011), the number of the participants satisfies the sample size adequacy assumption.

##### **4.2.2. Independence of the observations**

Independent observation assumption refers to measures of each respondent which are totally uncorrelated with the responses of other participants of the study. (Hair et al.,

2010). In the present study, in order to provide independent observation, the data collection procedure was implemented by the researcher and the participants were reminded to respond the questions on their own without discussing about the questions with other participants. The researcher was interfere with any situation that was possible to threaten the assumption of independent observation; however, some students were observed affecting each other while filling up the instruments. During the data collection process, scales that were filled up without independent observation were marked by the researcher and excluded from the data set before the data entry.

#### 4.2.3. Normality

For univariate normality assumption testing, skewness and kurtosis values of the variables were checked. As can be seen from Table 4.1, except the kurtosis value of peer bullying variable, the values of the study variables were between the acceptable range of +3 and -3 which recommended by Field (2009). According to suggestion by Tabachnick and Fidel (2013), if the sample size is large sufficiently (i.e.;  $n=200$ ), skewness and kurtosis values are ignorable. Kline (2011, pp.63) suggested that the skewness value exceeding  $\pm 3$  and the kurtosis value exceeding  $\pm 10$  creates important problems in the analysis. In addition, for SEM analysis, Finney and Distefano (2006, pp. 298) proposed to name the distribution as moderately non-normal if the skewness value is smaller than 3 whereas kurtosis value is smaller than 7, and to use maximum likelihood (ML) estimation through the analysis. Q-Q plots were also examined for the normality assumption. Sample visuals can be viewed in Appendix K.

Table 4.1

#### *Normality Indices for the Study Variables*

Study Variables	Skewness	Kurtosis
Sibling Bullying	1.702	2.997
Peer Bullying	2.013	3.944
Parental Acceptance- Rejection	1.493	1.830
Moral Disengagement	.536	.098
Problem Solving	-.207	-.725
Empathy	-.384	-.612

Multivariate normality was checked through Mardia's measure of multivariate kurtosis (Ursavaş, Şahin, & McIlroy, 2014). The multivariate kurtosis test offered the result  $N(b2p)=68.64$  for the variables of the current study. The critical value was calculated based on the equation ' $p(p+2)$ ' suggested by Raykov and Marcoulides (2008) and found as 440. In the formula,  $p$  was the number of observed variables and it was 20 for the model of current study. Since the obtained coefficient as a result of the Mardia's measure of multivariate kurtosis was smaller than critical value ( $68.64 < 440$ ), it was supposed that the multivariate normality assumption was not violated.

#### **4.2.4. Linearity and homoscedasticity**

Linearity and homoscedasticity assumptions are associated with multivariate normality. Kline (2011) suggested checking the visual inspection of the scatterplots as one of the ways for testing linearity and homoscedasticity. The matrix of scatterplot of the present study indicated that there was an almost accurate linear relationship between the variables who have homogenously distributed variances. The scatterplot matrix is represented in Appendix L.

In addition to the the scatterplot matrix, residual plots were investigated to support the assumptions of linearity and homoscedasticity much more. The residual plots' visual inspections showed that the linearity and homoscedasticity assumptions were not violated. The residual plots are illustrated in Appendix M.

#### **4.2.5. Multicollinearity**

Field (2013) proposed three ways to check multicollinearity: bivariate correlation, VIF (variance inflation factor), and tolerance. Bivariate correlations between the variables of the study should be below .90 (Kline, 2011; Tabachnick & Fidell, 2013), whereas tolerance value is need to be over .10, and VIF values should not be higher than 10 (Field, 2013; Kline, 2011). At first, bivariate correlations were checked in order to examine any multicollinearity problem among all of the variables of the present study. Since all the bivariate correlations were below .90, no multicollinearity problems among the variables were observed. The bivariate

correlations among the variables of this study were represented in Table 4.3, under the section 4.3.2. Then, the VIF and tolerance values were computed and they were also between the suggested ranges; 1.142 and 1.532, and .65 and .88, respectively. All in all, the assumption of multicollinearity was met in the present study.

### **4.3. Descriptive Analyses**

Under this heading, initially, gender and grade level differences were presented. Then, bivariate correlations among the study variables were reported and discussed.

#### **4.3.1. Gender and grade level differences**

Multivariate analysis of variance (MANOVA) was conducted to discover gender and grade level differences with respect to sibling bullying and peer bullying responses, and to check the interaction effect of gender and grade level on sibling and peer bullying. Since this present study was based on a model testing with the goal of investigating the relationships among some parental, personal and bullying (sibling and peer) variables, the hypothesized model test was not covered gender and year level.

Two-way MANOVA analysis was carried out in order to identify the gender and grade level differences among the sibling bullying and peer bullying scores. Due to the homogeneity of variance assumption was violated, Pillai's Trace criterion was utilized when interpreting the results.

The results showed that gender had a significant main effect on the bullying variables  $F(2, 711) = 18.28, p < .05$ , Pillai's Trace = .05, partial eta squared = .05, but there were no significant main effect of grade level on the bullying variables  $F(2, 711), p = .83$ , Pillai's Trace = .001, partial eta squared = .001. In other words, the participants did not significantly differ on sibling bullying and peer bullying with regards to their grade levels. Similarly, the interaction of gender and grade level was also not significant on the bullying variables  $F(2, 711), p = .87$ , Pillai's Trace = .00, partial eta squared = .00. When explored separately, gender was significantly differs for both sibling bullying  $F(1, 712) = 4.66, p < .05$ , partial eta squared = .01, and peer bullying  $F(1, 712) = 36.36, p < .05$ , partial eta squared = .05. It was found that males

showed higher levels of sibling bullying behaviors ( $M = 3.14$ ,  $SD = 3.19$  and  $M = 3.00$ ,  $SD = 3.62$ , respectively) than females ( $M = 2.58$ ,  $SD = 3.78$  and  $M = 2.45$ ,  $SD = 3.11$ , respectively). Likewise, males showed higher levels of peer bullying behaviors ( $M = 1.21$ ,  $SD = 1.66$  and  $M = 1.28$ ,  $SD = 1.80$ , respectively) than females ( $M = .58$ ,  $SD = 1.17$  and  $M = .55$ ,  $SD = 1.20$ , respectively). Details were summarized in Table 4.2.

Table 4.2

*Means and Standard Deviations of the Bullying Variables by Gender and Grade Level and the Minimum and Maximum Values of the Scales*

	4 <sup>th</sup> Grade						5 <sup>th</sup> Grade							
	Female		Male		Total		Female		Male		Total			
	(n=159)		(n=160)		(n=319)		(n=188)		(n=209)		(n=397)			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Sibling Bullying	2.58	3.78	3.14	3.19	2.86	3.50	2.45	3.11	3.00	3.62	2.74	3.40	9	45
Peer Bullying	.58	1.17	1.21	1.66	.90	1.46	.55	1.20	1.28	1.80	.93	1.58	6	24

### 4.3.2. Bivariate correlations

In order to understand the associations between the study variables, bivariate correlations between the study variables were computed before model testing. The details related to correlations between the study variables are illustrated in Table 4.3.

Table 4.3

*Correction Matrix of the Study Variables*

	1.	2.	3.	4.	5.	6.
1. Sibling Bullying	-					
2. Peer Bullying	.29**	-				
3. Moral Disengagement	.20**	.29**	-			
4. Problem Solving	-.30**	-.29**	-.27**	-		
5. Empathy	-.21**	-.15**	-.20**	.43**	-	
6. PAR	.27**	.29**	.32**	-.48**	-.28**	-

Note: \*\* $p < .01$ , two-tailed, PAR: Parental Acceptance-Rejection.

Sibling bullying was positively correlated to peer bullying ( $r = .29$ ,  $p < .01$ ), moral disengagement ( $r = .20$ ,  $p < .01$ ), and parental rejection ( $r = .27$ ,  $p < .01$ ) whereas it was negatively correlated to problem solving ( $r = -.30$ ,  $p < .01$ ) and empathy ( $r = -.21$ ,  $p < .01$ ). That is to say, participant children with higher scores on sibling bullying tended to score higher on peer bullying, moral disengagement and perception of parental rejection, and to score lower on problem solving and empathy. Similarly, peer bullying was positively correlated to moral disengagement ( $r = .29$ ,  $p < .01$ ) and parental rejection ( $r = .29$ ,  $p < .01$ ), while it negatively correlated to problem solving ( $r = -.29$ ,  $p < .01$ ) and empathy ( $r = -.15$ ,  $p < .01$ ). In other words, the higher the participant children scored on peer bullying, the more they showed morally disengaged behaviors and the more they perceived to be rejected by their parents, however the less they showed problem solving skills and empathy tendency. As the personal variable, moral disengagement was positively correlated to parental rejection ( $r = .32$ ,  $p < .01$ ), but negatively correlated to problem solving ( $r = -.27$ ,  $p < .01$ ) and empathy ( $r = -.20$ ,  $p < .01$ ). More specifically, higher scores on moral disengagement was associated with greater levels of parental rejection perception, on the contrary, lower levels of problem solving and empathy. Problem solving was positively correlated to empathy (.43,  $p < .01$ ) while it was negatively correlated to

parental rejection ( $-.48, p < .01$ ). That is, the greater the participant children scored on problem solving, the more they tended to show empathy, however the less they perceived rejection by their parents. Lastly, empathy was negatively correlated to parental rejection ( $r = -.28, p < .01$ ) which means the more participant children tend to show empathic behaviors; the less they perceived to be rejected by their parents.

#### **4.4. Model Testing**

Under this title, initially, item parceling and the estimation method and model evaluation criterions were described. Next, the measurement model was performed. Lastly, the hypothesized structural model was tested.

##### **4.4.1. Item parceling procedure**

In the present study, item parceling technique was utilized in the processes of testing the measurement model and hypothesized structural model. *Item parceling* “involves summing or averaging item scores from two or more items from the same scale and using these parcel scores in place of the item scores in a SEM analysis” (Bandalos, 2008, p. 212). In addition to obtaining fewer parameter estimation, greater stable parameter estimates, and reducing sampling error, it is recommended that models constructed with item parceling rather than individual items tend to get more continuous and normal distribution of the data and become more parsimonious model (Bandalos & Finney, 2001; Little, Cunningham, Shahar, & Widaman, 2002).

Kline (2011) proposed that for the instruments having more than five items, item parceling may be used. Sample size also should be taken into consideration while deciding the numbers of the items and parcels. Small numbers of parcels (i.e., two or three parcels) are compensated, if the sample size is sufficient ( $N > 200$ ) (Marsh, Hau, Balla, & Grayson, 1998).

Based on its advantages and the suggestions about the usage of item parceling, this technique was utilized for sibling bullying, peer bullying, and empathy variables in SEM analysis of this study. This procedure was not employed for moral disengagement, problem solving, and parental rejection variables. Among the techniques for building parcels proposed in the literature (Landis, Beal, & Tesluk,



2000; Little et al., 2002; Matsunaga, 2008), content-based and item-to-construct balance methods were utilized in this present study. Content-based method includes parceling items based on the contents in order to form theoretically meaningful clusters (Landis et al., 2000), whereas item-to-construct method comprises building balanced parcel structure by pairing the opposite levels of values together (Little et al., 2002). Following the suggestions, a total of 4 parcels for empathy were created for 13 items based on their mean values. A total of two parcels for 6 items of peer bullying, and three parcels for 9 items of sibling bullying variables were created based on their contents and theoretical backgrounds. Item parcels can be seen in the Table 4.4.

Table 4.4

*Items and Parcels of the Latent Variables*

Latent Variables and Parcels	Item Numbers
Sibling Bullying	
SBulP1	1,3,5,6,7.
SBulP2	2,4.
SBulP3	8,9.
Peer Bullying	
PBulP1	4,16,17.
PBulP2	9,11,14.
Empathy	
EmpP1	2,3,9,13.
EmpP2	6,10,12.
EmpP3	4,5,8.
EmpP4	1,7,11.

#### 4.4.2. Model estimation and model evaluation

The measurement model and the hypothesized structural model were tested by LISREL (Linear Structural Relations) version 8.7. MLE maximizes the probability that the observed covariances are derived from a population assumed to be consistent with the observed data (Pampel, 2000). Therefore, maximum likelihood estimation (MLE) is utilized in estimating structural coefficients in SEM.

In order to evaluate the results of SEM, certain model fit indices; Chi-square ( $\chi^2$ ),  $\chi^2/df$  ratio, Root Mean Square Error of Approximation (RMSEA), Goodness of Fit

Index (GFI), The Bentler Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR) were used based on the suggestions by Hair et al. (2010), Kline (2005), Klem (2000). Details about the criteria of the model fit indices were represented in the section of 4.4.3.2.

#### **4.4.3. Results of model testing**

At first, the results of the measurement model, then, the results of the hypothesized structural model were presented under this heading. The measurement model examines the relationships among the observed and latent variables, while the hypothesized structural model focuses on the direct and indirect effects among the latent variables. The hypothesized structural model was tested by utilizing the technique of Structural Equation Modeling (SEM).

##### **4.4.3.1. Testing the measurement model**

A measurement model is essentially a confirmatory factor analysis (CFA) specified to describe the associations among the latent and the observed variables (Schumacker & Lomax, 2010). Through the measurement model, the relationships among the latent variables which were sibling bullying, peer bullying, parental acceptance-rejection, moral disengagement, problem solving, and empathy, and their indicators which were including factors and parcels were investigated in the current study. The measurement model with its standardized coefficients is presented in Figure 4.1.

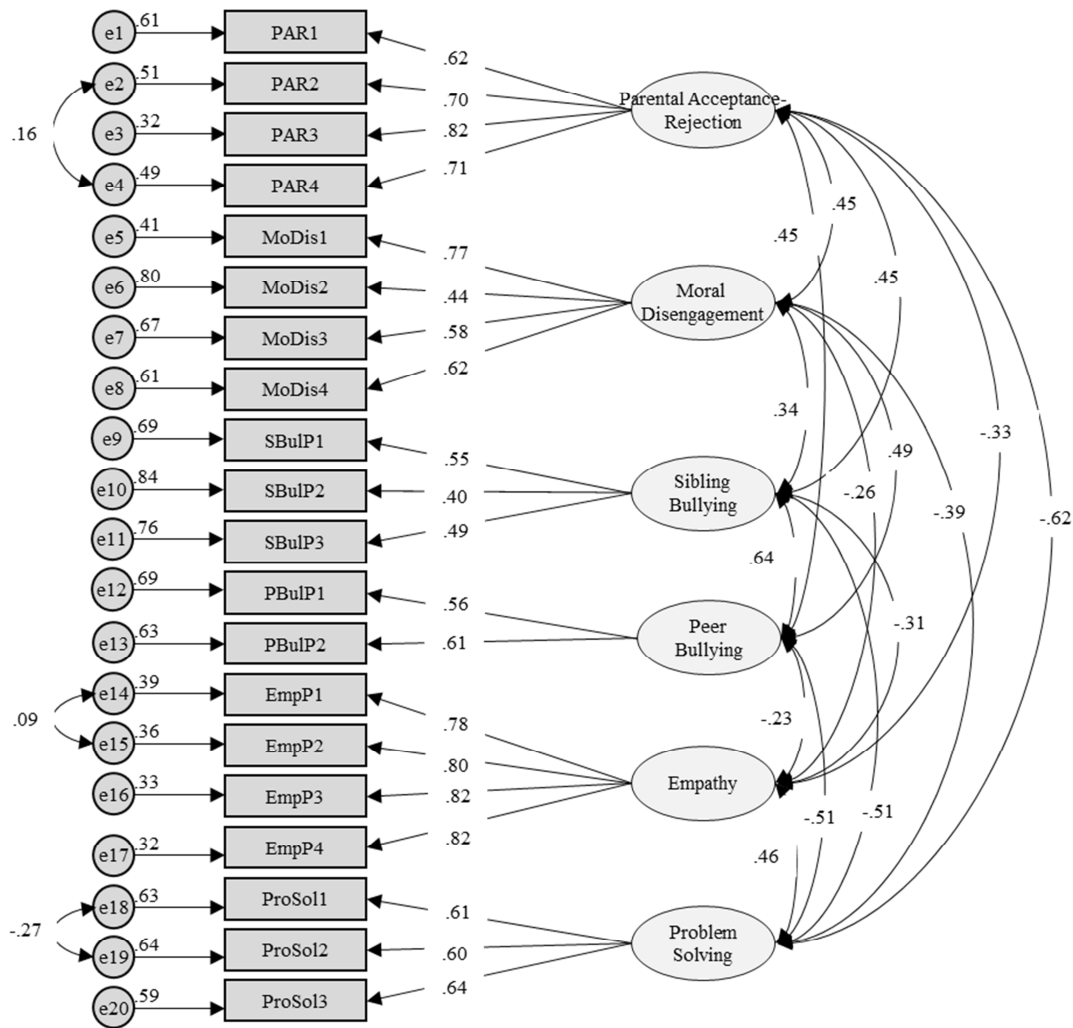


Figure 4.1 The measurement model.

The results presented that the measurement model indicated a good fit to the data ( $\chi^2 = 448.15$ ,  $df = 152$ ,  $p = .00$ ;  $\chi^2/df = 2.95$ ; GFI = .94, CFI = .96, TLI = .95, SRMR = .06, RMSEA = .05). All of the standardized factor loadings found to be significant, showing that each indicator significantly contribute to the related latent variables. They were ranged from .40 to .82. More details can be seen from Table 4.5

Table 4.5

*Standardized Regression Weights between the Observed and Latent Variables*

Observed		Latent	Loadings
SBulP1	<---	Sibling Bullying	.55
SBulP2	<---	Sibling Bullying	.40
SBulP3	<---	Sibling Bullying	.49
PBulP1	<---	Peer Bullying	.56
PBulP2	<---	Peer Bullying	.61
PAR1	<---	PAR	.62
PAR2	<---	PAR	.70
PAR3	<---	PAR	.82
PAR4	<---	PAR	.71
MoDis1	<---	Moral Disengagement	.77
MoDis2	<---	Moral Disengagement	.44
MoDis3	<---	Moral Disengagement	.58
MoDis4	<---	Moral Disengagement	.62
ProSol1	<---	Problem Solving	.61
ProSol2	<---	Problem Solving	.60
ProSol3	<---	Problem Solving	.64
EmpP1	<---	Empathy	.78
EmpP2	<---	Empathy	.80
EmpP3	<---	Empathy	.82
EmpP4	<---	Empathy	.82

PAR: Parental Acceptance-Rejection

Furthermore, correlations among the latent variables were mostly found to be significant, as can be seen from the Table 4.6.

Table 4.6

*Correlations among the Latent Variables for the Measurement Model*

	1.	2.	3.	4.	5.	6.
1. Sibling Bullying	-					
2. Peer Bullying	.64	-				
3. Moral	.34	.49	-			
4. Problem Solving	-.51	-.51	-.39*	-		
5. Empathy	-.31*	-.23*	-.26*	.46*	-	
6. Parental Rejection	.45*	.45*	.45*	-.62*	-.33*	-

Note: \* $p < .05$ .

#### 4.4.3.2. Testing the hypothesized structural model

The purpose of the proposed model was to investigate the relationships among parental acceptance-rejection and personal (empathy, problem solving, and moral disengagement) factors and sibling bullying and potential associations with peer bullying. Before the results explanation, used fit indexes and the cut points of them were compiled to have a better understanding of the results. In the current study, fit indexes as Goodness of Fit Index (GFI), The Bentler Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square of Error of Approximation (RMSEA) as well as model chi-square ( $\chi^2$ ) and chi-square/ degrees of freedom ratio ( $\chi^2/df$ -ratio) were used in order to interpret the results of SEM. In the perfect fit, Chi-square value should be small and non-significant (Kline, 2011; Schumacker & Lomax, 2010). Chi-square/df-ratio was suggested to be less than 3 according to Kline (2001), whereas it was also acceptable if less than 5 according to Wheaton, Muthen, Alwin, and Summers (1977). Kelloway (1998) recommended that the value of GFI greater than .90 shows a good fit to the data. Although it was not a rigid cut point (Brown, 2006), CFI and TLI values were suggested to be close to .95 and greater (Hu & Bentler, 1999). The range of SRMR is between 0 and 1, and smaller values indicate better fit. A SRMR value less than .08 (Hu & Bentler, 1999) and even .10 (Kline, 2005) is sufficient. A RMSEA value between .05 and .08 points out the close fit (Schumacker & Lomax, 2010) or reasonable fit (Browne & Cudeck, 1993), whereas, a value of RMSEA less than .06 shows good fit according to Hu and Bentler's (1999) suggestion.

Considering the suggested cut points for the fit indices, the results of *the structural portion* of the hypothesized model yielded a good fit to the data ( $\chi^2=448.15$ ,  $df=152$ ,  $p=.00$ ;  $\chi^2/df=2.95$ ; GFI = .94, CFI = .96, TLI = .95, SRMR = .06, RMSEA = .05). Furthermore, when *the measurement portion* of the model was checked, the results showed the significant links between the indicators (factors and parcels) and the latent variables with the factor loadings between the ranges .35 and .82. The whole model with the standardized coefficient values is represented in Figure 4.2.

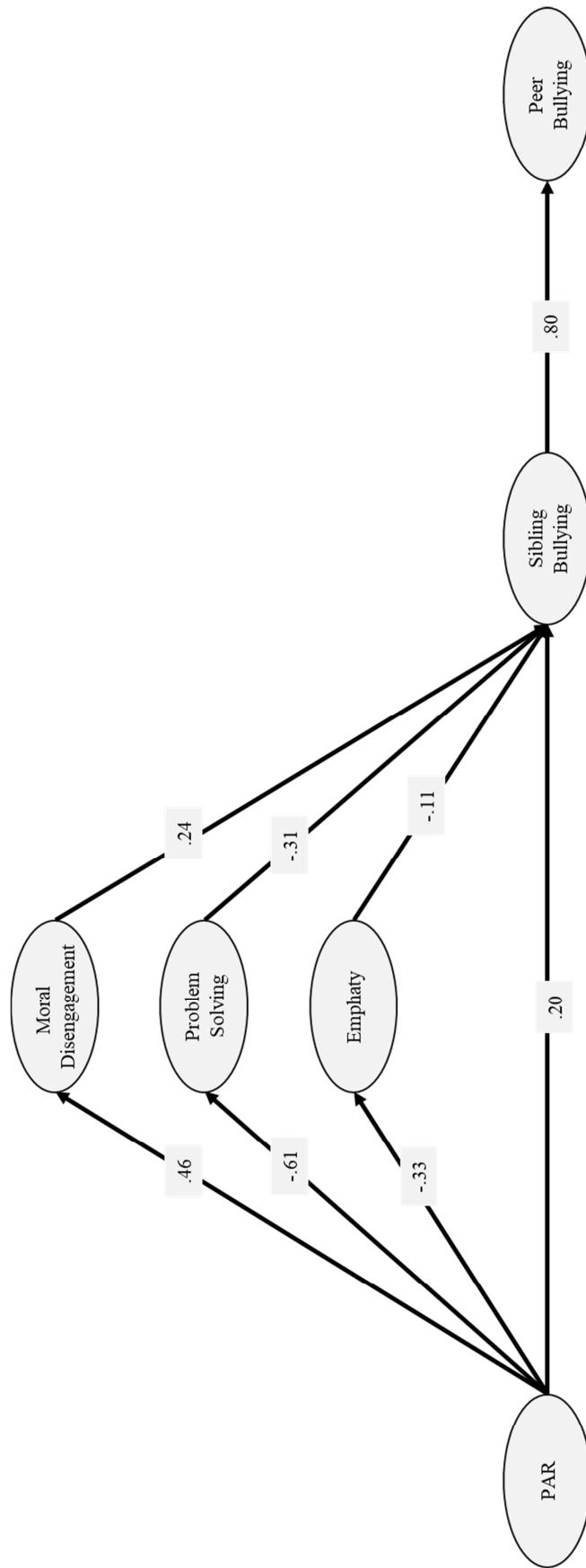


Figure 4.2 The full hypothesized model.

#### 4.4.3.2.1. Direct effects for the hypothesized structural model

Direct effects can be seen from the full hypothesized structural model in Figure 4.2. More specifically, parental rejection had a positive significant direct effect on moral disengagement ( $\gamma = .46, p < .01$ ) and negative significant direct effects on both problem solving ( $\gamma = -.61, p < .01$ ), and empathy tendency ( $\gamma = -.33, p < .01$ ). These results show that when children's perceptions of parental rejection increase, their scores of morally disengaged behaviors increase while their scores of problem solving and empathy tendency decrease.

The variables with significant direct effects on sibling bullying were parental rejection ( $\gamma = .20, p < .05$ ) and moral disengagement ( $\gamma = .24, p < .01$ ) with positive direct effects, and problem solving ( $\gamma = -.31, p < .01$ ) and empathy ( $\gamma = -.11, p < .05$ ) with negative direct effects. More specifically, when the level of children's perception of parental rejection and morally disengaged behaviors were high, sibling bullying behaviors increased, too. However, when problem solving skills and empathy tendency increased, sibling bullying decreased.

When direct effect between sibling and peer bullying examined, sibling bullying found to have a positive large and significant direct impact on peer bullying ( $\gamma = .80, p < .01$ ) as suggested in the hypothesized structural model. That is, the more students showed sibling bullying behaviors, the more they tended to bully also peers. All direct, total indirect and total effects and their levels of significance are given in Table 4.7.

Table 4.7

*Standardized Direct, Indirect, and Total Effects for the Hypothesized Structural Model*

		Parental Rejection	Moral Disengagement	Problem Solving	Empathy	Sibling Bullying
Sibling Bullying	Direct	.20*	.24**	-.31**	-.11*	-
	Total Indirect	.34**	-	-	-	-
	Total	.54**	.24**	-.31**	-.11*	-
Peer Bullying	Direct	-	-	-	-	.80**
	Total Indirect	.44**	.20**	-.25**	-.09*	-
	Total	.44**	.20**	-.25**	-.09*	.80**
Moral Disengagement	Direct	.46**	-	-	-	-
	Total Indirect	-	-	-	-	-
	Total	.46**	-	-	-	-
Problem Solving	Direct	-.61**	-	-	-	-
	Total Indirect	-	-	-	-	-
	Total	-.61**	-	-	-	-
Empathy	Direct	-.33**	-	-	-	-
	Total Indirect	-	-	-	-	-
	Total	-.33**	-	-	-	-

Note: \* $p < .05$ . \*\* $p < .01$ .



#### **4.4.3.2.2. Indirect effects for the hypothesized structural model**

As seen from Table 4.7, besides direct effects, the indirect effects were significant in the model. Although parental rejection did not predict peer bullying directly in the model, it had significant indirect impacts on peer bullying. The indirect effect of parental rejection on peer bullying was positive (.44), following through four possible pathways; (a) through moral disengagement and sibling bullying, (b) through problem solving and sibling bullying, (c) through empathy and sibling bullying, and finally (d) through just sibling bullying. That is, children who perceived parental rejection more also reported to show morally disengaged and sibling bullying behaviors more, that increasing their peer bullying behaviors, too. Alternatively, children who reported higher levels of parental rejection also showed lower levels of problem solving skills and empathy tendency which resulted in higher levels of sibling and peer bullying behaviors.

The indirect effect of parental rejection on sibling bullying was also positively significant (.34), following through three possible pathways; (a) through moral disengagement, (b) through problem solving, and finally (c) through empathy. That is, children who perceived mothers rejected more, showed morally disengaged behaviors more and showed problem solving and empathy skills less, that increased their sibling bullying scores.

Indirect effects corresponding with personal variables on peer bullying via sibling bullying showed that moral disengagement (.20) had significantly positive indirect effect on peer bullying through sibling bullying while problem solving (-.25) and empathy (-.09) significantly impact peer bullying through sibling bullying in a negative way. Specifically, children who reported high levels of moral disengagement also reported high levels of sibling and peer bullying as a result. However, children reported high levels of problem solving and empathy skills showed low levels of sibling bullying and peer bullying as a result. The indirect impact of empathy on peer bullying was small. The details were shown in Table 4.7.

#### 4.4.3.2.3. Squared multiple correlations ( $R^2$ ) for the hypothesized model

In order to examine the amount of variance the parental and personal variables explained in sibling and peer bullying variables, the squared multiple correlations ( $R^2$ ) were checked. Accordingly, in the hypothesized model, 30% of the variance in sibling bullying was explained by parental rejection, moral disengagement, problem solving, and empathy. Moreover, 19% of the variance in peer bullying was explained by parental rejection, moral disengagement, problem solving, and empathy via sibling bullying. Finally, while parental rejection accounted for 21% of the variance in moral disengagement, it accounted for 37 % of the variance in problem solving, and 11% of the variance in empathy. All the  $R^2$  values were listed in Table 4.8.

Table 4.8

*Squared Multiple Correlations for the Hypothesized Structural Model*

	Moral Disengagement	Problem Solving	Empathy	Sibling Bullying	Peer Bullying
$R^2$	.21	.37	.11	.30	.19

#### 4.4.3.3. Additional analysis: Testing for the structural invariance of the final model across gender

The MANOVA results indicated gender difference on the sibling and peer bullying behaviors; therefore, multi-group invariance analysis was carried out in order to examine whether the final model was invariant across girls and boys. At first, two models were tested as suggested by Byrne (2010): configural model and constrained model. The results indicated that the configural model of the final structural model demonstrated a good fit for girls and boys ( $\chi^2 = 767.95$   $df = 346$ ,  $p = .00$ ;  $\chi^2/df = 2.22$ ; GFI = .90, CFI = .94, SRMR = .08, RMSEA = .05). The constrained model results also yielded a good fit to the data ( $\chi^2 = 812.58$ ,  $df = 407$ ,  $p = .00$ ;  $\chi^2/df = 2.00$ ; GFI = .89, CFI = .94, SRMR = .08, RMSEA = .05).

Then, in order to assess the invariance of the final structural model across genders, the configural and constrained models were compared by performing  $\chi^2$  difference test ( $\Delta\chi^2$ ) with the chi-square values 767.95 (346) and 812.58 (407), respectively. Non-

significant difference was found ( $\Delta\chi^2_{(61)} = 44.63, p > .05$ ) which means that the structural model was invariant or equivalent across girls and boys.

#### **4.5. Summary of the Findings**

The present study tested a model examining the relationships among some parental, personal variables and sibling bullying and peer bullying via sibling bullying by Structural Equation Modeling (SEM). Considering gender and grade level differences, it was found at the end of descriptive analysis that participant children did not significantly differ with regards to grade levels, while they significantly differed with regards to gender on sibling and peer bullying. That is, grade level did not have any effect on peer and sibling bullying; whereas, gender had a significant effect on both sibling and peer bullying. More specifically, males responded significantly higher on both sibling and peer bullying when compared to females.

Findings with respect to model testing, the measurement model had a good fit to the data and all of the indicator factors and parcels significantly associated with the latent variables. In terms of structural model testing, the model supported that parental acceptance-rejection significantly influenced sibling bullying both directly and through the mediating effect of moral disengagement, problem solving, and empathy; whereas, peer bullying was affected significantly indirectly by parental rejection, moral disengagement, problem solving, and empathy via sibling bullying. Additionally, sibling bullying has significant direct impact on peer bullying. Finally, the structural model showed good fit to data for girls and boys, that is, the model was found invariant for both gender: for girls and boys.

## **CHAPTER 5**

### **DISCUSSION**

The findings of the present study are outlined and discussed in this final chapter, under three main sections. In the first section, the results are discussed and evaluated in the light of existing literature, following hypothesis of the present study. The second section involves implications of the findings for theory, research, and practice. Finally, the last section presents recommendations for further research.

#### **5.1. Discussion of the Findings**

##### **5.1.1. Discussions on the findings of additional analysis: gender difference**

Prior to the discussion of the main results, it should be noted the gender differences in bullying experiences. The findings of this present study on gender differences were parallel to previous research (e.g., Bilgiç, 2007; Demaray & Malecki, 2003) that as compared to girls, boys were more likely to report sibling and peer bullying behaviors. In addition, findings of the many international studies also indicated that bully children were mostly boys (e.g., Mouttapa et al., 2004; Pepler, Jiang, Craig, & Connolly, 2008; Rodkin & Berger, 2008; Veenstra, Lindenberg, Zijlstra, De Winter, Verhulst, & Ormel 2007). However, although the majority of boys in exhibiting bullying behaviors was found as mentioned, existing research have reported inconsistent findings about gender differences in bullying behaviors. Some of the studies concluded that girls were mostly victims (e.g., Craig et al., 2009) or boys were often victims (e.g., Bilgiç, 2007), whereas some of them found no significant difference between the bullying and victimization rates among genders (e.g., Andreou, 2000; Çetinkaya et al., 2009). On the other hand, despite the support for gender difference in both sibling and peer bullying behaviors in this present study, the structural model of this study did not differentiated across girls and boys. In other

words, the structural model of this study was found equal for girls and boys according to the results of invariant analysis. It can be speculated that when bullying investigated in a comprehensive model with some parental and personal factors as in this study, gender difference may disappear, and invariance may be observed.

### **5.1.2. Discussions on the findings of tested model through the specific hypothesis**

Of note to the reader, the independent roles of parental rejection and personal (empathy, moral disengagement, and problem solving) characteristics of children and adolescents on sibling and peer bullying have been analyzed separately in previous studies, but none of the existing investigations have explored the associations among these all factors and their relations to both sibling and peer bullying behavior simultaneously. Therefore, these relationships were investigated by this current research for the first time in bullying research. In brief, results of the previous studies were indirectly taken into consideration while discussing these research findings, because there was no previous study to be able to directly cross-check the findings pointed out by this present study. In order to understand the associations among the study variables and their unique impacts on sibling and peer bullying, detailed discussions of the findings presented by through specific hypotheses. Due to the main aim of this study to test the comprehensive bullying model as mentioned in *Hypothesis 6*, this part was started with the last hypothesis and continued with other specific hypothesis.

*Hypothesis 6:* This hypothesis involves all of the other hypotheses of this study that assuming the effect of parental rejection on peer bullying through sibling bullying would be mediated by the personal factors of empathy, moral disengagement, and problem solving. According to the findings, parental rejection was found significantly and positively related to peer bullying following four possible pathways; (a) through empathy and sibling bullying, (b) through moral disengagement and sibling bullying, (c) through problem solving and sibling bullying, and finally, (d) through solely sibling bullying. Specifically, children who perceived parental rejection more also displays morally disengaged and sibling bullying behaviors more, that increasing their peer bullying behaviors, too. Besides, children have higher levels of parental rejection perception also showed lower levels

of problem solving skills and empathic tendency which resulted in higher levels of both sibling and peer bullying behaviors. As seen, all expected results were confirmed by this study, and there were significant indirect relations and mediation effects among the variables as well as the direct and indirect correlations as explained in Hypotheses 1,2,3,4, and 5 below.

This present study was deprived of empirical evidence to explain why there are relationships between parental rejection and sibling bullying and also peer bullying with the mediator impacts of empathy, moral disengagement, and problem solving; however, in the light of mentioned previous investigations and suggested relationships among the present study variables, some speculations can be done. The origin of children's personal characteristics is their relationship with parents. In addition, parent-child relationships significantly give shapes to children's behaviors in healthy or problematic way. Therefore, as PARTheory suggested, when parenting is not full of warm and care, and when needs are not met and children feel insecure, children's social skills and personality (e.g., empathy and problem solving) development cannot supported and they may generate some disengaged moral values. On the other hand, based on the social cognitive theory in addition to PARTheory, this undesirable traits besides negative parenting, result in problem behaviors of children (e.g., bullying) as well. Moreover, if a child shows problem behaviors or has relationship problems within a context (at home), s/he likely transfers the experiences and shows similar responses and behaviors in other contexts (at school) as proposed by Tucker, Finkelhor, Turner, Sattuck (2014). Therefore, other hypotheses explain this comprehensive nature of bullying behavior starting from parental rejection and continuing step by step through bullying.

*Hypotheses 1.1., 1.2., and 1.3.:* These hypotheses assumed that parental rejection would be correlated to the personal factors of (a) empathy, (b) moral disengagement, and (c) problem solving. All of the hypotheses were confirmed by the findings of this research. That is, as the children perceived more rejection from their mothers, they tended more to disengage morally, less to be empathetic as well as to solve problems successfully.

Goleman (1995) claimed that experiencing emotional negligence in childhood damps down empathy skills. In parallel with this statement and the findings of this present research, some previous research findings supported the significant negative relationship between parental rejection and empathy and problem solving skills of children. For instance, Kim and Rohner (2003) concluded that parental acceptance-rejection and emotional empathy are in relation. That is, youths rejected by their parents in their childhood prone to less emotionally empathetic than youths who perceived parental acceptance in childhood. Furthermore, other researchers such as Padilla-Walker and Christensen (2010), Sayin (2010), and Köseoğlu (2013) also reported that children and adolescents have experienced positive maternity, acceptance and attention from their parents have significantly higher levels of empathy. The interaction styles, in relationship with children, of parents have importance on development of children's empathy. For example, approaches of parents toward their children, styles of listening them, sharing own emotions and supporting their children for sharing emotions, behaving in an empathic way not only in relations with their child but also in other relationships have an importance on development of children's empathy.

Accepted children by their parents have self-confidence, feel valuable of self, feel independence of emotions, and understand emotions and thoughts of others (Köseoğlu, 2013), whereas, rejected children reported themselves as to be hostile, aggressive, with injured self-esteem and self-adequacy (Rohner et al., 2005). Therefore, while accepted children having high levels of empathy (Davidov & Grusec, 2006), it can be concluded that the empathic skills of the rejected ones are deficient. On the other hand, Avcı and Sak (2018) and Önder and Gülay (2007) found no significant relationship between parental acceptance-rejection and children's empathy levels. Such contradictory findings may bring a question to mind that, there may be some factors play a role in relationship between parental acceptance-rejected and empathy. For instance, parental warmth was found by Zhou et al. (2002) in positive relation to parental expressiveness, which was, in turn, positively associated with empathy of children. Therefore, especially in their children's presence, warm and supportive parents are inclined to express more

positive emotions and their children show more empathy in response to emotion eliciting stimuli.

The finding of negative association between parental rejection and problem solving skills of children in this present study was also in parallel with the past studies. As supporting this finding, Tepeli and Yılmaz (2013) reported significant positive relationship between parental acceptance levels of children and problem solving skills. Çınar (2016) indirectly supported the finding of present research that children with authoritative parents- in more democratic and acceptable environment- have higher levels of problem solving skills than children with authoritarian parents. Because children with authoritarian parents do not feel safe, and feel rejected due to the exposure of different punishments, they cannot develop healthful social skills such as problems solving or they generate aggressive solutions rather than useful ones.

Concerning moral disengagement, investigations examining relations particularly between rejecting parenting and moral disengagement of children have been limited in the existing literature. For example, as supporting the findings of this present study, Hyde, Shaw, and Moilanen (2010) reported significant positive relationship between rejection by parents and morally disengaged attitudes of children and adolescence. In addition, Dunn (2006) indirectly provided support that attachment between parent and child examined as a significant contributor to moral development of children. Moreover, Campaert et al., (2018) again indirectly provided support that rather than to act compatibly with moral standards, children and adolescents disengaged morally in order to be approved by their parents. Because their moral cognitions have not completely developed yet, parental approval for behaviors has importance for children's moral development. Therefore, approval by parents can be thought as under parental acceptance dimension and it can be assumed that parental acceptance negatively related to moral disengagement of children and adolescents. Emerging picture from these mentioned results as well as the results of this present study is that behaviors or attitudes of parents that are warm and supportive are likely to improve empathic concern, problem solving abilities and moral behaviors of children. The findings of this present research extended past investigations by



exploring significant associations between parental acceptance-rejection and empathy, moral disengagement, and problem solving skills of children.

*Hypotheses 2.1, 2.2., 2.3., and 2.4. :* These hypotheses assumed that a parental factor of (a) parental rejection and personality factors of (a) empathy, (b) moral disengagement, and (c) problem solving would be correlated to the sibling bullying. All of the hypotheses were supported by the data of this present research and suggested that parental rejection and moral disengagement were significantly and positively linked to sibling bullying, whereas empathy and problem solving were significantly and negatively related to sibling bullying. In other words, the more the participants' parental rejection and moral disengagement levels increased, they were more likely to bully their siblings. The more participants' empathy and problem solving levels increased, they were less likely to show sibling bullying behaviors.

The empirical evidences indicated that in addition to failure of some cognitive abilities such as empathy and problem solving, morally wrong sense of bullying others for individual gains also motivates bullies (e.g., Arsenio & Fleiss, 1996; Caravita et al., 2012; Malti, Gasser, & Gutzwiller-Helfenfinger, 2010). That is, moral disengagement makes the child or adolescent easily act negatively toward others (Gini et al. 2014), because it enables to justify immoral behaviors and prevents feeling guilty emerging from victimized others. Therefore, this present study underlined the role of moral disengagement besides parental rejection, empathy, and problem solving on sibling and peer bullying behaviors of children. And findings showed similar pattern to former study results.

In fact, there are lack of empirical evidences for the relations of parental rejection and moral disengagement on directly sibling bullying; however, links between these two variables (parental rejection and moral disengagement) and aggressiveness or peer bullying were studied extensively. Therefore, based on the suggestion by Pepler et al., (2008, p.326) as “because bullying represents a subtype of aggression, children’s general tendency to be aggressive in different forms and in different contexts may be predictive of the more specific tendency to use aggression from a position of power, as in bullying”, existing study findings examined the relation of moral disengagement and parental rejection to aggression or peer bullying make

sense that they would be also as support for the present study's findings. These existing findings supported positive relationship between parental rejection and aggression, and bullying (e.g., Akse, Engels & Raaijmakers, 2004; Avcı & Sak, 2018; Jones, Forehand, Rakow, Colletti, McKee & Zalot, 2008), as well as moral disengagement and bullying (e.g., Almeida et al., 2010; Caravita et al., 2012; Obermann, 2011; Perren & Gutzwiller-Helfenfinger, 2012; Pozzoli, Gini, & Vieno, 2012; Tanrikulu & Campbell, 2015; Thornberg & Jungert, 2014; van Noorden et al., 2014; Wang et al., 2017). This finding is also consistent with the aforementioned results from existing literature of peer bullying or aggression (e.g., Oberman, 2011).

Moreover, there are empirical support for other findings of this present study reporting negative link between empathy and bullying (e.g., Caravita et al., 2009; Espelage et al., 2004; Gini et al., 2007; Mitsopoulou & Giovazolias, 2015; van Noorden et al., 2014; Zhou et al., 2002) as well as empathy and aggressiveness in the literature (e.g., Akdemir 2016; Çankaya 2014; Eisenberg, Eggum, & Giunta, 2010; Jolliffe & Farrington 2006; Marshall & Marshall 2011; Sohravardi, Bafrooei, & Fallah, 2015). In addition, there are previous studies supported the negative relationship between problem solving and bullying such as Albayrak-Sargın (2008), Andreou (2001), Arslan, Hamarta, Arslan, and Saygın (2010), Erdur-Baker (2009), Lubell and Vetter (2006), and Pakaslahti, Spoof, Asplund-Peltola, & Keltikangas-Järvinen (1998).

The findings of the study by Menesini et al. (2010) directly presented an evidence for this present study that they reported lower levels of empathy were associated to sibling bullying perpetration, and they concluded that empathy provides children to be aware of the damaging effects of their bullying behaviors. Therefore, based on the suggestion by Gibbs, Potter, Barriga, and Liao (1996), emerging guilt arising from empathy with negative emotions aroused by victim distress may prevent at least obviously harmful conducts. As a result, Zhou et al. (2002) also asserted that children with high levels of empathy would be expected in relation to fewer externalizing problems. On the contrary, the findings of this current study also in a discrepancy with some research results proposed no relations between empathy and bullying (e.g., Espelage et al., 2004) or positive relation between cognitive empathy and bullying (e.g., Caravita et al., 2009; Sutton et al., 1999) because cognitive

empathy help the bully child to use social cognitions for manipulating victims successfully (Garandeau & Cillessen, 2006). It was assumed that because the bully child is able to understand the mental state of victim (Andreou, 2004), his/her damaging toward victim would be to the point. Therefore, Williford et al. (2015) ascribed these contradictory findings to different components (affective and cognitive) of empathy examined.

Different from findings of this present study, in one of the most current study, the significant mediating effect of moral disengagement on the relationship between empathy (both affective and cognitive) and bullying was reported (Kokkinos & Kipritsi, 2018). Specifically, low levels of both cognitive and effective empathy supported morally disengaged behavior which increased engaging bullying behavior. As a result, it can be supposed that the indirect impact of affective empathy on bullying via moral disengagement demonstrated that the disengaged moral action may be significant in the social interaction in order to determine the level of one's sharing of another person's emotional state (Stavrinides, Georgiou, & Theofanous, 2010). Similarly, consistent with other earlier research (e.g., Caprara, Tisak, & Alessandri, 2014; Hyde et al., 2010), another previous study explored that moral disengagement was mediated the effect of empathy on aggression (Wang et al., 2017). In details, high level of empathy was negatively related to aggression and this reducing aggression effect could be explained by decrease in moral disengagement. It can be supposed that as well as empathy and moral disengagement separately and directly related to bullying involvement, they also have significantly influence on bullying behavior with together.

Considering the negative relationship between problem solving skills and sibling bullying, the reason can be the social problem solving deficiencies as proposed by Crick and Dodge (1994). That is, bully children use more ineffective, less constructive and aggressive solution strategies when facing to social problems and they anticipate positive consequences deriving from their aggressive or improper solutions (Dodge, Lochman, Harnish, Bates, & Pettit, 1997; Brody, Dorsey, Forehand, & Armistead, 2002). Additionally, Warden and Mackinnon (2003) explored in their research that bully children generated passive or indirectly assertive solutions to their social problems rather than aggressive solutions. Furthermore, they

were not aware of the negative consequences due to the lack of ability to judge the capability of their behaviors and problem solution strategies. As a result, they engaged in bullying behaviors because they cannot generate efficient and healthy solutions to the social problems.

Furthermore, relationship quality between parent and child has been found associated to the development of problem behaviors (Buist, Deković, & Prinzie, 2013; Buist, Verhoeven, Hoksbergen, ter Laak, Watve, & Paranjpe, 2016). Empirical findings as in this present study, have indicated a spillover process so that rejection in relationship of parent and child is found to be associated to sibling bullying (e.g. Kim & Kim, 2016) as well as peer bullying (e.g., Ergün, 2015; Kim, Kim, Koh, & Leventhal, 2010; Turgut, 2005). The rationale behind the links between parental rejection and aggression or bullying can be due to the negative impacts of parents' rejection on children. According to Wolchik, Wilcox, Tein, and Sandler (2000), rejected children have lower levels of self-confidence, poor communication skills, and lack of emotional abilities such as sharing emotions. Therefore, rather than establishing relations with others (sibling or peers) properly, they may choose to make contact with others by using their power and by causing harm on others as stated in bullying definition.

Moreover, parenting, comprises not meeting the needs of children (Knutson, DeGarmo, & Reid, 2004; Sullivan & Knutson, 2000) and poor supervision, especially in conflicts of sibling, makes children behaving aggressively, which may also result in sibling bullying (Kim & Kim, 2016). On the contrary, one of the most current study conducted by Stavrinides et al. (2018) longitudinally investigated the reciprocal interaction of parental rejection and bullying. They reached an interesting fruition that both victimization and bullying significantly predicted parental rejection; however, parental rejection significantly predicted victimization rather than bullying. They explain the reason as the cycle begins with the socialization problem of the child (i.e. bullying) leads parents disappointed and parents display their contempt by negative parenting (i.e. parental rejection). Therefore, further longitudinal studies are needed to detect way of relation.

*Hypothesis 3:* This hypothesis assumed that the effect of parental rejection on sibling bullying would be mediated by the personal factors of empathy, moral disengagement and problem solving. According to the findings, parental rejection was significantly and positively related to sibling bullying through three possible pathways; (a) through moral disengagement, (b) through problem solving, and finally (c) through empathy. This result suggested that children who perceived parents rejected more, exhibited morally disengaged behaviors more and exhibited problem solving and empathy skills less, that increased their likelihood of sibling bullying behaviors.

As aforementioned in the preceding paragraphs, some existing research provided empirical support for the link between parental rejection and personal factors; empathy, moral disengagement and problem solving (e.g, Avcı & Sak, 2018) as well as parental rejection and sibling bullying (e.g., Kim & Kim, 2016), and personal factors and sibling bullying (e.g., Menesini et al., 2010). However, to the researchers knowledge, there has been no research yet examined the relationships between parental rejection and sibling bullying with the mediation of empathy, moral disengagement and problems solving. There are some previous research presented findings indirectly supporting these likages. For instance, Rohner and Britner (2002) proposed that, at times, some behaviors of children and their personality can mediate the relationship between parental rejection and behavior problems by enhancing the negative results. Accordingly, Wang et al., (2017) found the mediating role of moral disengagement between childhood maltreatment and bullying. Specifically, high levels of maltreatment exposure in childhood are more likely to report higher levels on moral disengagement, which, in turn, provide an increase in their behaviors of bullying others. This is because, children with childhood maltreatment experiences generate a perception that bullying others is a justified response and attribute hostile motives to others (Godinet, Li, & Berg, 2014). Furthermore, maltreating parents play a role model with their attitudes that encourage bullying others, involving minimizing individual responsibility for and blaming or devaluing the victim of such negative behaviors, as well as disregarding the outcomes of bullying others (Hodgdon, 2009). Furthermore, some other researchers such as Hyde et al. (2010) and Pelton et al., (2004) also concluded that in order to explain the links between

family risks such as negative parenting and problem behaviors, moral disengagement serves as a mediating variable.

Furthermore, as an empirical support for this present study, children with the perception of less caring (i.e., showing less warmth and affection, more rejection and indifference) mothers founded have lower cognitive and affective empathic responses and this resulted in a tendency to bully other children much more (Mitsopoulou & Giovazolias, 2013). The rationale behind this result may be the influence of parenting on the emotional responsiveness development of children. In details, the association between attitudes of parents and children's empathy has been explained in terms of PARTheory, in which parents' warmth and care contribute to children's perspective taking abilities and emotional concern, as well as monitoring and controlling their own emotions, and understanding emotions of others which result in motivation to engage in prosocial behaviors rather than misbehaviors such as bullying (Knafo, Zahn-Waxler, Van Hulle, Robinson, & Rhee, 2008). Parental warmth, support and care not only enhance the development of empathy but also provide reinforcement for social competence performance including problem solving of children (e.g., Kazemi, Ardabili, & Solokian, 2010).

The relationship was found between low maternal care and more negative approach to solving problems (Swanson et al., 2010). Therefore, the relationship between parental rejection and sibling bullying through problem solving was indirectly supported by the studies mentioned including the results of, the positive relations between parental rejection and aggressive or passive problem solving strategies (e.g., Meesters & Muris, 2004; Tepeli & Yılmaz, 2013) and the negative relationship between problem solving skills and bullying (e.g., Warden and Mackinnon, 2003). Specifically, rejecting parents lead children to use more aggressive or maladaptive solutions to the social problems which, in turn, result in behaviors problems such as bullying behaviors.

*Hypothesis 4:* This hypothesis assumed that sibling bullying would be correlated to peer bullying. In parallel with earlier investigations (e.g., Bar-Zomer, & Brunstein Klomek, 2018; Duncan, 1999a; Menesini et al., 2010; Tippet & Wolke, 2015; Wiesner, Kapaldi, & Patterson, 2003; Wolke et al., 2015), this present study explored

a strong positive association between sibling and peer bullying, suggesting support to the “carry-over” model (Lockwood, Kitzmann, & Cohen, 2001). That is, although more research is required, evidences have provided support that, children involving bullying generally carry these behaviors into peer settings (Ostrov et al., 2006). This can be because children may learn from sibling violence to use violence for dealing with others as well as due to gaining perception of violence is a normal and acceptable way (Simonelli, Mullis, Elliott, & Pierce, 2002). Sibling aggression perpetrators were more likely to be bully perpetrator and also bully-victim yet (Tippett & Wolke, 2015).

However, it should be noted that, as some researchers (e.g., Duncan, 1999a; Johnson et al., 2015) proposed, the sibling bullying is more widespread than peer bullying and it is an efficient marker for peer bullying, too. Therefore, there should be some elements preventing children to bully peers although they bully siblings. The conclusion could be drawn from this finding is that although sibling and peer bullying share several common traits, sibling bullying seems to have some other unique characteristics. For instance, Wolke and Samara (2004) claimed that children are not able to choose their siblings; but they can choose their peers or may be chosen by their peers. Additionally, as a speculation, children may take strength from the family environment which involves; insufficient or absent supervision of parents, or many siblings, or positive viewpoint through bullying issue. Moreover, children may think that it is impossible to bully others at school because there is a teacher, a director or there are peers around; or because the child does not have the power as has at home. Therefore, despite the fact that the literature on peer bullying is helpful to comprehend sibling bullying, the findings of this study suggests a need for more investigation to build the theoretical architecture needed to shed light on sibling bullying.

*Hypothesis 5:* This hypothesis assumed that personal factors of empathy, moral disengagement, and problem solving would be correlated to peer bullying through sibling bullying. Results revealed that moral disengagement was significantly and positively linked to peer bullying through sibling bullying, while problem solving and empathy were significantly and negatively associated to peer bullying through sibling bullying. In other words, children who had higher levels of moral

disengagement also showed higher levels of sibling and peer bullying; however, children reported higher levels of problem solving and empathy skills showed lower levels of sibling bullying and peer bullying as a result. As seen, all expected findings were confirmed, and there were significant indirect associations among the variables as well as the direct correlations as explained in Hypotheses 2. The results of this present research extended previous studies by identifying significant links between empathy, moral disengagement, problem solving and peer bullying through sibling bullying.

To sum up, as a result of this study, the nature of sibling and peer bullying behaviors and the direct and indirect relationships among variables were explored. Parental rejection was found to be related directly to sibling bullying as well as personal variables (empathy, moral disengagement, and problem solving). Personal factors (empathy, moral disengagement, and problem solving) were also found to be related directly to sibling bullying. And sibling bullying was found to be related directly to peer bullying. Additionally, parental rejection was found to be associated also indirectly with sibling bullying through mediating role of personal factors (empathy, moral disengagement, and problem solving). And personal factors (empathy, moral disengagement, and problem solving) were also found to be associated indirectly with peer bullying through sibling bullying. Lastly and extensively, parental rejection was found to be related to peer bullying through sibling bullying with the mediation of personal factors (empathy, moral disengagement, and problem solving).

As a result, this study enlarged the growing body of literature that searches to understand whether and how sibling and peer bullying behaviors are explained by parental rejection and personal characteristics of children specifically, this research highlights the complex nature of sibling and peer bullying behaviors. To understand them, the ways in which the various ingredients – family and personality – work together to trigger bullying events were need to be understood. In short, this study presented empirical evidence as similarly suggested by MacKinnon-Lewis et al., (1997) pointing out that sibling bullying and thereby peer bullying were shaped by negative parenting through the impact of personality.



## 5.2. Implications of the Findings

*Bullying* is a universal subtype of aggressive behavior children and adolescence confront regularly in the context of schools (Salmivalli et al., 2011; Smith & Brain, 2000). Although peer bullying has been globally concerned but sibling bullying has not been considered sufficiently yet, sibling bullying also widespread, even more than peer bullying (Skinner & Kowalski, 2013) and it was found to be triggering factor for peer bullying (Menesini et al., 2010; Wolke et al., 2015) as supported by this study results. Additionally, this study examining parental rejection of bully children as well as sibling- peer bullying relationship found that relationships with mothers predispose children to engaging in both sibling and peer bullying. The findings of this study may provide valuable information to counselors/school counselors, parents and researchers for understanding the structure of both sibling and peer bullying and may help them to gain further insight for planning appropriate prevention and intervention strategies for coping with bullying.

A key implication of these findings is for professionals that *counselors or school counselors* should create prevention, intervention and treatment programs of peer bullying involving not only the children but also mothers and siblings. Services considering the inclusion of family members in prevention-intervention programs (PIP) of bullying will be precious herewith. In accordance with this purpose, mothers should be engaged in to make them aware of the crucial role they play in bullying process and to strengthen their positive parenting skills and increase their involvement into sibling relationship problems.

Moreover, since bullying is serious and prevalent problem in both contexts (at home and at school), it needs to be reduced, and one way to success this is by interfering directly in the bully perpetrators with the aim to help these children changing their social and cognitive behaviors that underlie their bullying behavior. Therefore, as a result of this study showing the significance of empathy, problem solving skills and moral disengagement in bullying behaviors; counselors may focus on these dynamics by developing prevention and intervention programs which aim to improve empathy skills, adaptive coping strategies and social problem solving skills as well as which focus on cognitive distortions and morally disengaged behaviors in order to become

aware and to correct them. School counselors can also prepare handouts, notice boards, and organize meetings to increase awareness on bullying as well as sibling bullying and their relations.

Furthermore, considering the prevalence rates of both types of bullying (sibling and peer bullying) among children and adolescents and the significant impacts of parenting on bullying behavior of children, the Ministry of Education (MoE) and the Ministry of Family and Social Policies (MoFSP) can develop strategies to prevent bullying at both contexts (at home and at school). *For the students and teachers*, MoE can develop educational information services and programs or some cartoons aiming to inform them about the nature, the extent and the risks of being engaged in peer bullying. Such suggested strategies may help elementary school students and their teachers for gaining more comprehensive awareness which can improve the effectiveness of the peer bullying prevention and intervention strategies. *For the parents*, MoE also can carry out specific programs for example under the name “A Family School” including some seminars or lectures aiming to inform parents about the relationship between parental warmth/acceptance and social-emotional development of their children as well as sibling and peer bullying. Additionally, MoFSP can develop programs or cartoons as public service broadcasting to help the parents from various education and SES levels for improving their attitudes toward their children. *For the siblings*, such kind of programs even can improve their awareness about the definition, nature and consequences of sibling bullying.

Additionally, an extensive body of research makes it obvious that parent-child relationships interfere with the development of children's and adolescents' interpersonal skills and their socialization. Thus, parents' attitudes and interactions with children also have an important role on bullying behaviors. Studying on the interaction among personal and parental determinants and sibling bullying, indirectly peer bullying will provide awareness for parents about the severity of sibling bullying, because parents are mostly not aware what is bullying and they mostly normalize the problematic (bullying) situations between siblings. Thus, with this knowledge, parents can detect bullying problems among their children and they can involve in the process to protect their both children from the negative outcomes of

bullying and so that bully child from the peer bullying engagement. By the help of this knowledge, they can create more supportive and positive home environment.

Until recently, bullying among siblings was assumed as a conflict like normal part of sibling relationship rather than a significant problem. Therefore, although peer bullying has been widely taken into consideration and searched, sibling bullying has been considerably neglected by researchers especially in our country (Tippet & Wolke, 2015). Along with peer bullying; the nature, the extent and the effects of sibling bullying should be understood for more efficient prevention and intervention strategies against both sibling and peer bullying. Therefore, this investigation is one of the first studies filling the nature part of this gap by bringing the research on parental and personal characteristics of sibling bullies and peer bullies by considering the connections between them.

This study contributed to the bullying research also with its measurement instruments which were adapted and revised. *Sibling Bullying Questionnaire* (Wolke & Samara, 2004) was adapted then revised; and renamed as *Revised Sibling Bullying Questionnaire (R-SBQ)* in this research. Therefore, the Turkish literature gained a sibling bullying scale which may be validated by further studies and could be more appropriate for the research involve elementary school children sample. Additionally, *Peer Relations Questionnaire* (PRQ) (Rigby & Slee, 1993), and *Moral Disengagement Scale* (MDS) (Caprara et al., 1995) were translated and adapted into Turkish in this current study. Although the scales got sufficient reliability values in adaptation process -in pilot study- some decrease in reliability was seen with data of main study, therefore, more investigation is certainly required to validate these adapted scales.

### **5.3. Recommendations for Further Studies**

In addition to significance and substantial implications, the present research had some limitations, thus, some recommendations for further studies. For instance, self-report measurement tools were used as the data collection instruments in this study. In fact, mostly self-reported measures are used in bullying research also all over the world. However, peer nominations and teacher and parent reports can also be utilized

because self desirability especially related to bullying behaviors and the characteristics of puberty such as having some difficulties with controlling emotions and behaviors (Forbes & Dahl, 2010) may confound the results. Therefore, researchers can benefit from alternative measurement tools and data sources in addition to self-report measures. Additionally, after adaptation process with sufficient values, the reliability results of adapted instruments (Revised-Sibling Bullying Questionnaire and Peer Relationship Questionnaire) with main data set decreased. Therefore, R-SBQ and PRQ are needed to be used in further studies for more evidences of the validation.

Moreover, for parental factor, only the children's perception of mothers' rejection is measured because there are studies found no direct relationship between rejection of fathers and aggression of children; however, directly significant relationship between mothers' rejection and children's aggression was found (e.g., Mackinnon et al., 1997). Additionally, Stavrinides et al., (2018) and Gülay (2011) explored that perception of mother's and father's rejection extremely similar that; if one of the parents presents rejection patterns toward their child, the other one almost certainly behaves in a like manner. However, rejection of father may possible have an effect on bullying behaviors of children. Therefore, data from both parents, or data from fathers are needed to explore the effects and differences of effects of each parent on bullying behavior.

This research has provided an evidence for the importance of parental rejection on both characteristics of children and bullying behaviors. The opposite impacts as suggested by the model of parenting determinants (Belsky, 1984) may also be possible that parenting may influenced by characteristics of children as well as individual characteristics (of parents) and social contextual sources of stress and support (e.g., marital relations, occupational experiences of parents) that parent-child relationship is embedded. Therefore, in order to gain deep understanding of the determinants of parenting shape childrearing and relations among characteristics of children and bullying behavior may be taken into consideration in further studies.

The target group of this study was elementary school children. The data was gathered from 4<sup>th</sup> and 5<sup>th</sup> grade students. The bullying behaviors in other age groups are also

needed to identify the age specific pattern of sibling and peer bullying behavior. Therefore, due to the cross-sectional design, this present study is not able to display the relationships between parental rejection and peer bullying through sibling bullying with the mediation of empathy, moral disengagement and problem solving over time. Longitudinal design studies are needed to confirm the same model over time and to make predictions truly.

In the present study, some mediators were observed. Because of a little bit complex nature of the structural model, some variables (personal variables and sibling bullying) had mediator effects besides their main influences. And in the existing literature, mediators in this study were also found to mediate each other in different dimensions. For example in this study, empathy and moral disengagement are in the same level as mediators. That is, they both mediate the relationship between parental rejection and bullying. However, some earlier studies showed that moral disengagement also may mediate the effect of empathy on bullying or aggression. Therefore, further investigations should focus on these mediations to get detailed information about the associations among the variables.

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## APPENDICES

### APPENDIX A: APPROVAL LETTER FROM METU HUMAN SUBJECTS ETHICS COMMITTEE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
MIDDLE EAST TECHNICAL UNIVERSITY

DÜMLÜPINAR BULVARI 06800  
ÇANKAYA ANKARA/TÜRKİYE  
Sayı: 2017-0816/318  
T: +90 312 210 79 59  
ueam@metu.edu.tr  
www.ueam.metu.edu.tr

07 HAZİRAN 2017

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)


İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu


Sayın Prof. Dr. Özgür ERDUR BAKER ;

Danışmanlığını yaptığınız doktora öğrencisi Nasibe KANDEMİR ÖZDİNÇ' in "*Kardeş ve Akran Zorbalığının Empati, Problem Çözme, Ahlakî Uzaklaşma. Kardeş İlişkileri ve Aile Stilleri ile İlişkisi*" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay 2017-EGT-125 protokol numarası ile 18.09.2017 – 31.07.2018 tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

  
Prof. Dr. Ş. Halil TURAN  
Başkan V


  
Prof. Dr. Ayhan SOL  
Üye

  
Prof. Dr. Ayhan Gürbüz DEMİR  
Üye

  
Doç. Dr. Yaşar KONDAKÇI  
Üye

  
Doç. Dr. Zana ÇITAK  
Üye

**BULINAMADI**  
Yrd. Doç. Dr. Pınar KAYGAN  
Üye

  
Yrd. Doç. Dr. Emre SELÇUK  
Üye

## APPENDIX B: APPROVAL LETTER FROM NATIONAL EDUCATION DIRECTORATE OF AFYONKARAHİSAR



T.C.  
AFYONKARAHİSAR VALİLİĞİ  
İl Milli Eğitim Müdürlüğü



Sayı : 86649407-605.01-E.5797391  
Konu: Araştırma İzni  
(Nesibe KANDEMİR ÖZDİNÇ)

20.03.2018

ORTADOĞU TEKNİK ÜNİVERSİTESİ REKTÖRLÜĞÜNE  
(Öğrenci İşleri Daire Başkanlığı)  
ANKARA

İlgi: a) Valilik Makamı'nın 20/03/2018 tarihli ve 605.01-E.5764325 sayılı Olurları.  
b) 14/03/2018 tarihli ve 1406 tarihli yazınız.

Üniversiteniz Eğitim Bilimleri Anabilim Dalı Rehberlik ve Psikolojik Danışmanlık doktora programı öğrencisi Nesibe KANDEMİR ÖZDİNÇ'in "**Kardeş ve Akran Zorbalığının Empati, Problem Çözme, Ahlakî Uzaklaşma Kardeş İlişkileri ve Aile Stilleri İle İlişkisi**" konulu araştırma çalışmalarında kullanılmak üzere 2017-2018 Öğretim Yılı içinde Müdürlüğümüze bağlı ilk ve orta dereceli okullarda öğrenim gören 4. ve 5. sınıf öğrencileri ile araştırma çalışması yapabilmesine dair ilgi (b) talebiniz;

Müdürlüğümüz AR-GE Birimi tarafından "Milli Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü" 22/08/2017 tarihli ve 35558626-10.06.01-E.12607291 sayılı yazısı ile yayımlanan 2017/25 No'lu Genelge doğrultusunda inceleme olup ilgi (a) "Valilik Oluru" ve onaylanmış veri toplama aracı ekte gönderilmiştir.

Bilgilerinizi ve gereğini arz ederim.

Metin YALÇIN  
İl Milli Eğitim Müdürü

EKLER:

- Valilik Onayı ( 1 sayfa )
- Onaylanmış Veri Toplama Aracı (... sayfa)

Not: 1- Anket çalışmalarında Müdürlüğümüz tarafından onaylanmış (mühürlü) veri toplama araçlarının çoğaltılarak kullanılması zorunludur.

2- Çalışmalar tamamlandıktan sonra sonuçlarının birer örneğinin İl Milli Eğitim Müdürlüğüne teslim edilmesi zorunludur.

Ayrıntılı bilgi için: Mustafa ORAL (Memur)  
Karaman İş Merkezi/AFYONKARAHİSAR  
e-posta: avbir03@meh.gov.tr / afyonstrateji@gmail.com

İL MİLLİ EĞİTİM MÜDÜRLÜĞÜ Ar-Ge  
Elektronik Ağ: afyon.meb.gov.tr  
Tel: (0 272) 2137604 / 208 Faks (0 272) 2137605

Bu evrak güvenli elektronik imza ile onaylanmıştır. <https://evraksorgu.meb.gov.tr> adresinden 553c-7e4b-3704-a645-d5f0 kodu ile teyit edilebilir.

## APPENDIX C: PARENT PERMISSION FORM / VELİ ONAY FORMU

Sevgili Anne/Baba

Bu çalışma Orta Doğu Teknik Üniversitesi doktora öğrencisi Nasibe KANDEMİR ÖZDİNÇ tarafından yürütülmektedir.

**Bu çalışmanın amacı nedir?** Çalışmanın amacı, bazı kişisel (empati, problem çözme, ahlaki uzaklaşma) ve ailesel (ebeveyn kabul-reddi) faktörlerin kardeş ve akran zorbalığı ile ilişkisini incelemektir. Ayrıca kardeş ve akran zorbalığı arasındaki ilişki de incelenecektir.

**Çocuğunuzun katılımcı olarak ne yapmasını istiyoruz?:** Bu amaç doğrultusunda, çocuğunuzdan bazı anketler cevaplamasını isteyeceğiz. Sizden çocuğunuzun katılımcı olmasıyla ilgili izin istediğimiz gibi, çalışmaya başlamadan çocuğunuzdan da sözlü olarak katılımıyla ilgili rızası mutlaka alınacak.

**Çocuğunuzdan alınan bilgiler ne amaçla ve nasıl kullanılacak?:** Çocuğunuzdan alacağımız cevaplar tamamen gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir. Elde edilecek bilgiler sadece bilimsel amaçla (yayın, konferans sunumu, vb.) kullanılacak, çocuğunuzun ya da sizin ismi ve kimlik bilgileriniz, hiçbir şekilde kimseyle paylaşılmayacaktır.

**Çocuğunuz ya da siz çalışmayı yarıda kesmek isterseniz ne yapmalısınız?:** Katılım sırasında sorulan sorulardan ya da herhangi bir uygulama ile ilgili başka bir nedenden ötürü çocuğunuz kendisini rahatsız hissettiğini belirtirse, ya da kendi belirtmesi de araştırmacı çocuğun rahatsız olduğunu öngörürse, çalışmaya sorular tamamlanmadan ve derhal son verilecektir.

**Bu çalışmayla ilgili daha fazla bilgi almak isterseniz:** Çalışmaya katılım sonrasında, bu çalışmayla ilgili sorularınız yazılı biçimde cevaplandırılacaktır. Çalışma hakkında daha fazla bilgi almak için araştırmacı Nasibe KANDEMİR ÖZDİNÇ (e-posta: [kandemir1984@gmail.com](mailto:kandemir1984@gmail.com)) ile iletişim kurabilirsiniz. Teşekkür ederiz.

***Yukarıdaki bilgileri okudum ve çocuğumun bu çalışmada yer almasını onaylamıyorum***

Annenin adı-soyadı: \_\_\_\_\_

Bugünün Tarihi: \_\_\_\_\_

Çocuğun adı soyadı: \_\_\_\_\_

(Formu doldurup imzaladıktan sonra araştırmacıya ulaştırınız).



**APPENDIX D: PERMISSIONS FOR THE MEASUREMENT INSTRUMENTS**  
**AUTHOR PERMISSION FOR TRANSLATING AND ADAPTING**  
**THE SIBLING BULLYING QUESTIONNAIRE (SBQ)**

Dear Nasibe,

That's totally fine with me as long as you refer to the correct reference.

Best wishes,

February 9, 2018

-----  
Professor Muthanna Samara CPsychol AFBPsS

Professor of Psychology

Department of Psychology

Kingston University London

Email: [M.Samara@Kingston.ac.uk](mailto:M.Samara@Kingston.ac.uk)

Tel: +44 (0) 20 8417 2533  
-----

**AUTHOR PERMISSION FOR TRANSLATING AND ADAPTING  
THE PEER RELATIONS QUESTIONNAIRE (PRQ)**

Dear Nasibe,

Please feel free to download and use any of the questionnaires accessible on the site. For other questionnaires as noted you need to contact ACER. I have not retained copies of most of my papers – but references are given and can be probably be accessed through your university library. Let me know if you can't.

Best wishes,

Ken Rigby

December 21, 2017

**AUTHOR PERMISSION FOR TRANSLATING AND ADAPTING  
THE MORAL DISENGAGEMENT SCALE (MDS)**

Dear Nasibe,

I am pleased to Accord the permission to use the scale we have developed  
to measure moral disengagement in children.

Sincerely, GVCaprara

July 22, 2017

-----

Gian Vittorio Caprara

Fai crescere la tua universita

-----

**AUTHOR PERMISSION FOR USING  
THE KASİ EMPATHIC TENDENCY SCALE (KASİ)**

Değerli meslektaşım,

Elbette, memnuniyetle KA-Sİ'yi çalışmanızda kullanabilirsiniz.

Selam ve saygılarımla

9 Ağustos 2017

-----  
Prof. Dr. Alim KAYA

Mersin Üniversitesi

Eğitim Fakültesi

Eğitim Bilimleri Bölümü

Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı Başkanı

Yenişehir/ Mersin

Tel: 0 324 341 2815/2225  
-----

**AUTHOR PERMISSION FOR USING  
THE PROBLEM SOLVING INVENTORY FOR CHILDREN (PSIC)**

Merhaba,

Öncelikle şahsım ve çalışma arkadaşlarım adına ölçeği kullanma izninizi kabul ediyoruz. Ölçeği kullanmanızda hiçbir sakınca yoktur. Ölçeğe ilişkin bilgilere ve puanlamasına kişisel web sayfamdan ulaşabilirsiniz. İyi çalışmalar diliyorum.

Oğuz SERİN

24 Temmuz 2017

-----  
Prof. Dr. Oğuz SERİN

Lefke Avrupa Üniversitesi

Dr. Fazıl Küçük Eğitim Fakültesi Dekanı

Lefke/KKTC

Tel: +90 392 660 26 52

Email: oserin@eul.edu.tr  
-----

**AUTHORS' PERMISSIONS FOR USING  
THE PARENTAL ACCEPTANCE-REJECTION QUESTIONNAIRE (PARQ)**

Hello Nasibe,

Thank you for your payment for the copyright license. Attached you will find the measures you requested (we only have the PARQ/Control in child version). I have included a file from Turkish reliability study (Fatos Erkman). The copyright license contains a link to the online scoring and data storage program. Please save that file for your future use.

Warm regards,

Nancy

-----

Ronald P. Rohner, Ph.D.  
Professor Emeritus and Director  
**Ronald and Nancy Rohner Center**  
for the Study of Interpersonal Acceptance and Rejection  
Department of Human Development and Family Studies, Unit 1058  
University of Connecticut  
Storrs, CT 06269-1058 USA  
860.486.0073 phone  
860.486.3452 FAX  
[www.csjar.uconn.edu](http://www.csjar.uconn.edu)  
email: [r.rohner@uconn.edu](mailto:r.rohner@uconn.edu)

13. 02. 2018

Sayın Nasibe Kandemir Özdiñ,

Orta Doęu Teknik Üniversitesi, Rehberlik ve Psikolojik Danışmanlık Bölümü  
doktora öğrencisi olarak, danışmanınız Prof. Dr. Özgür Erdur Baker ile  
yürüteceğiniz; 'Kardeş Zorbalığının Akran Zorbalığı ve Empati, Problem Çözme,  
Ahlaki Uzaklaşma ve Ebeveyn Kabul-Reddi ile İlişkisi' konulu tez çalışmanızda  
Türkçe'ye uyarlamış olduğumuz Ebeveyn Kabul- Red Ölçeğini kullanma isteğiniz  
tarafıma bildirilmiştir.

Bu araştırmada kullanılmak üzere, R.Rohner tarafından geliştirilmiş ve tarafımızdan  
adaptasyon çalışmaları yapılmış olan Ebeveyn Kabul-Red Ölçeği, Kısa Formunu  
kullanmak üzere yaptığınız izin talebiniz uygundur.

Araştırma amaçlı olarak kullanmanıza izin veriyorum.

Çalışmalarınızın bitiminde, bir kopyasını bana iletmenizi rica ediyorum.

Bilgilerinize,



Prof.Dr. Fatoş Erkman,

Eğitim Bilimleri Bölümü

Eğitim Fakültesi

Boğaziçi Üniversitesi

**APPENDIX E: SAMPLE ITEMS FROM  
THE REVISED-TURKISH VERSION OF SIBLING BULLYING  
QUESTIONNAIRE (R-SBQ)**

1. Kardeşimi bilerek grubumuza almadım, onu görmezden geldim.
2. Kardeşimi itip kaktım, onu dövdüm.
3. Kardeşimin eşyalarına bilerek zarar verdim.



**APPENDIX F: SAMPLE ITEMS FROM THE TURKISH VERSION OF  
PEER RELATIONS QUESTIONNAIRE (PRQ)**

1. Başkalarının benden korkmasından hoşlanırım.
2. Başkalarıyla dalga geçen bir grubun üyesiyim.
3. Patonun ben olduğumu göstermeyi severim.

**APPENDIX G: SAMPLE ITEMS FROM THE TURKISH VERSION OF  
MORAL DISENGAGEMENT SCALE (MDS)**

1. Arkadaş grubunun onuru tehdit edildiğinde kavga etmek yanlış değildir.
2. Birinin bisikletini izni olmadan almak, onu sadece ödünç almaktır.
3. Birileriyle alay etmek onları gerçekten kırmaz.

## **APPENDIX H: SAMPLE ITEMS FROM THE PROBLEM SOLVING INVENTORY OF CHILDREN (PSIC)**

1. Sorunlarımdan kaçma yerine sorunumu çözmeye çalışırım.
2. Sorunlarımı çözme konusunda genellikle başarılı değilimdir.
3. Sorunlar karşısında oldukça sabırlı ve kararlı davranırım.

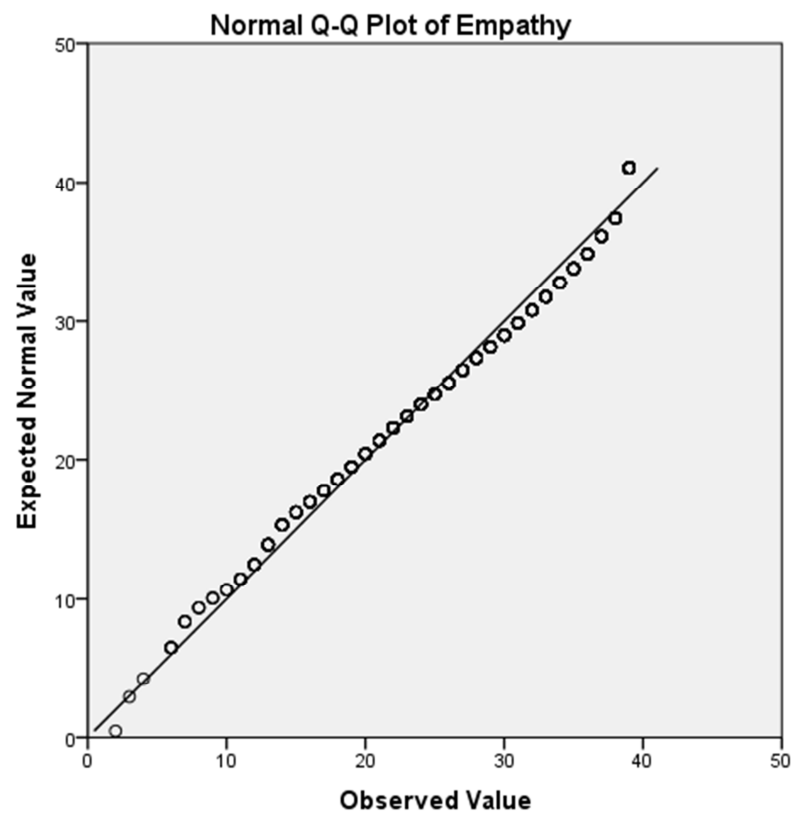
**APPENDIX I: SAMPLE ITEMS FROM  
THE KASİ EMPATHIC TENDENCY SCALE (KASİ)**

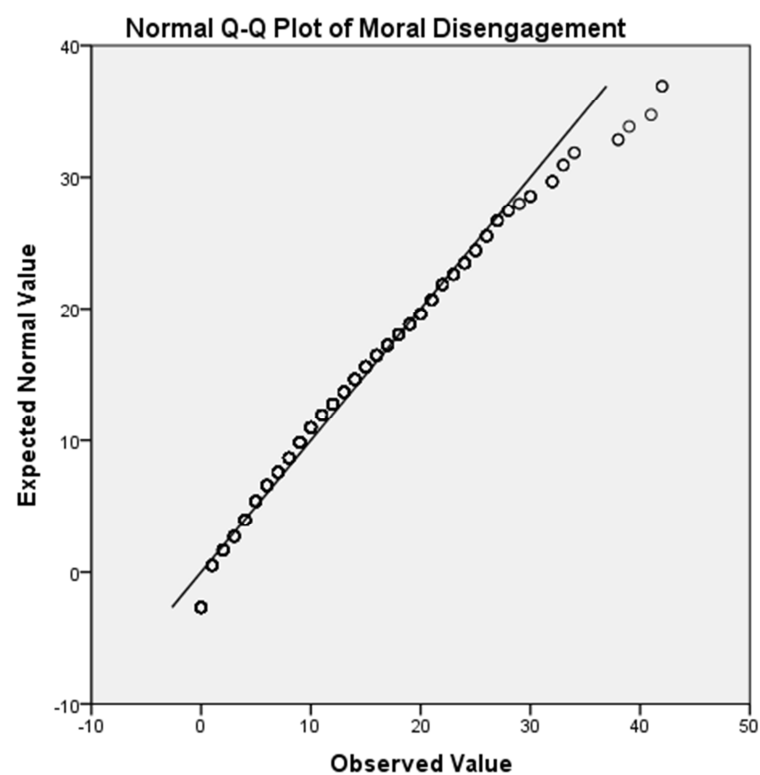
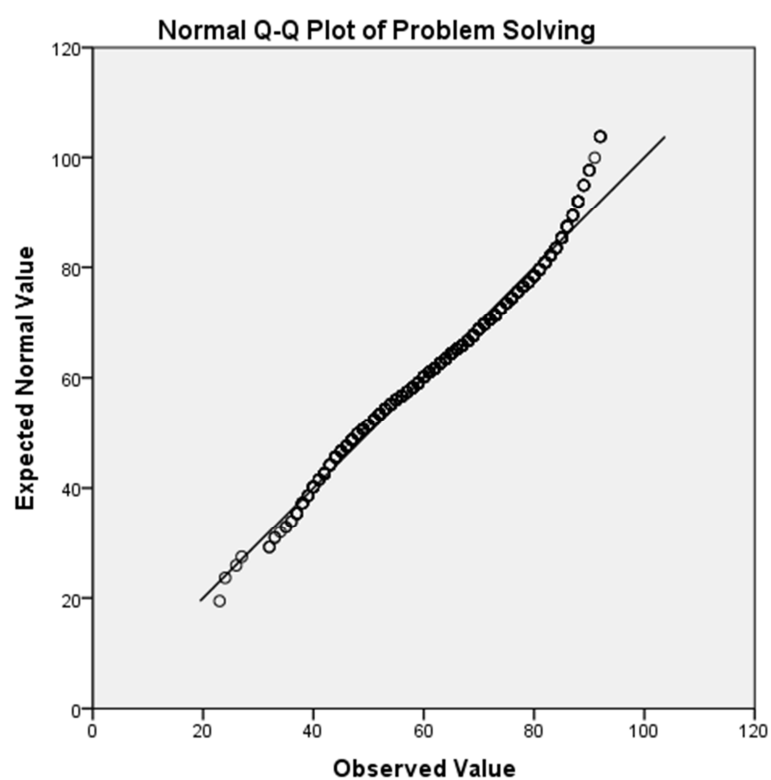
1. Bir arkadaşım mutlu olduđu zaman ben de kendimi mutlu hissedirim.
2. Yalnız kalan bir arkadaşımın neler hissettiğini anlayabilirim.
3. Bir arkadaşım haksızlığa uğradığında üzülürüm.

**APPENDIX J: SAMPLE ITEMS FROM  
THE CHILD PARENTAL ACCEPTANCE-REJECTION QUESTIONNAIRE/  
SHORT FORM (CHILD PART / SHORT FORM)**

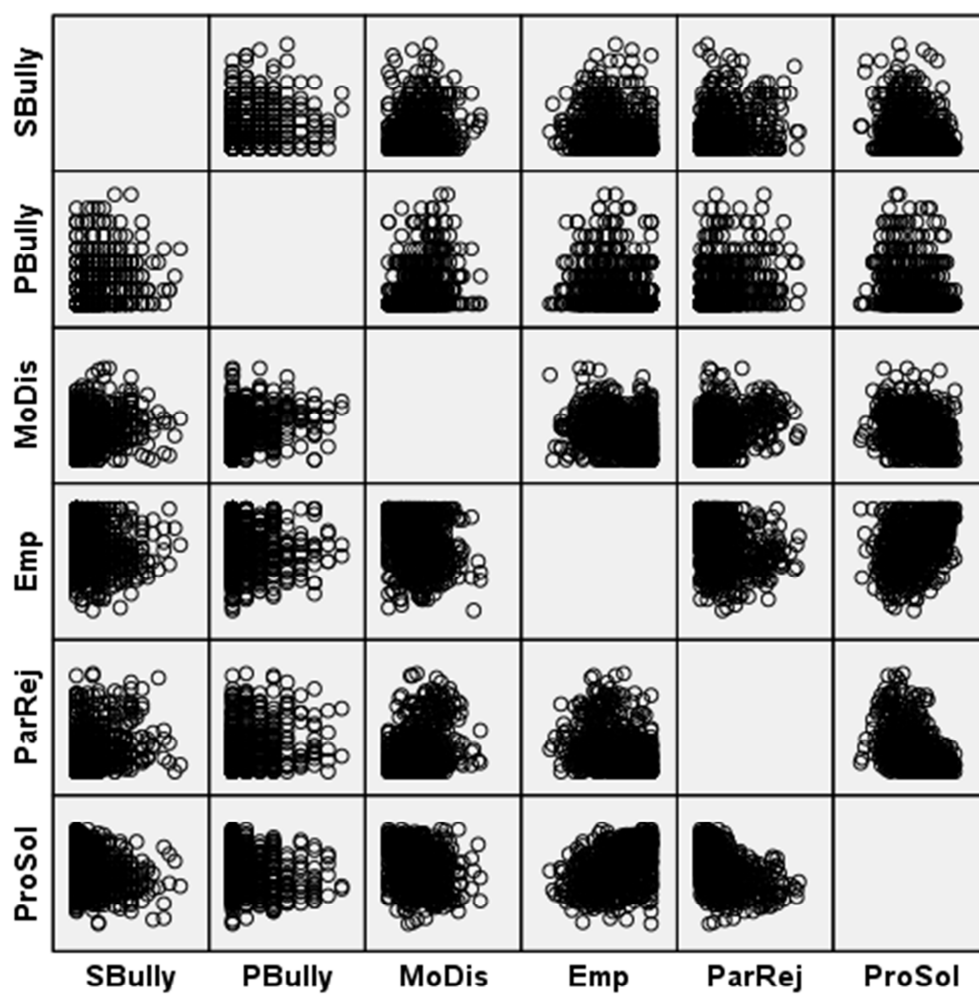
1. Benim hakkımda güzel şeyler söyler
2. Hak etmediğim zaman bile bana vurur.
3. Ne yaparsam yapayım, diğer çocukların benden daha iyi olduğunu hisseder.

## APPENDIX K: Q-Q PLOTS



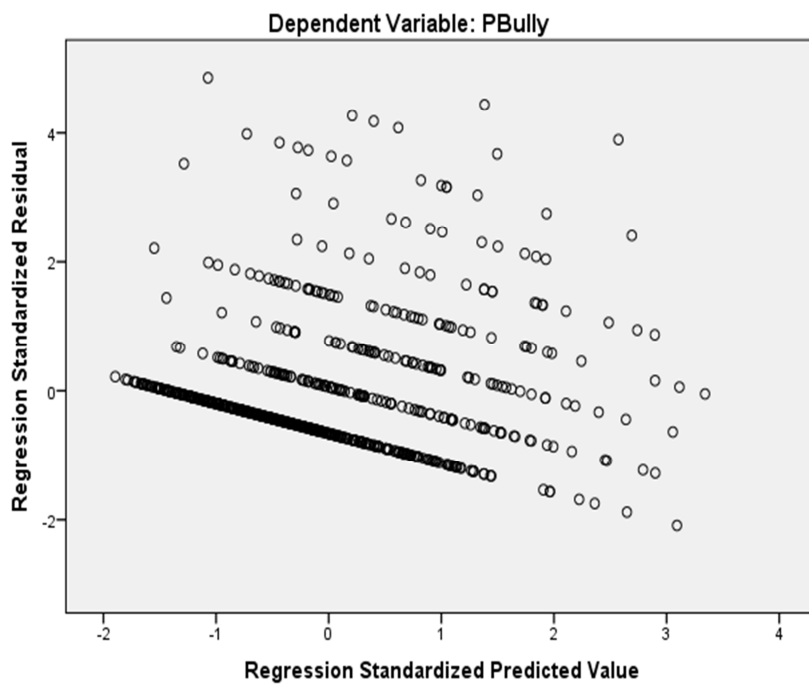
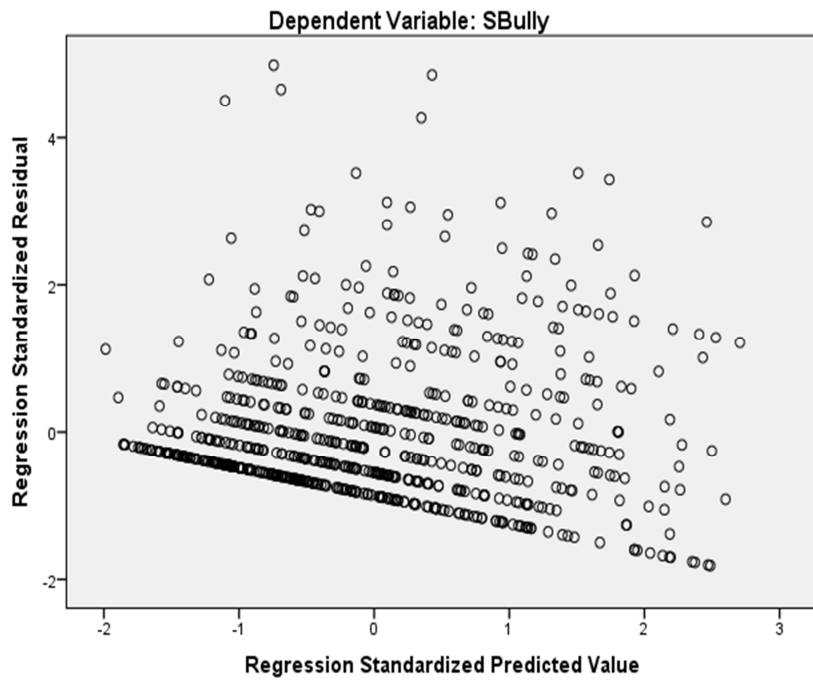


# APPENDIX L: SCATTERPLOT





## APPENDIX M: RESIDUAL PLOTS



## APPENDIX N: CURRICULUM VITAE

### Nasibe Kandemir-Özdinç

E-mail: [nkozdinc@gmail.com](mailto:nkozdinc@gmail.com)

#### Education

Degree	Institution	Year of Graduation
MS	METU Psychological Counseling and Guidance	2011
BS	METU Early Childhood Education	2007

#### Work Experience

Year	Place	Enrollment
2017- Present	Sülün Balı-Mubahat Açıkgözoğlu Primary School, Afyonkarahisar	Early Childhood Education Teacher
2016-2017	Çobanlar Atatürk Primary School, Afyonkarahisar	Early Childhood Education Teacher
2011-2016	Korkut Ata Primary School, Sincan, Ankara	Early Childhood Education Teacher
2009-2011	Nene Hatun Preschool, Yeniçağa, Bolu	Early Childhood Education Teacher
2007-2009	Special Education and Rehabilitation Centers (Private Sector)	Early Childhood Education Teacher

#### Publications

1. Aydın, G., Kandemir-Özdinç, N., & Aksu, M. (2015). The relationship between cognitive distortions and forgiveness in romantic relationships. *International Journal of Human Sciences*, 12(1), 1338-1349.
2. Kandemir-Özdinç, N. & Erdur-Baker, Ö. (2013). Children and television news. *Procedia-Social and Behavioral Sciences*, 84, 351-355.

## **Presentations at National and International Conferences**

1. Kandemir-Özdiñ, N., Erdur-Baker, Ö. (2018). Sibling bullying is bullying or rivalry?. Paper presented at International Congress on Science and Education 2018 (ICSE2018), Afyonkarahisar, Turkey, March 23-25.
2. Özdiñ, F., Akdeniz, M., Kandemir-Özdiñ, N. (2018). Design and development of color teaching smart toy for early childhood education. Paper presented at 3<sup>rd</sup> International Conference on Teaching, Education, Learning (ICTEL), Dubai, UAE, February 18-19.
3. Aydın, G., Kandemir-Özdiñ, N., & Aksu, M. (2014). The relationship between cognitive distortions and forgiveness in romantic relationships. Paper presented at The European Conference on Educational Research (ECER), Porto, Portugal, September 1-5.
4. Kandemir-Özdiñ, N. & Erdur-Baker, Ö. (2012). Children and television news. Paper presented at 3<sup>rd</sup> World Conference on Psychology, Counselling and Guidance (WCPCG), İzmir, Turkey, May 9-12.
5. Özdiñ, N. & Erdur-Baker, Ö. (2011). The 8-13 year olds' fears related with TV news. Paper presented at The European Conference on Educational Research (ECER), Berlin, Germany, September 12-16.

## **Research Projects**

8-13 Yaş Çocuklarının Televizyon Haberleriyle İlişkili Korkuları [TV news induced fears of 8-13 years old children]. Funded by BAP-07-03-2011-110, 2011.

## **Affiliations**

1. Turkish Psychological Counseling and Guidance Association.
2. Association for the Development of Early Childhood Education in Turkey.

## APPENDIX O: TURKISH SUMMARY / TRKE ZET

### KARDEŐ ZORBALIĐI VE AKRAN ZORBALIĐININ EMPATİ, AHLAKİ ZLME, PROBLEM ZME VE EBEVEYN KABUL-REDDİ İLE İLİŐKİSİ

#### 1. GİRİŐ

Bir mr boyunca en temel ve uzun sreli etkileŐimlerden birisi kardeŐ iliŐkisidir. Bu iliŐki, doĐası gereĐi, bir seim deĐil, zorunlu bir iliŐkidir (Bayram, 2014). DesteĐinin ve olumlu katkısının yanı sıra (Lam, Solmeyer & McHale, 2012) ocukların geliŐimi zerinde potansiyel olarak olumsuz bir etkisi de olabilir (Gamble, Yu & Kuehn, 2011). KardeŐ zorbalıĐı kardeŐlerin oĐunlukla ocukların sosyal-duygusal geliŐimlerini olumsuz ynde etkileyen olumsuz davranıŐlarından biridir.

Zorbalık, ocuklar ve ergenlerin okul baĐlamında (Salmivalli, Peets & Hodges, 2011; Smith, Morita, Junger-Tas, Olweus, Catalano & Slee, 2000) ve ev gibi diĐer ortamlarda (Menesini, Camodeca & Nocentini, 2010) dzenli olarak karŐılaŐtıkları saldırgan davranıŐın bir tr olarak tanımlanmaktadır. Zorbalık, daha gl bir birey tarafından daha az gl birereye, zarar vermeyi amalayan ya da nemli bir sıkıntıya neden olacak őekilde gerekleŐtirilen, tekrarlı olumsuz eylemler (fiziksel, szel, iliŐkisel) olarak tanımlanmaktadır. Bu  zellik - tekrarlama, niyet ve g dengesizliĐi - aynı zamanda zorbalıĐın atıŐmadan ayrılmasını da saĐlamaktadır (Jolliffe & Farrigton, 2006). Zorbalık bir tr saldırganlıktır (Salmivalli vd., 2011) ve hem evde hem de okulda ok yaygındır. Evde zorbalık yapmak, okulda zorbalık iin nemli bir belirti olmasına raĐmen (Johnson vd., 2015), araŐtırmacılar tarafından nemli bir őekilde gz nne alınmamıŐtır.

Zorbalık sosyal bir sorundur ve birey ile onun sosyal evresinde meydana gelir (Swearer, Wang, Berry & Mayers, 2014). Bylece, zorbalık, bireyin sosyal evresini gz nnde bulunduran birka kuramsal bakıŐ aısı ile aıklanmıŐtır. rneĐin, Sosyal BiliŐsel Teori'nin (SBT) zorbalık davranıŐlarını aıklamada yararlı olduĐu

düşünülmektedir. Bu teori, kardeşlerin yanı sıra (Bandura, 1973; Brody, 2004; Ostrov, Crick, Stauffacher, 2006; Slomkowski, Rende, Conger, Simons & Conger, 2001), ebeveynlik davranışlarının kardeş ilişkileri üzerinde çok önemli bir rol oynadığını açıklar. Ayrıca ebeveyn davranışları kardeş zorbalığı ile yüksek derecede ilişkilidir (Bayram, 2014). Çünkü çocuklar saldırgan davranışları başkalarını gözlemleyerek öğrenirler (örneğin; kardeşler, ebeveynler) ve saldırgan stratejiler kullanarak istedikleri hedeflere başarıyla ulaşırlar (Salmivalli vd., 2011). Sosyal Bilişsel Teori'ye paralel olarak, ebeveyn sevgi ifadeleri ile bunların etki ve kökenlerine odaklanan Ebeveyn Kabul-Red Teorisi (EKAR) kanıta dayalı sosyalleşme ve yaşam boyu gelişim kuramıdır (Rohner, 2004). Rohner'ın EKAR Kuramı, çocukların ebeveynlerinden veya bağlandıkları rol modellerden kabul edilmeye ihtiyaç duyduğunu ve kendilerini anneleri veya babaları tarafından reddedildiğini algılayanların kabul edilenden çok daha fazla davranış sorunu gösterme eğiliminde olduklarını savunmaktadır. Ayrıca, çocukların kabul edilme ihtiyacının karşılanmadığı durumda, çocuklar psikolojik olarak iyi görünüyorsa da, zihinsel olarak sağlıklı olmakta ve depresyon gibi sorunlar ortaya çıkmaktadır (Rohner, Khaleque & Cournoyer, 2005). Bu çalışma, akran zorbalığının bir yordayıcısı olarak kardeş zorbalığını ele almaktadır. Ayrıca kardeş zorbalığını ve kardeş zorbalığı aracılığıyla gerçekleşen akran zorbalığının kaynağı olarak bazı ebeveyn ve kişisel faktörleri açıklamaktır. Bu amacı gerçekleştirmek üzere çalışma kapsamında Sosyal Bilişsel ve EKAR Kuramları bir araya getirilmiştir.

Zorbalık davranışları için risk oluşturma potansiyeline sahip kişisel faktörlerden biri empatidir (Olweus, 1993). Empati, birbirlerinin duygularını tanımlamak ve iletmek olarak tanımlanmaktadır (Cohen & Strayer, 1996). Empati, antisosyal davranışları önlemekte, bunun yanında yararlı sosyal davranışlar sağlamaktadır (Jolliffe & Farrington, 2006). Olweus (1993), zorba olan çocukların empati eksikliği yaşadıklarını belirtmiştir. Diğer bir deyişle, empati düzeyi yüksek olanların zorbalık davranışı göstermemeleri muhtemeldir (Menesini vd., 2010) ve düşük empati düzeyi zorbalık davranışlarını anlamlı bir şekilde yordamaktadır (Jolliffe & Farrington, 2006).

Ahlaki çözülme, bireyin olumsuz ya da ahlaki olmayan davranışları için eylemleri haklı göstermesine yardımcı olan zorbalıkla ilgili bir başka kişisel faktördür

(Bandura, 2002). Bu gerekçe şu mekanizmaların yardımı ile yapılır: bilişsel yeniden yapılandırma, birinin zarar vermedeki etken rolünü gizleme veya en aza indirme, olumsuz eylemin sonuçlarını göz ardı etme veya çarpıtma ve mağduru insanlıktan çıkarma /suçlama. Ahlaki çözülme ve zorbalık arasındaki pozitif ilişki (Gini, Pozzoli & Bussey, 2014; Pozzoli, Gini & Vieno, 2012), zorba çocuklarının mağdur veya diğer çocuklardan daha yüksek ahlaki çözülme seviyelerine sahip oldukları bulunmuştur (Menesini, Sanchez, Fonzi, Ortega, Costabile & Feudo, 2003). Sonuç olarak, zorba çocuklar şiddete karşı olumlu bir tutuma sahiptir (Olweus, 1993).

Empatinin yanında, sosyal problem çözme becerilerinin eksiklikleri de zorbalığa ilişkin kişisel faktörlerden biridir (Pelligrini, 2002). Sosyal problem çözme, günlük problemlere etkili ve kullanılabilir çözümler bulmayı kapsayan bilişsel ve davranışsal bir süreçtir (D’Zurilla, Nezu & Maydeu-Olivares, 2004). Problem çözme becerisinin eksikliği çocukların psikolojik olarak stresli ve uyumsuz olmalarına neden olmaktadır (Heppner & Baker, 1997; Nezu & Ronan, 1985). Alnyazındaki bazı çalışma sonuçları, problem çözme becerilerinin anlamlı ve olumsuz yönde saldırgan davranışlarla ilişkili olduğunu göstermektedir (McMurrin, Blair & Egan 2002). Zorba çocukların sosyal ve problem çözme becerileri zayıftır; aynı zamanda bu çocuklar yıkıcı ve dürtüseldirler. Sosyal ve problem çözme becerilerindeki bu yetersizlikler diğer bağlamlara genellenmekte ve çocukların ebeveynleri tarafından cezalandırılmasına, öğretmenleri tarafından beğenilmemesine ve akranları tarafından grup dışlanmasına maruz kalmalarına neden olmaktadır (Berger, 2007). Bu nedenle, bu çalışmada problem çözme ile kardeş ve akran zorbalık arasındaki ilişki ele alınmıştır.

Yukarıda da değinildiği gibi çocukların sosyal-duygusal gelişimlerini ve zorbalık davranışının doğasını belirleyen önemli faktörlerden biri; ebeveynleri tarafından kabul görmesi ve reddedilmesidir. Çocuklarını kabul eden ebeveynler, onları sever, ilgi gösterir, destekler, rahat ettirmeye çalışır iken; reddeden ebeveynler, çocuklarına karşı sözlü olarak agresif (örneğin; alay etme, küfür etme, bağırma, düşüncesizce söylenme) veya fiziksel olarak agresif (örneğin; vurma, itme, fırlatma ve çimdikleme) davranışlar gösterebilirler (Stavrinides, Tantaros, Georgiou, & Tricha, 2018). Bu nedenle, reddedilen çocuklar bazı davranış problemleri, özellikle de kardeş ve akran zorbalığı davranışlarını sergileme eğilimindedir. Ayrıca ebeveyn reddi;

empati, problem çözme becerileri ile ahlaki çözölme gibi çocukların kişisel özelliklerinin gelişimi üzerinde de etkili bulunmuştur (Ergün, 2015; Kim & Kim, 2016; Mitsopoulou & Giovazolias, 2015; Pelligrini, 2002; Smith, 2016). Bu sebeplerle bu çalışmada, EKAR Kuramı'nı temel alan ebeveyn kabul-reddi; hem kişisel özelliklerle hem de zorbalık davranışlarıyla ilişkisi bağlamında incelenmiştir.

### **1.1. Çalışmanın Amacı**

Bu çalışmanın amacı, ebeveynle ilgili (ebeveyn kabul-reddi) ve kişisel (empati, problem çözme, ahlaki çözölme) özellikler ile kardeş zorbalığı; ayrıca kardeş zorbalığı yoluyla akran zorbalığı arasındaki ilişkileri incelemektir. Bu sebeple; bu çalışmanın amacı temelde: 1) kardeş zorbalığı aracılığıyla; ebeveyn reddi, empati, problem çözme, ahlaki çözölme ve akran zorbalığı arasındaki dolaylı ilişkileri, 2) kardeş zorbalığı ve akran zorbalığı arasındaki doğrudan ilişkiyi incelemek; ayrıca, 3) ebeveyn reddi, empati, problem çözme, ahlaki çözölme ile kardeş zorbalığı arasındaki doğrudan ilişkileri ve 4) empati, problem çözme ve ahlaki çözölme aracılığıyla ebeveyn reddi ve kardeş zorbalığı arasındaki dolaylı ilişkileri incelemektir.

### **1.2. Çalışmanın Önemi**

Bu çalışmada, ilk defa kardeş ve akran zorbalığının ebeveyn ve kişisel özelliklerle ilişkisi, Sosyal Bilişsel Kuram ve Ebeveyn Kabul-Red Teorisi bütünleştirilerek açıklanmaya çalışılmıştır. Ayrıca, bu kişisel özelliklerin ebeveynle ilgili faktörler ve zorbalık (kardeş, akran) davranışları arasındaki aracı rolünün yanında, kardeş ve akran zorbalığı arasındaki ilişkiler de açıklanmıştır.

Daha önceki çalışmalarda akran ve kardeş zorbalığı, Sosyal Bilişsel Kuram' ın da içinde yer aldığı farklı yaklaşımlar temel alınarak açıklanmaya çalışılmıştır (Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004; Swearer vd., 2014). Ancak, ebeveyn kabul-reddinin kişisel özellikler aracılığıyla kardeş zorbalığı ile; ve bu değişkenlerin kardeş zorbalığı üzerinden de akran zorbalığı ile dolaylı ilişkilerini inceleyen bir çalışma alanyazında henüz yer almamıştır. Ebeveyn kabul-reddinin; saldırganlık (Aytekin, 2015), kardeş ilişkileri (Kanyas, 2008), akran zorbalığı (Ergün, 2015) ve davranış problemleri (Yakmaz-Basılğan, 2012) ile ilişkileri de

önceki çalışmalarda incelenmiş olmasına rağmen kardeş zorbalığıyla ilişkisi hakkında bilinenler sınırlıdır. Bu sebeple, Ebeveyn Kabul-Red Teorisi temelinde, ebeveyn kabul-reddi ve akran zorbalığı alanyazınının bir araya getirilmesi önemlidir. Dolayısıyla bu çalışma, hem kardeş hem de akran zorbalık davranışlarının birbiriyle olan ilişkisinin yanında, kişisel ve ebeveyn özellikleriyle ilgili değişkenlerle olan ilişkilerini, Sosyal Bilişsel Kuram ve Ebeveyn Kabul-Red Teorisi çerçevesinde ele alan bir araştırma olarak alanyazındaki yerini almıştır. Sonuç olarak bu çalışma akran ve kardeş zorbalık davranışlarını kuramsal bir altyapıya dayandırarak açıklamaya çalışarak alanyazına katkı sağlamayı hedeflemiştir. Ayrıca bu araştırma sürecinde Türkçe' ye uyarlanan *Kardeş Zorbalığı Ölçeği*, *Akran İlişkileri Ölçeği* ve *Ahlaki Çözülme Ölçeği*' nin uluslararası ve ulusal alanyazına katkı sağlamak isteyen araştırmacılara fayda sağlaması amaçlanmıştır.

Uygulamaya yönelik olarak önemi göz önünde bulundurulduğunda bu araştırma; ebeveyn kabul-reddi ile kişisel özellikler ve zorbalık (akran ve kardeş) davranışları arasındaki ilişkileri inceleyerek, zorbalık davranışlarının doğası hususunda uygulayıcılara üzerinde durulması gereken bilgiler kazandırmayı amaçlamaktadır. Bu bilgiler doğrultusunda (okul) psikolojik danışmanlar(ı) özellikle geç çocukluk ve erken ergenlik döneminde, akranlarına zorbalık yapan öğrencilere nasıl daha iyi bir psikolojik yardım hizmeti verebilecekleri ve bu süreçte ebeveynler ile kardeşleri ne şekilde dahil edecekleri konusunda öngörü sahibi olabileceklerdir. Ayrıca bu bilgilerin, zorbalık davranışını önleme programlarını geliştirme aşamasında da yol gösterici olması amaçlanmaktadır. Diğer yandan bu çalışmanın, ebeveynlere, ev ortamında kardeş zorbalığının ne olduğuyla ilgili farkındalıklarının artarak çocukları arasındaki zorbalık problemlerini teşhis etme ve akran zorbalığına karışma ihtimallerini önleme sürecine dahil olmaları hususunda rehberlik etmesi hedeflenmektedir.

## 2. YÖNTEM

### 2.1. Örneklem ve Veri Toplama İşlemi

Araştırmacı, Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Kurulu ve Afyonkarahisar İl Milli Eğitim Müdürlüğü'nden alınan izinler sonrasında, 2017-2018 eğitim öğretim yılı bahar döneminde, elverişli örneklem yöntemiyle verileri elde



etmiştir. Veriler araştırmacı tarafından tek tek okullar ziyaret edilerek toplanmış ve veri toplama süreci boyunca sınıflarda öğrencilere bizzat rehberlik edilmiştir. Öğrencilerin veri toplama araçlarını doldurması yaklaşık 40 dakika sürmüştür. Araştırmanın örneklemini Afyonkarahisar’da bulunan ilk ve ortaöğretim düzeyindeki on okuldan 716 dördüncü ve beşinci sınıf öğrencisi oluşturmaktadır.

Katılımcıların 347’si (% 48.5) kız, 369’u (% 51.5) erkek öğrencilerden oluşmaktadır. Yaşlarına bakıldığında, 20’sinin (% 2.8) 9 yaşında, 338’inin (% 47.2) 10 yaşında, 340’ının (% 47.5) 11 yaşında, 18’inin (% 2.5) ise 12 yaşında olduğu belirlenmiştir. Katılımcıların 319’u (% 44.6) 4. sınıf öğrencisi iken 397’si (% 55.4) 5. sınıf öğrencisidir. Kardeş sayıları sorulduğunda 391’i (% 54.6) 1 kardeşi, 248’i (% 34.6) 2 kardeşi, 51’i (% 7.1) 3 kardeşi, 21’i (% 2.9) 4 kardeşi, 3’ü (% 0.4) 5 kardeşi ve 2’si de (% 0.3) 6 kardeşi olduğunu söylemiştir.

Katılımcıların annelerinin yaşları 25 ila 61 arasında değişmekte olup, yaş ortalaması 36.60’tır (SS = 4.97). Ancak, katılımcıların 36’sı annelerinin yaşlarını bilmediğini bildirmiştir. Katılımcıların annelerinin 6’sı (% 0.8) okuma yazma bilmemekte, 138’i (% 19.3) ilkokul mezunu, 152’si (% 21.2) ortaokul mezunu, 180’i (% 25.1) lise mezunu, 178’i (% 24.9) üniversite mezunu, 44’ü (% 6.1) yüksek lisans veya doktora mezunudur. Katılımcıların 18’i annelerinin eğitim seviyesini bilmediklerini belirtmişlerdir. Katılımcıların annelerinin işleri sorulduğunda, 474’ü (% 66.2) ev hanımı, 145’i (% 20.3) memur, 59’u (% 8.2) işçi olduğunu, 35’i (% 4.9) ise diğer işlerde çalıştığını belirtmiştir ve katılımcıların 3’ü ise annenin işini bilmediğini ifade etmiştir.

## 2.2. Veri Toplama Araçları

Bu çalışmada kullanılan veri toplama araçları; *Kardeş Zorbalığı Ölçeği*, *Akran İlişkileri Ölçeği* ve *Ahlaki Çözülme Ölçeği* araştırmacı tarafından Türkçe’ye uyarlanmış ve pilot çalışma 289 katılımcıyla gerçekleştirilmiştir. Kardeşi olmayan 20 katılımcı, *Kardeş Zorbalığı Ölçeği*’nin uyarlama çalışmasına dahil edilmemiştir. Ayrıca *KASİ Empatik Eğilim Ölçeği*, *Çocuklar İçin Problem Çözme Envanteri* ile Yılmaz ve Erkman (2008) tarafından Türkçe’ye kazandırılan *Ebeveyn Kabul-Red Ölçeği* de çalışmada kullanılan diğer veri toplama araçlarıdır.

**Kardeş Zorbalığı Ölçeği.** Wolke ve Samara (2004) tarafından geliştirilen ölçeğin başında zorbalık tanımı verilir. Ölçek, çocukların ne sıklıkla; (1) vurma, itip kakma; (2) kişisel eşyalara zarar verme; (3) kötü isimler takma; (4) alay etme; (5) görmezden gelme/dışlama; (6) başkaları sevmesin diye asılsız dedikodular yayma yöntemlerini kullanarak kardeşlerine zorbalık yaptıkları ya da kardeşleri tarafından zorbalığa maruz kaldıklarını ölçmektedir. Bu çalışmada sadece zorba formu kullanılmıştır. 5'li Likert tipi derecelendirmeye değerlendirilen ve 6 maddeden oluşan ölçek, tek faktörlü yapıya sahiptir. Ölçeğin zorba formu için güvenirlik katsayısı .65 olarak raporlanmıştır. Bu çalışma için yürütülen uyarlama süreci sonunda 2. maddenin faktör yükü ( $\lambda=.20$ ) ile güvenirlik kat sayısının çok düşük çıkması nedeniyle ölçeğin madde sayısının artırılmasına ve 2. maddenin çıkarılmayarak tekrarlanacak olan pilot çalışma sonucunun incelenmesine karar verilmiştir. Akran İlişkileri Ölçeği'nden 3 madde uyarlanarak Kardeş Zorbalığı Ölçeği'ne eklenmiş ve 9 soru ile ölçeğin ikinci pilot çalışması 120 öğrencinin katılımıyla gerçekleştirilmiştir. Ölçeğin orijinalinde olduğu gibi tek faktörlü yapısını doğrulamak amacıyla yapılan doğrulayıcı faktör analizi bu yapıyı doğrulamıştır ( $\chi^2 = 34.65$ ,  $df = 26$ ,  $p = .12$ ;  $\chi^2/df = 1.33$ ; GFI = .94, CFI = .98, TLI = .97, SRMR = .05, RMSEA = .05). Ayrıca ölçeğin iç tutarlılık kat sayısı .78 olarak bulunmuştur.

**Akran İlişkileri Ölçeği.** Rigby ve Slee (1993) tarafından kişilerarası ilişkilerin üç boyutunu: zorbalık, mağduriyet ve olumlu sosyal davranışlar ölçmek için geliştirilmiştir. Bu üç boyut ayrıca ölçeğin de alt boyutlarını oluşturmaktadır. Yirmi maddeden oluşan ve 4'lü Likert tipi derecelendirmeye değerlendirilen ölçeğin iç tutarlılık kat sayıları; .71 ile .86 (Rigby & Slee, 1993) arasında ve .62 ile .86 (Raskauskas, Gregory, Harvey, Rifshana, & Evans, 2010) arasında bulunmuştur. Ana çalışmada ölçeğin sadece zorbalık alt boyutu (6 madde) kullanılmıştır. Bu çalışma için yürütülen uyarlama çalışması sonucunda ise ölçeğin 10. ( $\lambda=.22$ ) ve 13. ( $\lambda=.30$ ) maddelerinin yükleri düşük bulunmuş ayrıca 13. maddenin açıklık ve anlaşılabilirliği konusunda pilot uygulama sürecinde çokça sorularla karşılaşılmıştır. “Okulda kavgalara karışım” maddesinden bazı çocuklar arkadaşlarını ayırmak için kavgalara karışmaktan mı yoksa kavgacı bir şekilde kavgalara karışmaktan mı bahsedildiği konusunun net olarak anlaşılmadığını belirtmişlerdir. Bu sebeplerle 10. ve 13. maddelerin ölçekten çıkarılmasına karar verilmiştir. Ölçeğin orijinal yapısı test

edilmiş ve 3 faktörlü yapı doğrulanmıştır ( $\chi^2 = 130.87$ ,  $df = 74$ ,  $p = .00$ ;  $\chi^2 / df = 2.35$ ; GFI = .94, CFI = .96, TLI = .96, SRMR = .12, RMSEA = .05). Ayrıca ölçeğin iç tutarlılık kat sayısı zorbalık alt boyutu için .72 tüm ölçek için ise .65 olarak bulunmuştur.

**Ahlaki Çözülme Ölçeği.** Caprara, Pastorelli ve Bandura (1995) tarafından ilköğretim çağındaki çocukların ahlaki olmayan davranışlarını savunmak için bilişsel yöntemleri kullanma eğilimlerini ölçmeye yönelik geliştirilmiştir. On dört maddeden oluşan ve 5’li Likert tipi derecelendirmeye değerlendirilen ölçeğin 4 alt boyutu vardır. Bu alt boyutlardan “bilişsel yeniden yapılandırma”nın varyansın %43’ünü, “sorumluluğu üstlenmeme”nin %56’sını, “sonuçları çarpıtma”nın %29’unu ve “insandışlaştırma”nın %44’ünü açıkladığı Pozzoli, Gini, ve Vieno (2012) tarafından raporlanmıştır. Uyarlama çalışması sonucunda ölçeğin 4 faktörlü yapısını doğrulamak amacıyla yapılan doğrulayıcı faktör analizinin bu 4 faktörlü yapıyı doğruladığı görülmüştür ( $\chi^2 = 170.32$ ,  $df = 69$ ,  $p = .00$ ;  $\chi^2 / df = 2.47$ ; GFI = .92, CFI = .95, TLI = .93, SRMR = .06, RMSEA = .07). İç tutarlılık kat sayıları bilişsel yeniden yapılandırma için .72, sorumluluğu üstlenmeme için .46, sonuçları çarpıtma için .58, insandışlaştırma için .64 ve tüm ölçek için .83 olarak bulunmuştur.

**Çocuklar İçin Problem Çözme Envanteri.** Serin, Bulut-Serin ve Saygılı (2010) tarafından ilköğretim çocuklarının kendi problem çözme becerilerine yönelik algılarını ölçmek için geliştirilmiştir. 5’li Likert tipi derecelendirmeye değerlendirilen ölçek 24 maddeden oluşmaktadır. Ölçek, “problem çözme becerisine güven”, “özdenetim” ve “kaçınma” olmak üzere 3 alt boyuttan oluşmaktadır. İç tutarlılık kat sayıları; problem çözme becerisine güven için .85, özdenetim için .78 ve kaçınma için .66 ve tüm ölçek için .80 olarak hesaplanmıştır. Bu çalışmada, ölçeğin 3 faktörlü yapısı test edilmiş ve doğrulayıcı faktör analiz sonuçları 3 faktörlü yapıyı doğrulamıştır ( $\chi^2 = 454.43$ ,  $df = 220$ ,  $p = .00$ ;  $\chi^2 / df = 2.11$ ; GFI = .95, CFI = .98, TLI = .98, SRMR = .06, RMSEA = .04). Bu çalışmada iç tutarlılık kat sayıları ise problem çözme becerisine güven için .88, özdenetim için .73 ve kaçınma için .64 ve tüm ölçek için .84 olarak bulunmuştur.

**KASİ Empatik Eğilim Ölçeği.** Kaya ve Siyez (2010) tarafından çocuk ve ergenlerin empatik eğilim düzeylerini ölçmek için geliştirilmiştir. Çocuk ve ergen

olmak üzere iki formu vardır. Bu çalışma için çocuk formu kullanılmıştır. 4'lü Likert tipi derecelendirmeye değerlendirilen ölçek 13 maddeden oluşmaktadır. Ölçeğin, “duygusal empati” ve “bilişsel empati” olmak üzere 2 alt boyutu vardır. İç tutarlılık kat sayıları; duygusal empati için .79, bilişsel empati için .72 ve tüm ölçek için .84 olarak hesaplanmıştır. Bu çalışmada, ölçeğin 2 faktörlü yapısı test edilmiş ve doğrulayıcı faktör analiz sonuçları 2 faktörlü yapıyı doğrulamıştır ( $\chi^2 = 102.82$ ,  $df = 64$ ,  $p = .00$ ;  $\chi^2/df = 1.61$ ; GFI = .98, CFI = .99, TLI = .99, SRMR = .03, RMSEA = .03). Bu çalışmada iç tutarlılık kat sayıları duygusal empati için .83, bilişsel empati için .79 ve tüm ölçek için .89 olarak bulunmuştur.

**Ebeveyn Kabul-Red Ölçeği (EKRÖ).** Rohner, Saavedra ve Granum (1978) tarafından çocuk ya da yetişkinlerin anne/baba kabul-red deneyimlerine dair algılarını ölçmek için geliştirilmiştir. 60 maddeden oluşan ve 4'lü Likert tipi derecelendirmeye değerlendirilen ölçeğin; yetişkin, çocuk ve ebeveyn olmak üzere 3 versiyonu ve her versiyonun da 24 maddeden oluşan kısa formları bulunmaktadır. Her versiyondaki sorular aynı olup sadece zaman ve öznel versiyona göre çeşitlilik göstermektedir (çocuk versiyonunda şimdiki zaman, yetişkin versiyonunda geçmiş zaman gibi). Bu çalışma için Çocuk EKRÖ/kısa formu kullanılmıştır. Ölçeğin, “sıcaklık/şefkat”, “düşmanlık/saldırganlık”, “kayıtsızlık/ihmal” ve “ayrışmamış red” olmak üzere 4 alt boyutu bulunmaktadır. İç tutarlılık kat sayıları bu alt boyutlar için sırasıyla; .90, .87, .77 ve .72 olarak hesaplanmıştır. Çocuk EKRÖ/kısa formun Türkçe uyarlama çalışması Yılmaz ve Erkman (2008) tarafından yapılmış olup iç tutarlılık kat sayıları; sıcaklık/şefkat için .88, düşmanlık/saldırganlık için .69, kayıtsızlık/ihmal için .66, ayrışmamış red için .55 ve tüm ölçek için .89 olarak hesaplanmıştır. Bu çalışmada, ölçeğin 4 faktörlü yapısı test edilmiş ve doğrulayıcı faktör analiz sonuçları 4 faktörlü yapıyı doğrulamıştır ( $\chi^2 = 668.54$ ,  $df = 242$ ,  $p = .00$ ;  $\chi^2/df = 2.76$ ; GFI = .93, CFI = .96, TLI = .95, SRMR = .05, RMSEA = .05). İç tutarlılık kat sayıları; sıcaklık/şefkat için .73, düşmanlık/saldırganlık için .62, kayıtsızlık/ihmal için .63, ayrışmamış red için .54 ve tüm ölçek için .85 olarak bulunmuştur.

**Demografik Bilgi Formu.** Katılımcıların cinsiyetleri, yaşları, sınıfları, kardeş sayıları, annelerinin yaşı, eğitim seviyeleri ve meslekleri sorulmuştur.

### 2.3. Verilerin Analizi

Toplanan verilerin analizi iki aşamada gerçekleştirilmiştir. İlk aşamada, betimsel analizler aracılığı ile akran ve kardeş zorbalığı yapmada cinsiyet ve sınıf farkı incelenmiştir. İkinci aşamada ise; bu araştırma için oluşturulan model, Yapısal Eşitlik Modellemesi (YEM) kullanılarak test edilmiştir.

## 3. BULGULAR

### 3.1. Betimsel Analiz Bulguları

Alanyazın çerçevesinde önemli olabileceği düşünülen cinsiyet ve sınıf demografik değişkenleri ile bağımlı değişkenler -kardeş ve akran zorbalık davranışları- arasındaki ilişkiler çalışmanın asıl analizlerine geçmeden önce incelenmiştir. MANOVA sonuçları katılımcı öğrencilerin yalnızca cinsiyeti ile zorbalık davranışları arasındaki ilişkinin anlamlı olduğunu göstermiştir ( $F(2, 711) = 18.28, p < .05$ , Pillai's Trace = .05, partial eta squared = .05). Aynı ayrı incelendiğinde; hem kardeş  $F(1, 712) = 4.66, p < .05$ , partial eta squared = .01 hem de akran zorbalık davranışında bulunma  $F(1, 712) = 36.36, p < .05$ , partial eta squared = .05 puanlarında cinsiyet farkı ortaya konulmuştur. Sonuçlar, erkeklerin hem kardeş zorbalığı yapma ( $M = 3.14, SS = 3.19 \cdot 4^{\text{sınıflar}}$ ;  $M = 3.00, SS = 3.62 \cdot 5^{\text{sınıflar}}$ ) hem de akran zorbalığı yapma ( $M = 1.21, SS = 1.66 \cdot 4^{\text{sınıflar}}$ ;  $M = 1.28, SS = 1.80 \cdot 5^{\text{sınıflar}}$ ) açısından kızlara göre (sırasıyla;  $M = 2.58, SS = 3.78 \cdot 4^{\text{sınıflar}}$ ;  $M = 2.45, SS = 3.11 \cdot 5^{\text{sınıflar}}$  ve  $M = .58, SS = 1.17 \cdot 4^{\text{sınıflar}}$ ;  $M = .55, SS = 1.20 \cdot 5^{\text{sınıflar}}$ ) anlamlı olarak daha yüksek puanlar aldığını göstermiştir. Yani erkekler, kızlara kıyasla daha çok kardeş ve akran zorbalığı yapmaktadırlar.

### 3.2. Model Testi Bulguları

Bu çalışma için önerilen yapısal model test edilmeden önce, kullanılan ölçeklerin modelin içinde birlikte çalıştıklarını doğrulamak amacıyla 6 faktörlü bir yapı doğrulayıcı faktör analizi ile test edilmiştir. Sonuçlar iyi uyum değerleri göstermiştir ( $\chi^2=448.15, df=152, p=.00; \chi^2/df=2.95; GFI=.94, CFI=.96, TLI=.95, SRMR=.06, RMSEA=.05$ ).

Bir sonraki adımda; ebeveyn reddi, empati, problem çözme, ahlaki çözülme ile kardeş zorbalığı; ve kardeş zorbalığı yoluyla akran zorbalığıyla da arasındaki

ilişkileri inceleyen model test edilmiştir. Yapısal eşitlik modellemesi sonuçlarına göre test edilen model kabul edilebilir uyum göstermiştir ( $\chi^2=448.15$ ,  $df=152$ ,  $p=.00$ ;  $\chi^2/df=2.95$ ; GFI = .94, CFI = .96, TLI = .95, SRMR = .06, RMSEA = .05).

Bu modeldeki anlamlı *doğrudan* ilişkiler göz önünde bulundurulduğunda ebeveyn reddi; ahlaki çözülme ile ( $\gamma = .46$ ,  $p < .01$ ) pozitif yönde, empati ( $\gamma = -.33$ ,  $p < .01$ ) ve problem çözme ile ( $\gamma = -.61$ ,  $p < .01$ ) negatif yönde ilişkili bulunmuştur. Ayrıca ebeveyn reddi ( $\gamma = .20$ ,  $p < .05$ ) ve ahlaki çözülme ( $\gamma = .24$ ,  $p < .01$ ) kardeş zorbalığı ile pozitif yönde ilişkili bulunurken, problem çözme ( $\gamma = -.31$ ,  $p < .01$ ) ve empati ( $\gamma = -.11$ ,  $p < .05$ ) kardeş zorbalığı ile negatif yönde ilişkili bulunmuştur. Kardeş zorbalığının da ( $\gamma = .80$ ,  $p < .01$ ) akran zorbalığı ile pozitif yönde ilişkili olduğu bulunmuştur.

Diğer yandan bu modeldeki anlamlı *dolaylı* ilişkiler göz önünde bulundurulduğunda kardeş zorbalığı varyansının %30'u ebeveyn reddi, empati, problem çözme ve ahlaki çözülme değişkenleri tarafından açıklanmıştır. Akran zorbalığı varyansının ise %19'u kardeş zorbalığı aracılığı ile ebeveyn reddi, empati, problem çözme ve ahlaki çözülme değişkenleri tarafından açıklanmıştır. Ayrıca empati değişkeninin %11'i, problem çözme değişkeninin %37'si ve ahlaki çözülme değişkeninin %21'i de ebeveyn reddi tarafından açıklanmıştır.

Özetle; önerilen modeldeki ilişkiler, çalışma sonuçlarıyla desteklenmiş ve anlamlı bulunmuştur. Sonuçlara göre;

1. Ebeveyn reddi; bütün kişisel değişkenler (empati, problem çözme ve ahlaki çözülme) için anlamlı bir yordayıcıdır. Yani ebeveyn reddi empati ve problem çözme değişkenleri ile negatif yönde anlamlı ilişkili iken ahlaki çözülme ile pozitif yönde anlamlı ilişkilidir. Diğer bir deyişle, ebeveynleri tarafından reddedilen çocukların empati ve problem çözme becerileri düşük seviyede iken ahlaki çözülme seviyeleri yüksek bulunmuştur.
2. Ebeveyn reddi, empati, problem çözme ve ahlaki çözülme; kardeş zorbalığının anlamlı olarak yordayıcılarıdır. Diğer bir deyişle, empati düzeyi ve problem çözme becerisi düşük olan ancak ahlaki çözülme ve ebeveyn reddine dair algı

düzeyi yüksek olan çocukların daha yüksek düzeyde kardeş zorbalığını davranışında bulunduklarını belirttikleri görülmüştür.

3. Kardeş zorbalığının akran zorbalığı üzerinde doğrudan, anlamlı bir etkisinin olduğu bulunmuştur. Yüksek düzeyde kardeş zorbalık davranışı raporlayan çocukların yüksek seviyede akran zorbalık davranışında bulunduklarını belirttikleri görülmüştür.
4. Empati, problem çözme ve ahlaki çözülme değişkenlerinin ebeveyn reddi ile kardeş zorbalığı arasında anlamlı aracı rolü oynadığı tespit edilmiştir.
5. Ebeveyn reddi, empati, problem çözme ve ahlaki çözülme değişkenlerinin kardeş zorbalığı üzerindeki doğrudan etkilerinin yanısıra bu değişkenler, kardeş zorbalığı aracılığıyla akran zorbalığıyla da anlamlı olarak ilişkili bulunmuştur.

Son olarak, araştırmanın temel değişkenlerinden biri olmamasına rağmen betimsel analizler sonucunda cinsiyetin, hem akran hem de kardeşe zorbalık yapma puanları üzerinde önemli bir etkisi olduğu bulunmuştur. Ancak, kızlar ve erkeklerden alınan yanıtlar bir arada tutularak bu çalışmada oluşturulan model test edilmiştir. Bu sebeple, modelin kızlar ve erkekler için değişmezliğini sınamak için yapısal model değişmezliği testi kullanılmıştır. Sonuçlara göre, test edilen modelin kabul edilebilir uyum iyiliği indeksleri gösterdiği belirlenmiştir ( $\chi^2 = 767.95$   $df = 346$ ,  $p = .00$ ;  $\chi^2/df = 2.22$ ; GFI = .90, CFI = .94, SRMR = .08, RMSEA = .05). Bu nedenle, bu çalışmanın yapısal modelinin kızlar ve erkekler için eşit ve geçerli olduğu ortaya konulmuştur.

#### 4. TARTIŞMA

Temel amaçlarından biri olmasa da bu çalışma, MANOVA sonuçlarına göre erkeklerin kızlara oranla daha fazla kardeş ve akran zorbalığı davranışında bulunduklarını ortaya koymuştur. Bu bulgular, zorba çocukların daha çok erkek olduklarını açığa çıkaran diğer çalışmaları (Mouttapa, Valente, Gallaher, Rohrbach & Unger, 2004; Pepler, Jiang, Craig, & Connolly, 2008; Rodkin & Berger, 2008; Veenstra, Lindenberg, Zijlstra, De Winter, Verhulst, & Ormel 2007) desteklerken; kızların daha kurban olduklarını (Craig et al., 2009) ya da erkeklerin daha çok kurban olduklarını (Bilgiç, 2007) ya da kızlar ve erkekler arasında fark olmadığını bulan (Andreou, 2000; Çetinkaya, Nur, Ayvaz, Özdemir, & Kavakçı, 2009) çalışmalarla

ters düşmektedir. Diğer yandan, ölçüm değişmezliği analizi sonrasında bu çalışmada test edilen yapısal modelin kız ve erkeklere göre farklılık göstermediği; her iki cinsiyet için de eşit olduğu ve iyi uyum gösterdiği bulunmuştur. Bu sonuç doğrultusunda; zorbalık ve cinsiyet arasındaki ilişkideki farklılığın bazı kişisel ve ailesel faktörlerin devreye girmesiyle ortadan kalkmış olabileceği yorumu yapılabilir.

Bu araştırmanın temel amacı; zorbalığa yönelik oluşturulan kişisel ve ailesel faktörleri içeren karmaşık bir modeli test etmek olduğundan, bu bölüme Hipotez 6 ile başlanmış ve basamak basamak diğer hipotezlerle tartışmalara devam edilmiştir. Sonuç olarak, bu çalışmada test edilen yapısal eşitlik modeline yönelik hipotezler göz önünde bulundurulduğunda, elde edilen sonuçlar aşağıdaki gibidir:

*Hipotez 6:* Bu hipotez, ebeveyn reddinin kardeş zorbalık yoluyla akran zorbalığına etkisine empati, ahlaki çözülme ve problem çözme faktörlerinin aracılık edeceğini varsaymaktadır. Bulgulara göre, ebeveyn reddi, dört olası yolu izleyerek akran zorbalığı ile anlamlı ve pozitif olarak ilişkili bulunmuştur; (a) empati ve kardeş zorbalığı yoluyla, (b) ahlaki çözülme ve kardeş zorbalığı yoluyla, (c) problem çözme ve kardeş zorbalığı yoluyla ve son olarak (d) sadece kardeş zorbalığı yoluyla.

Ebeveyn reddini daha fazla algılayan çocuklar, aynı zamanda ahlaki olarak çözülme yaşamakta ve kardeş zorbalık davranışlarını daha fazla göstermektedir; bu da akran zorbalığı davranışlarını arttırmaktadır. Bunun yanında, ebeveyn reddetme algısı daha yüksek seviyede olan çocukların, daha düşük seviyelerde problem çözme becerileri ve empatik eğilim gösterdikleri, hem kardeş hem de akran zorbalığı davranışlarında daha yüksek seviyelerde oldukları belirlenmiştir. Görüldüğü üzere, beklenen tüm sonuçlar bu çalışma ile teyit edilmiş ve yukarıdaki Hipotezler 1,2,3,4 ve 5'te açıklandığı gibi değişkenler arasında doğrudan ve dolaylı ilişkilerin yanı sıra önemli dolaylı ilişkiler ve aracılık etkileri de bulunmaktadır.

Önceki araştırmalar ve bu çalışma değişkenleri arasındaki önerilen ilişkiler ışığında, bazı spekülasyonlar yapılabilir. Çocukların kişisel özelliklerinin kökeni ebeveynleri ile olan ilişkileridir. Ayrıca, ebeveyn-çocuk ilişkileri çocukların davranışlarını sağlıklı veya problemli bir şekilde şekillendirir. Bu nedenle, ebeveynlik sıcak ve özen dolu olmadığında ve ihtiyaçlar karşılanmadığında ve çocuklar güvensiz olduklarında, çocukların sosyal becerileri ve kişilik (örneğin, empati ve problem



çözme) gelişimi desteklenemez ve ahlaki değerlerde bazı çözümler üretebilir. Olumsuz ebeveynliğin yanı sıra bu istenmeyen özellikler, çocukların problemli davranışlarına (örneğin, zorbalık) yol açar. Ayrıca, bir çocuğun problemli davranışlar göstermesi veya bir bağlam içinde (evde) ilişki problemleri olması durumunda çocuk, muhtemelen bu deneyimleri aktarır ve diğer bağlamlarda (okulda) benzer tepkiler ve davranışlar gösterir.

Hipotezler 1.1., 1.2. ve 1.3.: Bu hipotezler, ebeveyn reddinin (a) empati, (b) ahlaki çözümler ve (c) problem çözme ile ilişkili olduğunu varsaymıştır. Hipotezlerin tümü bu araştırmanın bulguları ile doğrulanmıştır. Diğer bir deyişle, çocuklar anneleri tarafından reddedildiklerini yüksek düzeyde raporladıkça, ahlaki çözümler seviyelerini de yüksek, empatik eğilim ve problem çözme beceri seviyelerini de daha düşük raporlamışlardır. Goleman (1995), çocuklukta duygusal ihmali deneyimlemenin empati becerilerini azalttığını iddia etmiştir. Bu ifadeye ve bu araştırmanın bulgularına paralel olarak, önceki bazı araştırma bulguları ebeveyn reddi ile empati ve çocukların problem çözme becerileri arasındaki anlamlı negatif ilişkiyi desteklemektedir. Örneğin, Kim ve Rohner (2003), ebeveyn kabul reddi ve duygusal empatinin ilişki içinde olduğu sonucuna varmıştır. Yani, çocukluklarında ebeveynleri tarafından reddedilen gençler, çocuklukta ebeveyn kabulünü algılayan gençlerden daha az duygusal olarak empatik olma eğilimindedir. Ayrıca, Padilla-Walker ve Christensen (2010), Sayın (2010) ve Köseoğlu (2013) gibi diğer araştırmacılar da pozitif annelik deneyimleyen, ebeveynlerinin kabulünü, dikkatlerinin üzerinde olduğunu hisseden çocuk ve ergenlerin daha yüksek empati düzeyine sahip olduğunu bildirmiştir. Ebeveynlerin çocuklarıyla ilişkilerinde etkileşim biçimleri, çocuğun empatisinin gelişmesinde önem taşımaktadır. Örneğin, ebeveynlerin çocuklarına yönelik yaklaşımları, onları dinleme stilleri, kendi duygularını paylaşma ve çocuklarını duygularını paylaşma konusunda destekleme, empatik bir şekilde davranma yalnızca çocuklarıyla ilişkilerinde değil, aynı zamanda diğer ilişkilerde de çocukların gelişiminde büyük önem taşımaktadır.

Bu çalışmada ebeveyn reddi ile çocukların problem çözme becerileri arasında negatif bir ilişki bulunması da geçmiş çalışmalarla paralellik göstermiştir. Bu bulguyu destekleyen Tepeli ve Yılmaz (2013), çocukların ebeveyn kabul düzeyleriyle problem çözme becerileri arasında anlamlı pozitif bir ilişki olduğunu bildirmiştir.

Çınar (2016), dolaylı olarak bu sonucu desteklemiş ve otoriter ebeveynleri olan çocukların - daha demokratik ve kabul edilebilir bir ortamda - olan çocuklardan daha düşük düzeyde problem çözme becerisine sahip olduğunu bulmuştur. Otoriter ebeveynleri olan çocuklar kendilerini güvende hissetmedikleri ve farklı cezalara maruz kalmaları nedeniyle reddedildikleri için, problem çözme gibi sağlıklı sosyal beceriler geliştiremedikleri veya faydalı olanlar yerine saldırgan çözümler ürettikleri belirlenmiştir.

Ahlaki çözülme ile ilgili olarak, çocukların ebeveyn kabul-red algısı ve ahlaki çözülme arasındaki ilişkileri inceleyen araştırmalar mevcut alanyazında sınırlıdır. Örneğin, bu çalışmanın bulgularını destekler şekilde Hyde, Shaw ve Moilanen (2010), ebeveyn reddi ile çocukların ve ergenlerin ahlaki açıdan kopuk tutumları arasında anlamlı pozitif bir ilişki olduğunu bildirmiştir. Buna ek olarak, Dunn (2006) dolaylı olarak ebeveyn ve çocuk arasındaki bağın çocukların ahlaki gelişimine önemli katkısı olduğu sonucunu desteklemiştir. Ayrıca, Campaert ve arkadaşları, (2018) yine dolaylı olarak, çocuklar ve ergenlerin ahlaki standartlara uygun davranmak yerine, ebeveynleri tarafından onaylanmak için ahlaki çözülmeye yönelebildikleri sonucunu desteklemiştir. Ahlaki bilişleri henüz tam olarak gelişmemiş olduğundan, çocukların davranışları için ebeveynlerinden onay almaları ahlaki gelişimleri için önemlidir. Bu nedenle, ebeveynlerin onayı ebeveyn kabul boyutu altında olduğu düşünülebilir ve ebeveyn kabulünün, çocukların ve ergenlerin ahlaki çözülme seviyeleri ile olumsuz yönde ilişkili olduğu varsayılabilir.

Bu sonuçların yanı sıra bu sonuçlardan ortaya çıkan tablo; sıcak ve destekleyici ebeveyn davranışlarının veya tutumlarının çocukların empatik eğilim, problem çözme becerilerini desteklediğini ve çocukların ahlaki davranışlarını iyileştirme olasılığını artırdığını göstermektedir. Bu mevcut araştırmanın bulguları, ebeveyn kabul-reddi ile empati, çocukların problem çözme becerileri ve ahlaki çözülme eğilimleri arasındaki önemli ilişkileri inceleyerek geçmiş araştırmaları genişletmiştir.

*Hipotezler 2.1., 2.2., 2.3. ve 2.4.:* Bu hipotezler; (a) ebeveyn reddi ile (a) empati, (b) ahlaki çözülme ve (c) problem çözmenin kardeş zorbalığıyla ilişkilendirilebileceğini varsaymıştır. Bu hipotezlerin tümü bu araştırmanın verileriyle desteklenmiş; ebeveyn reddi ve ahlaki çözülmeye kardeş zorbalığı anlamlı ve pozitif bir şekilde bağlantılı

bulunurken; empati ve problem çözmenin kardeş zorbalığıyla önemli ve negatif olarak ilişkili olduğu belirlenmiştir. Başka bir deyişle, katılımcıların ebeveyn reddi ve ahlaki ayrılma seviyeleri arttıkça, kardeşlerine zorbalık yapma olasılığı daha yüksek bulunurken; katılımcıların empati ve problem çözme düzeyleri arttıkça kardeş zorbalık davranışları gösterme olasılıkları ise daha düşük bulunmuştur.

Gözleme dayalı kanıtlar, empati ve problem çözme gibi bazı bilişsel yeteneklerdeki eksikliğe ek olarak, başkalarına bireysel kazançlar için zorbaca davranma duygusunun ahlaki olarak yanlış algılanmasının da zorbaları motive ettiğini göstermiştir (Arsenio & Fleiss, 1996; Caravita, Gini, & Pozzoli, 2012; Gini, 2006; Malti, Gasser, & Gutzwiller-Helfenfinger, 2010). Yani ahlaki çözülme, çocuğun veya ergenin başkalarına karşı kolayca olumsuz şekilde davranmasını sağlar (Gini, Pozzoli, & Hymel, 2014; Menesini, Nocentini, & Camodeca, 2013), çünkü ahlaki çözülme, ahlaki olmayan davranışları haklı kılar ve başkalarını mağdur etmekten kaynaklanan suçluluk hissini önler. Bu nedenle, bu çalışma, ebeveyn reddi, empati ve problem çözmenin kardeş ve akran zorbalığı üzerindeki etkilerinin yanında, ahlaki çözülmenin rolünün de altını çizmiştir. Bulgular önceki çalışma sonuçlarına benzer bir yapı sergilemiştir.

Aslında, ebeveyn reddi ve ahlaki çözülmenin kardeş zorbalığı üzerinde doğrudan etkisine dair gözleme dayalı kanıtlar sınırlıdır, ancak, bu iki değişken (ebeveyn reddi ve ahlaki çözülme) ile saldırganlık veya akran zorbalığı arasındaki bağlantılar yoğun olarak incelenmiştir. Bu mevcut bulgular, ebeveyn reddi ile saldırganlık ve zorbalık arasındaki (Akse, Engels & Raaijmakers, 2004; Avcı & Sak, 2018; Jones, Forehand, Rakow, Colletti, McKee & Zalot, 2008) ve ahlaki ayrılma ve zorbalık arasındaki (Almeida, Correia, & Marinho, 2010; Caravita vd., 2012; Menesini vd., 2003; Obermann, 2011; Perren & Gutzwiller-Helfenfinger, 2012; Pozzoli, Gini, & Vieno, 2012; Tanrikulu & Campbell, 2015; 2014; van Noorden, Haselager, Cillessen, & Bukowski, 2014; Wang, Ryoo, Swearer, Turner, & Goldberg, 2017) pozitif yöndeki ilişkiyi desteklemiştir. Bu bulgu daha önce yukarıda belirtilen akran zorbalığı veya saldırganlığına ilişkin mevcut alanyazındaki sonuçlarla da tutarlıdır (Oberman, 2011).

Dahası, bu çalışmanın diğer bulgularını destekler şekilde empati ve zorbalık arasındaki (Caravita vd., 2009; Espelage, Mebane, & Adams, 2004; Gini, Albiero, Benelli, & Altoè, 2007; Mitsopoulou & Giovazolias, 2015; van Noorden vd., 2014; Zhou vd., 2002) ve empati ile saldırganlık arasındaki (Akdemir 2016; Çankaya 2014; Eisenberg, Eggum & Giunta, 2010; Jolliffe & Farrington 2006; Marshall & Marshall 2011; Sohravardi, Bafrooei & Fallah, 2015) olumsuz bağlantıları ortaya koyan çalışmalar mevcuttur. Ayrıca, Albayrak-Sargın (2008), Andreou (2001), Arslan, Hamarta, Arslan ve Saygın (2010), Erdur-Baker (2009), Lubell ve Vetter (2006) gibi problem çözme ve zorbalık arasındaki olumsuz ilişkiyi destekleyen çalışmalar da alanyazında bulunmaktadır.

Ayrıca, ebeveyn ve çocuk arasındaki ilişki kalitesi, problem davranışların gelişimi ile ilişkili bulunmuştur (Buist, Deković & Prinzie, 2013; Buist, Verhoeven, Hoksbergen, ter Laak, Watve & Paranjpe, 2016). Bu çalışmada olduğu gibi bulgular, ebeveyn reddinin çocukların kardeş zorbalık davranışları (Kim & Kim, 2016) ve akran zorbalık davranışlarıyla (Ergün, 2015; Kim, Kim, Koh & Leventhal, 2010; Turgut, 2005) ilişkili olduğunu göstermiştir. Ebeveyn reddi ile saldırganlık veya zorbalık arasındaki bağların ardındaki sebep, ebeveynlerin reddinin çocuklar üzerindeki olumsuz etkileri olabilir. Wolchik, Wilcox, Tein ve Sandler (2000)'e göre, reddedilen çocuklar daha düşük seviyede özgüvene, zayıf iletişim becerilerine ve duyguları paylaşmama gibi duygusal yeteneklerin eksikliğine sahiptir. Bu nedenle, başkalarıyla (kardeş veya akranları) düzgün bir şekilde ilişki kurmak yerine, güçlerini kullanarak ve zorbalık tanımında belirtildiği gibi başkalarına zarar vererek başkalarıyla iletişim kurmayı seçebilirler.

*Hipotez 3:* Bu hipotezde, ebeveyn reddinin kardeş zorbalığı üzerindeki etkisine; empati, ahlaki çözülme ve problem çözme faktörlerinin aracılık edeceği varsayılmıştır. Bulgulara göre, ebeveyn reddi, üç olası yoldan kardeş zorbalığıyla anlamlı ve pozitif olarak ilişkiliydi; (a) ahlaki çözülme yoluyla, (b) problem çözme yoluyla ve son olarak (c) empati yoluyla. Bu sonuç, ebeveyn reddini daha fazla algılamış çocukların ahlaki çözülme davranışlarını daha fazla sergilerken; problem çözme ve empati becerilerini daha az gösterdiğini, dolayısıyla da daha fazla kardeşe yönelik zorbalık davranışları gösterdiklerini ortaya koymuştur.

Önceki paragraflarda belirtildiği üzere mevcut bazı araştırmalar; ebeveyn reddi ile kişisel faktörler (empati, ahlaki çözülme ve problem çözme) (Avcı & Sak, 2018); ebeveyn reddi ile kardeş zorbalığı (Kim & Kim, 2016) ve kişisel faktörler ile kardeş zorbalığı (Menesini vd., 2011) arasındaki bağlantılara ampirik destek sağlamıştır. Bununla birlikte, araştırmacıların bilgisine göre, ebeveyn reddi ile kardeş zorbalığı arasındaki ilişkiyi empati, ahlaki çözülme ve problem çözme aracılığıyla incelemiş bir araştırma henüz yapılmamıştır. Bu bağlantıları dolaylı olarak destekleyen bulgular sunan bazı araştırmalar mevcuttur. Örneğin, Rohner ve Britner (2002) ebeveyn reddi ve davranış problemleri arasındaki ilişkiye çocukların bazı kişilik özelliklerinin olumsuz sonuçları artırarak aracılık edebileceğini önermiştir. Buna göre Wang ve arkadaşları (2017) çocuklukta kötü muamele ve zorbalık arasındaki ilişki üstünde ahlaki çözülmenin aracılık rolünü bulmuştur. Spesifik olarak, çocukluk çağında yüksek kötü muameleyle maruziyet seviyeleri, daha sonra, başkalarına zorbalık etme davranışlarında bir artış sağlayan ahlaki çözülme seviyelerinde de artışa neden olmuştur. Bunun nedeni ise; kötü muamele deneyimleri olan çocukların başkalarına zorbalık yapma ve başkalarına düşmanca güdüler atfetme konusundaki kendilerini haklı görme algılarıdır (Godinet, Li & Berg, 2014). Ayrıca, kötü muamelede bulunan ebeveynler; başkalarının zorbalığını teşvik eden, bireysel sorumlulukları en aza indiren ve bu tür olumsuz davranışlardan dolayı mağduru suçlayan veya başkalarına zorbalık etmenin göz ardı edilmesini içeren tutumlarıyla bir rol modeli oynamaktadır (Hodgdon, 2009).

Ayrıca, bu çalışma için ampirik bir destek olarak, daha az bakım algılayan (yani daha az sıcaklık ve şefkat gösteren, daha fazla reddetme ve ilgisizlik algılayan) çocukların, daha az bilişsel ve duyuşsal empatik becerilere sahip olduğu ve bunun da diğerlerine zorbalık yapma eğilimini artırdığı bulunmuştur (Mitsopoulou & Giovazolias, 2013). Bu sonucun ardındaki mantık, ebeveynliğin çocukların duygusal duyarlılık gelişimi üzerindeki etkisi olabilir. Ebeveyn Kabul-Red Teorisine göre; ebeveynlerin tutumları ile çocukların empati becerileri arasındaki ilişki şu şekilde açıklanmaktadır: ebeveyn sıcaklığı, çocukların kendi duygularını yönetme ve kontrol etme üstünde etkili olduğu kadar başkalarının duygularını ve bakış açılarını anlama, zorbalık gibi yanlış davranışlar yerine yararlı sosyal davranışlarda bulunma üzerinde de etkilidir (Eisenberg & Valiente, 2002). Ebeveyn sıcaklığı, destek ve bakımı yalnızca

empatinin gelişmesini arttırmakla kalmaz, aynı zamanda çocukların problem çözme de dahil olmak üzere sosyal yetkinlik performansı için pekiştirici sağlar (Kazemi, Ardabili & Solokian, 2010).

*Hipotez 4:* Bu hipotez, kardeş zorbalığının akran zorbalığı ile ilişkili olduğunu varsaymıştır. Daha önceki araştırmalara paralel olarak (Bar-Zomer & Brunstein Klomek, 2018; Duncan, 1999a; Menesini vd., 2010; Tippet & Wolke, 2015; Wiesner, Kapaldi & Patterson, 2003), bu çalışma kardeş ve akran zorbalığı arasında güçlü bir pozitif ilişki olduğunu ortaya koymuştur (Lockwood, Kitzmann & Cohen, 2001). Diğer bir deyişle bulgular, kardeşine zorbalık yapan çocukların genellikle bu davranışları akran ortamlarına taşıdıklarını (Ostrov vd., 2006) destekler niteliktedir. Bunun nedeni, kardeş zorbalığı sonucunda çocukların şiddeti normal olarak algılamalarından dolayı başkalarıyla baş etmek için şiddeti kullanmayı öğrenmeleri olabilir (Simonelli, Mullis, Elliott & Pierce, 2002). Kardeş zorbalığının aynı zamanda akran zorba ya da zorba-kurban olma olasılıkları daha yüksektir (Tippet & Wolke, 2015).

*Hipotez 5:* Bu hipotez, empati, ahlaki çözülme ve problem çözme faktörlerinin kardeş zorbalığı yoluyla akran zorbalığı ile ilişkili olduğunu savunmaktadır. Sonuçlar ahlaki çözülmenin, kardeş zorbalığı yoluyla akran zorbalığıyla anlamlı ve pozitif bir şekilde ilişkili olduğunu, problem çözme ve empatinin kardeş zorbalığı yoluyla akran zorbalığıyla anlamlı ve olumsuz bir şekilde ilişkili olduğunu ortaya koymuştur. Başka bir deyişle, ahlaki çözülme seviyesi daha yüksek olan çocuklar aynı zamanda daha yüksek seviyelerde kardeş ve akran zorbalığı göstermektedir; bununla birlikte, daha yüksek düzeyde problem çözme ve empati becerilerine sahip olan çocuklar, düşük düzeyinde kardeş zorbalığı ve sonucunda akran zorbalığı gösterdiğini bildirmiştir.

Görüldüğü üzere, beklenen tüm bulgular teyit edilmiş ve Hipotez 2'de açıklandığı gibi doğrudan korelasyonların yanı sıra değişkenler arasında anlamlı dolaylı ilişkiler de ortaya çıkmıştır.

Özetle, bu çalışma sonucunda değişkenler arasındaki doğrudan ve dolaylı ilişkiler incelenmiştir. Ebeveyn faktörünün (ebeveyn reddi) doğrudan kardeş zorbalığının yanı sıra kişisel faktörlerle (empati, ahlaki çözülme ve problem çözme) ilişkili

olduğu bulunmuştur. Kişisel faktörlerin (empati, ahlaki çözülme ve problem çözme) de kardeş zorbalığıyla doğrudan ilişkili olduğu bulunmaktır ve kardeş zorbalığının da doğrudan akran zorbalığı ile ilgili olduğu bulunmaktır. Ek olarak, kişisel faktörlerin (empati, ahlaki çözülme ve problem çözme), ebeveyn faktörünün (ebeveyn reddi) dolaylı olarak rolüne aracılık ederek kardeş zorbalığıyla ilişkili olduğu bulunmuştur. Ve kişisel faktörlerin de (empati, ahlaki çözülme ve problem çözme) dolaylı olarak kardeş zorbalığı yoluyla akran zorbalığı ile de ilişkili olduğu bulunmuştur. Son olarak ve yaygın olarak, ebeveyn faktörünün (ebeveyn reddi), kişisel faktörlerin aracılıklarıyla (empati, ahlaki çözülme ve problem çözme) kardeş zorbalık yoluyla akran zorbalığıyla ilgili olduğu bulunmuştur.

Sonuç olarak, bu çalışma, çocukların kişisel özelliklerinin, ebeveyn özelliklerinin zorbalık üzerindeki etkilerine aracılık edip etmediğini araştırarak ilgili alanyazını genişletmektedir. Özellikle, bu araştırma kardeş ve akran zorbalık davranışlarının karmaşık yapısını vurgulamaktadır. Bunları anlamak için, çeşitli bileşenlerin - aile ve kişilik - zorbalık olaylarını tetiklemek için birlikte çalışma yöntemlerinin anlaşılması gerekmektedir. Kısacası, bu çalışma, MacKinnon-Lewis ve arkadaşları (1997) tarafından benzer şekilde önerildiği gibi olumsuz ebeveynliğin kardeş zorbalığını şekillendirdiğine ve bu nedenle de kişiliğin etkisiyle akran zorbalığına neden olduğuna ampirik kanıtlar sunmaktadır.

#### **4.1. Bulgulara Yönelik Çıkarımlar**

Zorbalık, çocuklar ve ergenlerin okullar bağlamında düzenli olarak karşılaştıkları saldırgan davranışların evrensel bir alt tipidir (Salmivalli vd., 2011; Smith & Brain, 2000). Her ne kadar akran zorbalığı küresel bir konu olarak ilgi görüyor ve kardeş zorbalığı henüz çok çalışılmamış olsa da çalışmalar kardeş zorbalığının akran zorbalığından bile daha yaygın olduğu göstermektedir (Skinner & Kowalski, 2013; Wolke & Skew, 2012) ve kardeş zorbalığının akran zorbalığı için tetikleyici bir faktör olduğu tespit edilmiştir (Menesini vd., 2010; Wolke vd., 2015). Bu durum, bu çalışmanın sonuçları ile desteklenmiştir. Ek olarak, zorba çocukların ebeveyn reddinin yanı sıra kardeşe zorbalık ilişkisini inceleyen bu çalışma, annelerle ilişkilerin çocukların hem kardeş hem de akran zorbalığına katılmada etkin olduğunu ortaya koymuştur. Bu çalışmanın bulguları, hem kardeş hem de akran zorbalığının

yapısını anlama konusunda danışmanlara / okul danışmanlarına, ebeveynlere ve araştırmacılara değerli bilgiler sağlayabileceği ve zorbalıkla başa çıkmada uygun önleme ve müdahale stratejilerinin planlanması konusunda daha fazla bilgi edinmelerine yardımcı olabileceği düşünülmektedir.

Profesyoneller için (örneğin, danışmanlar ve okul danışmanları): Bu bulguların anahtar bir sonucu, akran zorbalığının önlenmesi, müdahale edilmesi ve tedavi programlarının sadece çocukları değil aynı zamanda ebeveynleri ve kardeşleri de içermesi gerektiğidir. Aile üyelerinin zorbalık önleme-müdahale programlarına dahil edilmesini göz önünde bulunduran hizmetler değerli olacaktır. Bu amaç doğrultusunda ebeveynlerin, zorbalık sürecinde oynadıkları kritik rolden haberdar olmaları ve olumlu ebeveynlik becerilerini güçlendirmeleri ve kardeş ilişki problemlerine katılımlarını arttırmaları gerekmektedir.

Ebeveynler için: Bu konuda yapılan kapsamlı araştırmalar, ebeveyn-çocuk ilişkilerinin, çocukların ve ergenlerin kişilerarası becerilerinin gelişmesine ve sosyalleşmesine etkisi olduğunu açıkça göstermektedir. Bu nedenle, ebeveynlerin çocuklarla olan tutum ve etkileşimlerinin zorbalık davranışları üzerinde de önemli bir rolü vardır. Kişisel ve ebeveynlerle ilgili değişkenler ile kardeş zorbalığı arasındaki etkileşimi incelemek, dolaylı olarak akran zorbalığı ile ebeveynlerin kardeş zorbalığının ciddiyeti hakkında farkındalığını arttırmaya yardımcı olacaktır, çünkü ebeveynler zorbalıkların ne olduğunu bilmezler ve çoğunlukla kardeşler arasındaki sorunlu (zorbalık) durumları normalleştirirler. Bu nedenle, bu bilgi ile ebeveynler, çocukları arasındaki zorbalık sorunlarını tespit edebilir ve her iki çocuklarını da zorbalığın olumsuz sonuçlarından ve akran zorbalığına karışmasından korumak için sürece dahil edebilirler. Bu bilgiler sayesinde daha destekleyici ve olumlu bir ev ortamı yaratabilirler.

#### **4.2. Gelecek Çalışmalara Yönelik Öneriler**

Bu çalışmada bazı aracı değişkenler ortaya çıkmıştır. Yapısal modelin biraz karmaşık olması nedeniyle, bazı değişkenlerin (kişisel değişkenler ve kardeş zorbalığı) ana etkilerinin yanı sıra aracı etkileri olmuştur. Bu çalışmadaki aracı değişkenlerin ilgili alanyazında birbirlerini farklı boyutlarda aracılık yaptığı da bulunmuştur. Örneğin, bu çalışmada empati ve ahlaki çözülme, aracı değişkenlerler aynı düzeydedir. Yani,



her ikisi de ebeveyn reddi ile zorbalık arasındaki ilişkiye aracılık etmektedir. Bununla birlikte, bazı çalışmalar ahlaki çözülmenin, empatinin zorbalık veya saldırganlık üzerindeki etkisine de aracılık edebileceğini göstermiştir. Bu nedenle, değişkenler arasındaki ilişkiler hakkında ayrıntılı bilgi almak için daha fazla araştırmada bu araçlara odaklanılmalıdır.

Bu çalışmada, ebeveyn faktörü için yalnızca çocukların anne reddi algısı ölçülmüştür; çünkü babaların reddetmesi ile çocukların saldırganlığı arasında doğrudan bir ilişki bulan çalışmaya rastlanmamıştır. Bununla birlikte, anne reddi ile çocukların saldırganlığı arasında doğrudan anlamlı bir ilişki bulunmaktadır (Mackinnon vd., 1997). Ek olarak, Stavrinides ve arkadaşları, (2018) ve Gülay (2011), anne ve baba tarafından eddedilme algılarının çok benzer olduğunu; ebeveynlerden biri çocuklarına karşı reddetme kalıpları sunarsa, diğerinin neredeyse kesinlikle benzer şekilde davrandığını belirtmektedir. Bununla birlikte, babanın reddetmesi, çocukların zorbalık davranışları üzerinde etkili olabilir. Bu nedenle, her bir ebeveynin zorbalık davranışları üzerindeki etkilerini ve farklılıklarını araştırmak için her iki ebeveyninden veya babalardan gelen verilerle yapılan çalışmalara ihtiyaç vardır.

Bu araştırma, ebeveyn reddinin hem çocukların özellikleri hem de zorbalık

davranışları üzerindeki önemine dair kanıt sağlamıştır. Bu nedenle, çocuk yetiştirme şeklinin belirleyicilerini derinlemesine anlamak için ebeveyn ve çocukların özellikleri ile zorbalık davranışları arasındaki ilişkiler ileriki çalışmalarda dikkate alınabilir.

Bu çalışmanın hedef kitlesi 4. ve 5. sınıf öğrencileri idi. Diğer yaş gruplarındaki zorbalık davranışları ile yaşa özgü kardeş ve akran zorbalık davranışlarını belirlemeye de ihtiyaç vardır. Aynı modeli zaman içinde teyit etmek ve gerçek anlamda öngörülerde bulunmak için boylamsal tasarım çalışmalarına ihtiyaç vardır.

## APPENDIX P: TEZ İZİN FORMU/THESIS PERMISSION FORM

### ENSTİTÜ / INSTITUTE

- Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences** ☐
- Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences** ☒
- Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics** ☐
- Enformatik Enstitüsü / Graduate School of Informatics** ☐
- Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences** ☐

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**Bölümü / Department** : Eğitim Bilimleri / Educational Sciences

**TEZİN ADI / TITLE OF THE THESIS (İngilizce / English)** : Sibling Bullying and Peer Bullying Relations to Empathy, Problem Solving, Moral Disengagement, and Parental Acceptance-Rejection

**TEZİN TÜRÜ / DEGREE** Yüksek Lisans / Master ☐ **Doktora / PhD** ☒

- 1. Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide.** ☒
- 2. Tez iki yıl süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of two year. \*** ☐
- 3. Tez altı ay süreyle erişime kapalı olacaktır. / Secure the entire work for period of six months. \*** ☐

**Yazarın imzası / Signature**

**Tarih / Date**