

WHAT DETERMINES THE SIBLING CONFLICT RESOLUTION
STRATEGIES OF ADOLESCENTS? PARENTS, SIBLINGS, OR
TEMPERAMENT?

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ABSTRACT

WHAT DETERMINES THE SIBLING CONFLICT RESOLUTION STRATEGIES OF ADOLESCENTS? PARENTS, SIBLINGS, OR TEMPERAMENT

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The main purpose of the current study is to examine the role of siblings' temperamental traits (effortful control, negative affect, and depressive mood), parenting practices (maternal closeness, support, and conflict, maternal differential control), and younger siblings' conflict resolution strategies in the prediction of adolescent older siblings' conflict resolution strategies. Another aim is to investigate whether these relations vary depending on the younger siblings' gender. Participants were 9th grader female adolescents recruited from various high schools in Denizli and their younger siblings who were the closest in age. All the scales were completed by the older siblings and the Early Adolescent Temperament Questionnaire and the Resolving Conflict in Relationship Scale were completed by younger ones. In the study, three sets of hierarchical regression analyses were run for each conflict resolution strategies (solution orientation, control, & nonconfrontation) used by older sibling. For each set, younger sibling's each temperamental characteristics were separately added as a moderator and the interaction between younger and older siblings' temperamental traits in the prediction of older sibling's conflict resolution strategies were regressed after parenting practices, maternal differential control, and conflict

resolution strategies used by younger sibling were regressed. The results indicated significant relationships in all hierarchical regression analyses. Findings in the scope of the literature, contributions, limitations, and suggestions were discussed.

Keywords: Conflict Resolution Strategies, Adolescent Temperament, Parenting Practices

ÖZ
ERGEN BİREYLERİN KARDEŞ ÇATIŞMALARINI ÇÖZME
STRATEJİLERİNİ NELER BELİRLER? EBEVEYNLER, KARDEŞLER,
VEYA MİZAÇ

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Bu çalışmanın amacı, kardeşlerin mizaçlarının (çaba gerektiren kontrol, negative duygulanım ve depresif duygudurum), algılanan ebeveynlik davranışlarının (yakınlık, destek ve çatışma), annenin çocukları üzerindeki farklılaşmış kontrolünün, küçük kardeşlerin çatışma çözme stratejilerinin (çözüm odaklı, kontrol edici ve yüzleşmeden kaçınmacı), ergen bireylerin (büyük kardeş) kardeş çatışmalarını çözme stratejilerini yordaması üzerindeki rollerini araştırmaktır. Diğer bir amaç ise, bu ilişkilerin küçük kardeşin cinsiyetine göre değişip değişmediğini incelemektir. Katılımcılar Denizli ilinden birçok çeşitli liseden katılan 9. Sınıf kız öğrencilerden ve onların kendilerine en yakın yaştaki küçük kardeşlerinden oluşmaktadır. Tüm anketler büyük kardeşler tarafından doldurulmuştur. Ayrıca, Erken Ergenlik Mizaç ve İlişkilerde Çatışma Çözme Ölçekleri küçük kardeş tarafından da doldurulmuştur. Çalışmada, büyük kardeş tarafından kullanılan her bir çatışma çözme stratejisi için (çözüm, kontrol etme ve kaçınma odaklı) 3 grup ayrı hiyerarşik regresyon analizi yapılmıştır. Her bir sette, büyük ve küçük kardeşin mizaçları, anneye ait davranışlar ve küçük kardeşin çatışma çözme stratejileri girildikten sonra, küçük kardeşin bir mizaç özelliği aracı değişken alınarak büyük kardeşin çatışma çözme stratejileri yordanmıştır. Sonuçlar tüm analiz gruplarında anlamlı ilişkiler olduğunu göstermiştir. Literatür kapsamında bulgular, çalışmanın katkıları, eksiklikleri ve öneriler tartışılmıştır.

Anahtar Kelimeler: Çatışma Çözme Stratejileri, Ergen Mizacı, Ebeveyn Davranışları

To My Siblings, Şeyma & Kemal

And

To My Parents, Hatice & Halil

And

To My Love, İbrahim

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CHAPTER 1

INTRODUCTION

The main purpose of the current study was to examine the role of perceived parenting practices including maternal closeness, support, and conflict, parental differential treatment including maternal affection and control in the prediction of adolescent older siblings' conflict resolution strategies. In addition, function of the older and younger siblings' temperamental characteristics involving effortful control, negative affect, and perceptual sensitivity and younger siblings' conflict resolution strategies on older siblings' strategies in conflict resolution were investigated. Another aim was to investigate whether these relations vary depending on the younger siblings' gender. Therefore, to cover the related theoretical and empirical backgrounds, this thesis involves six sections.

In the first section, the nature of sibling relationships and developmental course of sibling relationships, the nature of sibling conflicts, theories about sibling conflict, conflict resolution strategies, and gender differences in conflict resolution, environmental contributions -parenting and parental differential treatment- to sibling relationships and conflict resolution, and temperament as individual difference factor and its relationship with sibling outcomes and conflict resolution strategies were explained. Then, the current study was proposed with the aims and predictions. In the second section, methodological information including participants, measures, and procedure were included. In the third section, results of the presents study were mentioned. Firstly, factor analyses of the Resolving Conflict in Relationship, the Early Adolescent Temperament Questionnaire, and Sibling Inventory of Differential Experience were involved. Secondly, correlational analyses performed in order to understand the relationship between older and younger siblings' conflict resolution strategies, siblings' temperamental traits, and parenting practices were stated. Thirdly, nine sets of hierarchical regression analyses were indicated. In the last section, findings of the current

study were discussed in the light of the literature. In addition, contributions, limitations, and future suggestions were included.

1.1. Sibling Relationship

1.1.1. Nature of Sibling Relationships

Relationship between siblings is one of the most essential interactions throughout the one's life. Sisterhood/brotherhood provides important and emotionally significant members to one's social network. Unlike to other relationships such as parent-child and friend relations, relationship between siblings has unique characteristics of interaction (Dunn, 2002). First, relationships between siblings are involuntary due to its nature. In other words, sibling relationships are not formed as a result of any choice. Additionally, sibling relationships are interminable, that is to say, siblings have the most long-lasting and relatively permanent relationships with each other throughout their lives which is dissimilar to other relationships (Cicirelli, 1995). Another point which differentiates sibling relationships from others is its diagonal nature. Even though relationships are characterized as complementary or reciprocal, sibling relationships are composed of not only complementarity but also reciprocity (Dunn, 1983). For instance, relationship between parent and child is defined as complementary, in which parents have more responsibilities and greater power over children, similarly complementarity may be revealed in older-younger sibling interaction. On the other hand, in friendships, peers are likely to be engaged in more balanced and egalitarian interactions ascribed as reciprocity, may also be displayed in sibling relationships with closer ages (Howe & Recchia, 2005). Lastly, unlike other close relationships, emotional content varies considerably in sibling interactions. Research examining affective dimensions of sibling relationships showed that emotional positivity and negativity are seen as non-correlational and siblings may experience warmth and conflict at times referring emotional ambivalence (Howe

& Recchia, 2008). It means that siblings quite often experience intense positive and negative affects in their interactions.

Hence, empirical studies have stressed both positivity and negativity in sibling relationships (Milevsky, 2011). Positivity in relationship may provide siblings an opportunity to develop support and intimacy (Howe, Rinaldi, Jennings, & Petrakos, 2002), empathy (Lam, Solmeyer, & McHale, 2012), and emotional understanding and self-closure (Howe, Aquan-Assee, Bukowski, & Rinaldi, 2001). However, negativity in relationship may lead them to have more conflictual and detrimental relationships resulted in internalizing and externalizing problem behaviors (Dunn, Slomkowski, Beardsall, & Rende, 1994; Gamble, Yu, & Kuehn, 2011), adjustment difficulties (Gamble et al., 2011), antisocial behaviors, and substance use (Stromshak, Bullock, & Falkestein, 2009).

1.1.2. Sibling Relationship from Childhood to Adolescence

In the literature, there are some seemingly inconsistent findings about how sibling relationships are affected by time. Dunn et al. (1994) mentioned that the correlation between the nature of sibling relationship in the childhood and adolescence has been found significant. It could be said that there is a noticeable continuity in behaviors and feelings in sibling relationships from childhood to early adolescence implying the extension of positivity and negativity from childhood to adolescent period (Dunn, 1996). However, some other findings pointed out differences in the quality and nature of sibling relationship between childhood and adolescence. In those terms, Dunn (1992) stated that because of physical, psychological, and social changes experienced throughout adolescence, sibling relationship quality may change from childhood to adolescence. In other words, as the child grows, the nature of sibling relationship may also get altered based on the developmental changes in that person (as cited in Noller, 2005). Some research suggested that the intensity of relationships between siblings becomes decline in terms of positivity and negativity during the adolescence

period (Kim, McHale, Wayne Osgood, & Crouter, 2006). Buhrmester and Furman (1990) found that compared to younger participants, adolescents displayed less affection, less companionship, and less intimacy to their siblings. They also found sibling conflict differences across four grades in terms of age and age ranges between siblings. With respect to age, while younger (later-born) siblings in the twelfth grade reported less sibling conflict than younger siblings in the third grade; older (earlier-born) ones reported considerable continuity in conflict across four grades. The findings related to age differences between siblings revealed that if age gap between siblings is less than 4 years, the relationship tend to be more conflictual. In another cross-sectional study about age-related difference in sibling conflict, it was found that sibling conflict become less with age (Cole & Kerns, 2001). Moreover, parallel with Buhrmester and Furman's conclusion, it was also shown that positive characteristics of relationship declined in early adolescence but then increased, attributing u-shaped pattern in the nature of relationships. In other words, decrease in both positive and negative qualities of relationship could be explained such a way that relationship gets less intense as children grows, and this is as a result of more egalitarian and less asymmetrical nature of sibling relationship in the adolescence (Buhrmester & Furman, 1990).

However, compared to cross-sectional studies examining changes in the nature of sibling relationships in a longitudinal study, Brody, Stoneman, McCoy (1994) suggested that there is an increase in describing the relationship as negative between early adolescence and middle childhood as well as decline in positivity in sibling relationships over the four years from middle childhood to early adolescence. This result confirms the comparison hypothesis (Tesser, 1980, as cited in Brody et al., 1994), which implies that as children grows, they tend to be more competitive, jealous, and compare themselves with their siblings through the late adolescence because of becoming close in terms of relative competency and interests.

1.2 Conflict in Sibling Relationship

1.2.1 Definitions of Conflict & Nature of Sibling Conflict

Conflict is one of the central, dynamic, and unavoidable patterns in human life. Cicirelli (1995) defined conflict as a social event in which both sides engage in mutual opposition and disagreement including actions such as quarrelling and fighting. In addition to this definition, Hay (1984) identified social conflict as “the opposition between two individuals that occurs when one person does something to which a second person objects” (as cited in Rafaelli, 1992, p.652). Conflict in interpersonal relationships is aimed to maintain a relationship or to reach a certain goal. Hence, it is not positive or negative by its nature but is a defining feature of relationships (Valsiner & Cairns, 1992). In other words, conflict provides people an overall understanding about their social worlds (Dunn, 2002; Ross, Ross, Stein, & Trabasso, 2006) by occurring in a wide spectrum from daily hassles to serious and hostile incongruities (Rafaelli, 1992).

Research on interpersonal conflict also mentioned about unique processes of conflict and their impact on one’s relationships. According to Shantz (1987), there are five processes which characterize interpersonal conflict. The first one is the frequency and duration of conflict. Specifically, Rafaelli (1992) found that an increase in spending time with the sibling is linked with an increase in the frequency of conflicts between siblings. The second one is about the topics of conflicts. Research examining the topic of conflict suggested that conflict may arise because of specific topics such as sharing personal properties (McGuire, Manke, Eftekhari, & Dunn, 2000). Furthermore, the initiation of conflict is an important process of interpersonal conflicts. With respect to that, who initiates the conflicts varies because of different personality characteristics and the dominance role of one’s relationships (Collins & Laursen, 1995) and is related to other processes of conflict such as resolution (McGuire et al., 2000). Moreover, conflict resolution strategies are one of the unique features of interpersonal conflicts and they are highly associated with other processes in conflict and child/adolescent

developmental outcomes (Howe et al., 2004; Recchia & Howe, 2009). The last process is the outcomes of conflicts. Shantz (1987) implied that which strategies are used by pairs determines the outcomes of conflicts and those outcomes may be harmful for the quality of relationships. In the present study, conflict resolution strategies utilized by adolescent siblings were investigated; therefore, in the following sections, research on conflict resolution strategies will be mentioned.

In the literature, researchers specified conflict resolution strategies as constructive and destructive and pointed out the differences between constructive and destructive styles of conflict resolution. Constructive conflict consists of low level of emotional intensity; whereas, destructive ones is composed of high level of intensity in terms of emotions. In addition, constructive conflict resolution includes some management patterns such as problem-solving, collaboration, and brainstorming, which stimulates compromising in terms of the issue of dispute. In contrast to constructive conflict, destructive one is associated with hostile, avoidant, and unresolved conflict resolution patterns such as coercive behaviors and tends to weaken the relationship quality due to adverse impacts on the course of relationships (Howe et al., 2002; Ross et al., 2006). Although this study would not target directly constructive and destructive conflict resolution strategies, both of them would be indirectly focused through three conflict strategies which are solution-orientation, nonconfrontation, and control.

People tend to establish mutually satisfying interactions with others; however, conflict is a common and inevitable experience in different developmental periods, specifically in adolescence (Brody et al., 1994; Campione-Barr & Smetana, 2010). Also as noted above, the relationship between siblings is one of the longest-lasting and the most salient context in which a person involved from the beginning of his/her sibling's birth; hence, it tends to be widely characterized as conflictual apart from having high levels of closeness between siblings. In that sense, it may be said that due to the mixed nature of different aspects, sibling relationships are based on love-hate patterns (Furman & Burhmester, 1985).

During the adolescence period, not only parent-child conflict but also conflict between siblings is more likely to increase perhaps because of developmental changes experienced in that period (Laursen, Coy, & Collins, 1998; Bordy et al., 1994). With respect to sibling conflicts, Buhrmester and Furman (1990) found that it is ranked as the most frequent ones compared to all other close relationships since relationship between siblings includes intimacy and incompatible goals. Especially in early adolescence, the frequency of disagreements between siblings is much more than their intensity and conflicts are more inclined to be experienced because of intrusion to personal space rather than issues related to equality and fairness. In other words, the issue of conflict also changes in this period (Campione-Barr & Smetana, 2010).

1.2.2 Theories Related to Sibling Conflict

There are some theories which explain the associated factors of sibling conflict and how siblings resolve conflicts. This part consists of three major theories in order to understand underlying factors of sibling conflicts.

Family systems theory is not a traditional account for sibling relationships yet it has some implications on sibling subsystems by means of focusing on the interdependence and circular interactions of subsystems in the family (Minuchin, 1985). Based on a systems approach, an organization and maintenance of whole family system functioning is provided by bidirectional subsystem relationships. Accordingly, each subsystem not only influences other subsystems but also is affected by larger family system. Research investigating close relationships specifically sibling relationships as a subsystem also implies that different family processes including marital conflicts, parenting behaviors, parental control, and differential treatment have influences on the nature of sibling relationship such as the quality of relationship and sibling conflict. For instance, negative parent-child relationships and spousal conflict in the family are strongly associated with sibling conflict outcomes (Kim et al., 2006). It was also found that the relationship

between interparental conflict resolution and sibling conflict resolution is mediated by mother–adolescent and father–adolescent conflict resolution behaviors (Reese-Weber, 2000; Reese-Weber & Kahn, 2005). Thus, as these studies indicate, the subsystem dynamics depends on several aspects of larger family. Therefore, in the present study on the role of parenting behaviors in adolescent siblings' conflict resolution behaviors will be tested.

Another major theory which accounts for sibling relationship dynamics including conflicts and resolution strategies is social learning theory (Bandura, 1977). Social learning view assumes that children learn to behave and to form ideas and attitudes through reinforcement and observation; indeed, imitating people in the social context. In accordance with this assumption, parents and siblings have a huge impact on children's and adolescents' behaviors (Bandura, 1989). Therefore, observation of conflict patterns and performances within the family has given siblings a chance to learn possible conflict behaviors and related resolution strategies. Accordingly, Haj-Yahia and Dawud Noursi (1998) studied familial predictors of conflict resolution tactics used by Arab siblings in Israel and found that the likelihood of using reasoning in sibling conflicts increase in the same direction with parental use of the same tactics within the family interactions. Consistent with this study, another investigation focused on the role of parents in sibling relationships, and suggested that parents model their children through their behaviors and strategies they use in interparental conflicts; thus, children and adolescents practice the same strategies in their own interactions within the family (Reese-Weber & Kahn, 2005). Additionally, Noller (2005) mentioned that siblings are more likely to spend time with their siblings during the adolescence; therefore, saliency in modeling may be greater in youths (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). In that sense, sibling relationships are shaped by positive and negative reinforcements and observations through engaging in shared activities with siblings in this period (Updegraff et al., 2005). Social learning view is also concerned about conflict resolution strategies of

siblings which imply that younger children develop specific conflict resolution through learning from their older siblings (Whiteman & Soli, 2011).

As opposed to social learning theory, sibling de-identification provides another point of view in the examination of factors affecting sibling relationships, specifically conflict resolution behaviors. In the literature, sibling de-identification is described as an inclination of siblings to make conscious or unconscious selection of different paths from their siblings and develop distinct personality characteristics. The central purpose of this tendency is to define themselves as unique or dissimilar from other siblings (Whiteman, Becerra, & Killoren, 2009). Sibling de-identification could be clarified by some theoretical frameworks such as psychoanalytic theory, social comparison theory, and identity formation theory. The common point of those theories in explaining sibling de-identification is that siblings try to be different in order to minimize sibling rivalry and conflict (Milevsky, 2011).

According to studies investigating the sibling de-identification process, the first-born adolescents tend to define themselves as more different from younger siblings (McHale, Updegraff, Helms-Erikson, & Crouter, 2001) and also the more closer ages between the siblings, the more they de-identify themselves (Feinberg & Hetherington, 2001). In addition to these findings, there are unclear links between mixed and same-sex sibling pairs and sibling differentiation dynamics. Although Schacter and Stone (1985) found that compared to mixed sex sibling pairs, same sex ones are more likely to engage in de-identification processes, Whiteman, McHale, and Crouter (2007) did not find any differences between mixed and same sex sibling pairs in terms of de-identification processes

Moreover, Scahter and Stone (1985) investigated the relationship between temperament and de-identification processes in sibling dyads and found that older children of mothers who define their older children as difficult in terms of temperament are more prone to de-identify themselves from their younger

siblings, which indicated that temperament is one of the sources of de-identification. Whiteman et al. (2007) also investigated similarity and dissimilarity patterns among siblings in terms of competition and hostility by providing three-cluster solution. The clusters mentioned in the study were sibling who model other sibling, who de-identify themselves from other sibling, and who report neither model other sibling nor de-identify from other sibling. Consistent with sibling de-identification process, adolescents in the de-identification group were less likely to compete with their siblings than in the modeling group. Moreover, when younger and older siblings in modeling and de-identification groups are compared in terms of hostility, they found that younger siblings in modeling group were more likely to be hostile toward their older siblings, which confirms love-hate patterns in sibling relationships. In addition, older siblings in the de-identification group reported more hostile behaviors toward their younger siblings than the older siblings in the modeling group. This pattern implies that when the relationship between siblings is defined by low level of warmth and high level of conflict, differentiation processes are more likely to occur (Whiteman et al., 2007). In addition, Whiteman et al. (2007) also found that younger siblings who have a tendency to be different from older ones are more likely to report that their sibling relationships less intimate. While considering Feinberg et al. (2003)'s study, it may be implied that, sibling de-identification theory is confirmed in some extent. As mentioned above, sibling de-identification refers that younger siblings are more likely to choose different paths from their siblings through defining themselves differently. Thus, the relationship quality is improved (Feinberg et al., 2003).

Up to this point, three theories explaining the nature and quality of sibling relationships were discussed. When all theories accounting for similarities and differences between siblings are taken into consideration, de-identification processes mainly focus on different temperament and personality characteristics as sources of de-identification (Whiteman et al., 2009), social learning theory emphasizes that behaviors acquired through learning, and family systems theory

stresses the interdependent nature of behaviors within family. As explained above, it is important to note that there are some mechanisms when explaining how siblings and parents affect sibling relationships. In the present study, the role of parenting practices, maternal differential treatment, older and younger siblings' temperamental traits, and younger sibling's conflict resolution strategy use on older sibling's conflict resolution strategy use will be investigated. Although the focus of the present thesis is not to test any of the mentioned theories directly, results can be evaluated within the framework of these relevant theories.

1.2.3 Understanding Conflict Resolution Patterns

Sweeney and Carruthers (1996) identified conflict resolution as “the process used by parties in conflict to reach a settlement” (as cited in Holt & DeVore, 2005). After Blake and Mouton's dual concern model which includes five styles of interpersonal conflict resolution, in the last 50 years, interest in conflict resolution research has grown (Sorenson, Morse, & Savage, 1999). As an extension of Blake and Mouton's theory, Pruitt (1983) proposed a four dimensional adaptation of “dual concern model” which is a theoretical point of view about how people deal with interpersonal conflicts. Their model suggests that when resolving interpersonal conflicts, some motivational factors have impacts on strategies utilized by individuals. The first one is concern about self and the second one is concern about others (Carnevale & Pruitt, 1992). Concern about self corresponds to satisfaction of their own needs and outcomes and the latter one is about concern for needs and interests of other people who engage in a conflict with them (Carnevale & Pruitt, 1992; Pruitt & Kim, 1998). Pruitt and his colleagues (1992; 1998) suggested that these two factors for motivation are distinct but interdependent by nature rather than the poles of a unidimensional continuum. According to this model, the combination of those two dimensions -self and other- have direct or indirect influences on strategies that people use in order to handle conflicts. According to dual concern model, balancing various levels of concern about self and others forms four strategies: a) yielding/accommodation reflects the

combination of low concern about self and high concern about others, which is characterized by ending conflict in favor of other party's point of view through ignoring own goals, b) inaction/avoidance is produced by the combination of low concern both self and others, in which people are more likely to give up conflict without any effort, c) contending/competition refers to high self-concern and low other-concern, in which people seek to dominate others by means of threats and power tactics, and d) problem solving/collaboration is associated with high concern about both self and others which reflects an effortful procedure in order to find a solution in favor of both own goals and other party's interests.

In addition, Killoren, Thayer, and Updegraff (2008) suggested three-factor model to Pruitt (1983)'s dual concern model. Their three dimensional model includes a) controlling strategies, b) nonconfrontational strategies, and c) solution-oriented strategies. Controlling strategies are related to competition, hostility, and negativity. Furthermore, controlling strategies are used by individuals when their concern is mostly about themselves but not others. However, nonconfrontational strategies involve actions such as avoidance or withdrawal. Individuals who use nonconfrontational strategies when resolving conflicts, they are less inclined to have concerns about both themselves and others. Another strategy used by individuals when resolving their interpersonal conflicts is solution-orientation. In solution-oriented strategies, high levels of concern for both self and others are involved; indeed, people's main concern is their relationship. This tactic in conflict resolution is composed of behaviors by targeting compromising and negotiation. In the present study, conflict resolution strategies of adolescent siblings were investigated based on the three dimensional adaptation of dual concern model. Since sibling relationships become more complex during adolescence period, siblings experience a number of disputes throughout this period (Campione-Barr & Smetana, 2010). Thus, Dunn (1983) stated that sibling relationships provide the most prominent context to develop ability to manage conflicts (as cited in Anderson, Hetherington, Reiss, & Howe, 1994).

There are limited numbers of studies concerned about how adolescent siblings resolve their conflicts. With respect to conflict resolution patterns, Tucker, McHale, and Crouter (2003) emphasized that adolescents are more likely to have difficulties in resolving conflicts with their siblings than with their parents. Killoren et al.'s study (2008) examining Mexican adolescent siblings' use of strategies in their conflicts suggested that adolescents used controlling and solution oriented strategies more often than nonconfrontation strategy when resolving sibling disagreements (Killoren et al., 2008). Thayer, Updegraff, and Delgado (2008) found that solution-oriented resolution strategies in sibling conflicts were the most frequently used ones then the use of nonconfrontational and controlling strategies followed it, respectively. Reese-Weber (2000) also compared resolution strategies in sibling conflicts during middle and late adolescence and she found that youths in middle adolescence tend to use attacking more compared to youths in late adolescence; whereas, youths in late adolescence are liable to resolve their sibling conflicts through compromising as compared to youths in middle adolescence.

Research investigating conflict resolution strategies has also suggested that a number of factors have an influence on conflict resolution tactics in childhood and adolescence. In this section, the impacts of sibling warmth, negativity, age, and gender on sibling conflict resolution strategies will be explained. Tucker et al. (2003) studied effective and ineffective strategies utilized by adolescent siblings in terms of sibling warmth and they found that the more they feel warmth to each other, the more likely they use effective strategies to resolve conflicts. In another study, warmth between siblings is linked with constructive conflict strategies that youths use in early adolescence (Rinaldi & Howe, 1998; Recchia & Howe, 2009). Killoren et al. (2008) endorsed Tucker and her colleagues' findings such a way that increase in intimacy and decline in negativity as key elements of sibling relationship quality was related to solution-oriented strategies that siblings used. However, Rinaldi and Howe (1998) found that increase in frequency of conflicts was associated with the use of destructive conflict strategies used by early

adolescents. In addition, Recchia and Howe (2009) stated that decrease in the quality of relationship between siblings is associated with increase in destructive strategies when resolving conflicts with siblings. In addition to sibling warmth and conflict, the relationship between siblings' age differences and their conflict resolution strategies was also examined. Killoren and her colleagues (2008) suggested that small age gap in sibling pairs is associated with older siblings' use of nonconfrontational strategies during the conflicts. However, Ross et al. (2006) did not find any relationship between siblings' age gap and strategies used in conflict resolution. Furthermore, Killoren and his colleagues (2008) compared older and younger siblings' conflict resolution tactics in sibling conflicts. They found that older siblings are more likely to use controlling in their disputes than younger siblings. In contrast, younger ones tend to use nonconfrontation as a conflict strategy. Moreover, Ross and her colleagues (2006) investigated the role of older and younger sibling's conflict resolution strategies on the other sibling's conflict resolution strategies and found that older siblings' ratings regarding their younger siblings' strategies in resolving conflicts predicted their own strategies in sibling conflict resolution. If older sibling's ratings about younger sibling's resolution strategies were in a favorable way, they were less inclined to blame their sibling's but they offered more counterarguments to their younger siblings.

In addition, Rafaelli (1997) pointed out the differences between adolescents' sibling and peer conflict resolution strategies. She found that during the process of conflicts, siblings' resolution strategies were characterized by open confrontation and violence and conflicts were more likely to be ended either by the intervention of a third person or giving in of one of the siblings. The findings about peers' strategies in conflict resolution also indicated that peers do not allow to the prolongation of conflict and any intervention of others. Thayer et al. (2008) also investigated peer conflict resolution strategies in terms of peer intimacy and negativity. Their results suggested that while solution-oriented strategies was positively associated with the intimacy between friends, nonconfrontational and controlling tactics in peer conflict resolution was positively associated with

negativity between friends. In a similar vein with Ross and her colleagues (2006) findings about sibling's impacts on other's conflict resolution strategies, another study examining the impacts of one's conflict resolution strategies on the other's strategies in peer conflict resolution suggested that strategies utilized by friends predicted the same tactics use by adolescents in a reciprocal manner (Park & Antonioni, 2007).

1.2.4 Gender Differences in Siblings' Conflict Resolution Strategies

Almost all research studying siblings' conflict resolution strategies called attention to gender differences and compared the use of strategies by males and females. In this respect, gender differences in conflict resolution strategies of siblings may be explained by gender socialization and specifically, gendered social relationships and gendered communication styles. This section will include theoretical backgrounds and empirical studies related to gender differences in conflict resolution.

According to Gidden (1993), gender socialization is identified by children's learning of their gender roles; therefore, they act in accordance with their gender roles (as cited in Crespi, 2004). Behaving in accordance with gender roles increases the likelihood of differences in communication and relationships styles of girls and boys (Athenstaedt, Haas, & Schwab, 2004). Research proposed that females and males develop distinct communication styles based on their gender. A meta-analysis indicated that talkativeness and use of affiliation in the speech were more common for girls. In contrast, assertiveness is much more frequent in boys' speech than girls' (Leaper & Smith, 2004). Another meta-analytic study showed that gender differences in the styles of communication were also prevalent in adulthood. For this reason, it could be said that gender differences in the communication during childhood extends to adulthood. However, there was one exception that was women's talkativeness. This meta-analytic study demonstrated that women were not more talkative anymore in adulthood compared to early

years; whereas, men were talkative in the adulthood (Leaper & Ayres, 2007). Moreover, children are inclined to imitate same-sex siblings much more than opposite-sex siblings in gender socialization process (Whiteman & Soli, 2011). It may be said that learned behaviors through modeling decreases the intensity and frequency of conflicts among the same-sex siblings but increases among the opposite-sex siblings (Campione-Barr & Smetana, 2010; McHale, Updegraff, & Whiteman, 2012).

In the literature, it was also advocated that females and males engage in relationships in different manners with respect to communication styles. Maccoby (1990) reviewed relational differences between females and males. She mentioned that both boys and girls tend to form and maintain relationships with other same-sex children and this pattern does not change even in adolescence and adulthood. However, more intimacy and integration are fundamental characteristics of girls' relationships; whereas, more constrictive style in exchanges and inability to reveal himself to another person are strongly associated with boys' relationships. Although boys interact with others not only of same-sex but also of mixed-sex in interruptive and directive ways, girls tend to behave in a similar way with boys in only mixed-sex group interactions (Maccoby, 1990). Based on those gendered relationships and communication styles in the socialization process, it could be said that conflict resolution strategies differ in same-sex and mixed-sex pairs.

Research investigating gender differences in sibling conflict and resolution strategies in adolescence period suggested insufficient and inconsistent findings. Killoren and her colleagues (2008) reported that there were no gender differences in siblings' conflict resolution strategies. In addition, Thayer (2005) looked at conflict resolution strategies in sibling and friend relationships through targeting 7th graders and their next older siblings. She found a significant gender difference conflict resolution tactics in younger siblings' friendships; whereas, she did not find any gender difference in conflict resolution strategies used by siblings. However, Thayer et al. (2008) examined adolescent friends' conflict resolution

strategies and they found that solution-oriented resolution skills were used more often by girls; however, controlling strategies were more frequently used by boys. However, they found no gender differences in terms of the use of non-confrontational strategies in conflicts.

Since research indicating the effects of being female or male and having same- or opposite-sex sibling in conflict resolution strategies with siblings in adolescent population has been rarely conducted, studies from early and middle childhood may shed light on how boys and girls differ in resolving sibling conflicts and how resolution strategies change according to having same-sex and mixed-sex sibling. Howe and her colleagues (2004) investigated conflict resolution strategies of siblings in childhood. In terms of gender constellation, they found that if older sibling is a girl, the gender of younger sibling is essential in the way of how they resolve conflicts but it was not valid when older siblings is a boy. They particularly found that destructive or negotiated resolution strategies are most frequently utilized by younger brothers rather than younger sisters. In contrast, younger sisters who have older sisters tend to use passive resolution strategies more often.

Besides conflict resolution strategies in adolescence and childhood, the patterns of friend and parent-child conflict resolutions may be helpful to understand gender differences in conflict resolution tactics of adolescent siblings. For peer conflicts, studies indicated that there are differences between female and male friends in terms of conflict resolution tactics. Joshi (2008) stated that girls and boys differ in terms of resolving strategies; and particularly in conventional strategies which are characterized by saying please, apologizing, ignoring, and forgiving the friend, are more often used by girls than boys when resolving their conflicts. In addition, Dunn and Herrera (1997) focused on conflict resolution patterns among friends in the sense of being female and male. They found that submissive and distracting strategies are more frequently used by young girls than boys. Another study examining gender differences in the friend conflict resolutions showed that girls

are more likely to use compromise, obliging, and avoidance than boys in adolescence (Owens, Daly, & Slee, 2005).

For parent-child conflicts, Smetana, Daddis, and Chuang (2003) posited that conflicts between adolescents and their mothers are more likely to be unresolved in the families with son compared to families with daughter. In addition, they found that according to mothers' reports of conflict resolution strategies, boys are more inclined to give in than girls.

Even though, there are some studies revealing the gender differences in sibling conflict resolution, other studies suggest that there are no clear findings whether gender differences exist in resolution strategies of sibling conflicts. Killoren and her colleagues (2008) did not find any difference between adolescent boys and girls with respect to conflict resolution strategies as opposed to their predictions which corresponded to use of controlling and nonconfrontational strategies more often by boys than by girls. They also hypothesized that sister-sister pairs tend to use more solution-oriented strategies in sibling conflict resolution; yet, their findings did not support this hypothesis. In a similar vein, Recchia and Howe (2009) found that sibling conflict resolution strategies were not associated with not only gender composition but also gender of older and younger children in the middle childhood. Because of such mixed findings with respect to gender and gender constellation, this study examined whether gender of the sibling pairs or gender constellations, specifically older sister-younger brother and older sister-younger sister, would have an influence on older siblings' conflict resolution strategies.

1.3 Environmental Contributions to Sibling Conflict Resolution

Parenting is usually considered as environmental impacts on children's and adolescents' development (Rowe, 2002). A recent literature about sibling relationships has also emphasized sibling outcomes of parental influence

(Milevksi, 2011). While considering family-systems and social learning theories, parents have direct or indirect impacts on sibling relationships involving sibling warmth and conflict. In this study, those impacts were examined through parenting practices such as maternal closeness, maternal support, and maternal conflict. In addition to these effects of parenting practices or styles on sibling relationships, some other parental dimensions directly influence sibling relationships. In that respect, this study also investigated the relationship between parental differential treatment and conflict resolution skills of adolescent older siblings.

1.3.1 Parenting

1.3.1.1 Parenting and Its Relation between Adolescent and Sibling Outcomes

In this section, the conceptualization of parenting, parenting behaviors, and parenting practices will be pointed out and literature on parenting processes and siblings relationships of youths will be discussed. As it is known, parents play a primary role in the socialization process of children and adolescents (Kiff, Lengua, & Zalewski, 2011). Parenting could be defined as a process in which parents have an influence on children's physical, psychological, social, cognitive, and emotional development from a child's birth to adult years (Bornstein, 2013). In the literature, parenting is broadly called as and identified by parenting styles, parenting practices and parenting behaviors.

One of the most important contributions to parenting literature is Baumrind's typology of parenting. This typology is one of the most prominent and widely accepted theoretical frames in the parenting literature. According to Baumrind (1971; 1991), parenting is characterized by two dimensions: a) responsiveness and b) demandingness. Parental responsiveness is composed of parental warmth, acceptance, attachment, involvement, and reciprocity. On the other hand, parental control, demands regarding maturity, supervision, and disciplinary efforts are

included in demandingness dimension. In her original proposal of the typology, three different parenting styles based on these two dimensions have involved. First, authoritative parenting refers to firm, consistent, and optimal guiding for children's activities and is characterized by warmth, responsiveness, and control. In other words, authoritative parents are high in both responsiveness and demandingness. Second, authoritarian parenting style refers to restrictive, punitive, and rejecting styles of parenting in which parents set up some rules implying obedience, discipline, and demands. Authoritarian parents are high in demandingness but low in responsiveness unlike to authoritative parents. Third, permissive parenting reflects high levels of responsiveness but low levels of demandingness. Permissive parents are more likely to show warmth and tolerance and accept their children's behaviors or activities; however, they do not behave in accordance with demands and restrictions (Baumrind, 1971; 1991). Maccoby and Martin (1983) have also added the fourth parenting style to Baumrind's typologies by separating permissive style to permissive-indulgent and permissive-neglecting. For the new parenting styles, indulgent parenting is similar to Baumrind's permissive style which is high level of responsiveness and low levels of demandingness. Unlike indulgent parenting, neglectful parenting is characterized by low demandingness and low responsiveness. Neglectful parents show lack of control and involvement to their children. In addition, disengagement is the most important feature of this type of parenting (as cited in Teti & Candelaria, 2002).

Accumulating research on parenting styles has revealed that some child and adolescent outcomes are highly associated with Baumrind's typology of parenting types. For example, authoritative parenting style is positively linked with adolescents' school performance; whereas, authoritarian and permissive styles of parenting are adversely related to academic achievement (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). Authoritative parenting style is also associated with low level of depression but high level of commitment to school. In addition to this, adolescents with authoritative mother but indulgent father or vice versa are not prone to engage in delinquent behaviors through forming a buffer

effect (Simons & Conger, 2007). Milevsky, Schlecter, Netter, and Keehn (2007) also investigated the influence of parenting styles on adolescents' adjustment level. Their findings revealed that adolescents who have authoritative parents have high levels of self-esteem, have satisfied from the life, and are less depressed. However, incompetency and maladjustment were found as characteristics of adolescents with authoritarian parents (Baumrind, Larzelere, & Owens, 2010).

Beside child and adolescent outcomes, parenting styles also play a decisive role on sibling relationships (Milevsky, 2011). Milevsky, Machlev, Leh, Kolb, and Netter (2005) pointed out that authoritative and permissive parenting styles and authoritarian and neglectful parenting styles differed in terms of sibling support. The findings showed that adolescents who have authoritative parents feel higher levels of support from their siblings and tend to be close to their siblings than all other adolescents who have authoritarian and neglecting parents. Similar to these findings, Milevski, Schlecter, and Machlev (2011) investigated parental styles with respect to the quality of sibling relationships. They suggested that adolescents with authoritarian and neglectful parents define their sibling relationships as less supportive than adolescents with authoritative and permissive parents. In addition, authoritative parenting style was found to be linked with higher level of closeness among siblings than adolescents with both neglectful and authoritarian parents.

It is obvious that parenting styles are highly correlated with child, adolescent, and sibling outcomes as explained by social learning theory. Thus, many researchers have relied on Baumrind's parenting typologies in examining parental influence on child outcomes. However, Darling and Steinberg (1993) focused that parenting styles do not directly create situational specific outcomes because they impact adolescent and sibling outcomes through behaviors which parents engage in. Darling and Steinberg's integrative model of parenting emphasizes that Baumrind's parenting typologies are broad concepts in the examination of parental influence. In addition, Lee, Daniels, and Kissinger (2006) have

highlighted domain specific nature of parenting practices, which enable to indicate parental influences on child or sibling outcomes. They suggested that rather than parenting styles, parenting practices directly affects those outcomes by targeting certain behaviors.

In that sense, it is crucial to mention about Darling and Steinberg's focus of specific level of parenting namely parenting practices. Darling and Steinberg (1993) have advocated that parenting styles and practices coexist; however, they are different from each other. Their model suggests that parenting style is defined as beliefs and "attitudes toward the child that are communicated to the child and create an emotional climate in which parenting behaviors are expressed" (Darling & Steinberg, 1993, p. 488); in contrast, parenting behaviors (i.e. parenting practices) consist of not only specific, goal-directed behaviors performed by parents as personal duties or tasks but also behaviors that are not displayed with any intend or any goal such as gestures, tone of voice, and emotional expression. Therefore, in the present study, the influences of parenting practices on sibling conflict resolution strategies were examined instead of the influence of parenting styles.

In addition to Darling and Steinberg's conceptual model of parenting practices, in the current study, Steinberg and Silk's three dimensions of parenting practices in parent-adolescent relationships were investigated. Steinberg and Silk (2002) have mentioned that due to differences in family relationships through adolescence period, there are three parenting dimensions come into prominence in adolescent-parent relationships. Those dimensions are a) autonomy, b) harmony, and c) conflict. Autonomy refers to the extent to which parents control their adolescent offspring in order to develop both interdependency and independency in a balanced state. Autonomy includes parenting behaviors such as psychological control, monitoring, supervision, or support. Harmony includes parental warmth, involvement, or closeness. It refers to the extent in which parents engage in such behaviors in the relationship with their children. They also defined conflict as the

extent to which parent-adolescent relationship is composed of antagonistic, hostile, and argumentative style of communication (Steinberg & Silk, 2002; Vazsonyi, Hibbert, & Snider, 2003).

Empirical work proposed that these three dimensions are highly correlated with adolescent outcomes. In terms of autonomy, effective parental monitoring in which adolescents are allowed to be independent and related is associated with positive adolescent adjustment outcomes such as school achievement (Jacobson & Crockett, 2000) and negatively linked with engaging in risky sexual behaviors, drug use, alcohol consumption (DiClemente, Wingood, Crosby, Sionean, Cobb, Harrington, Davies, Hook, & Oh, 2001), and delinquent behaviors (Jacobson & Crockett, 2000). Additionally, parental support is a strong predictor of positive child outcomes. It is known that children whose parents provide love, support and control over their children in terms of behaviors tend to have willingness to disclose about oneself to other people (Soenens, Vansteenkiste, Luyckx, & Goossens, 2006). In addition, there is a significant relationship between perceived parental support and sibling relationships. Research examining this relationship showed that perceived parental support is positively linked with sibling warmth but negatively related to sibling conflict and parental support also provided the stability of these dimensions over adolescence period (Derkman, Engels, Kuntsche, van der Vorst, & Scholte, 2011).

With respect to harmony, Trentacosta et al. (2011) examined the trajectories of parental warmth from childhood to adolescence and related adolescent outcomes. They found that adolescents who experience stable and high parental warmth tend to have higher quality in peer relationships compared to adolescents who perceive low and decreasing parental warmth (also see Wang, Dishion, Stormshak, & Wouldett, 2011). Parental warmth is also linked to adolescents' engagement in positive behaviors (Wang et al., 2011). Moreover, Tucker and her colleagues (2003) stated that high level of perceived warmth from mothers and fathers, and low level of conflict with mothers is associated with adolescents' effective

conflict resolution. Moreover, warmth and acceptance from parents are indirectly affect children's relationship with their siblings. Kim et al. (2006) found that if adolescents perceive an increasing level of acceptance from their mothers, intimacy with their siblings changes in the same direction. Similarly, decrease in acceptance result in decrease in sibling intimacy. In addition, adolescents who feel closeness to their parents tend to show self-disclosure and they are less likely to engage in antisocial behaviors (Vieno, Nation, Pastore, & Santinello, 2009). Moreover, parental closeness in the childhood is positively associated with psychological functioning and satisfaction with life and negatively linked with psychological distress in the adulthood (Flouri, 2004).

When considering conflict, research has suggested that adolescents who experience high level of conflict with mothers are more inclined to engage in antisocial behaviors (Trentacosta et al., 2011). In addition, disputes and disagreements in the family subsystems may increase the likelihood of harsh and argumentative type of interaction with other family members, which strongly advocates family system theory (Bank, Burraston, & Snyder, 2004). Kim and her colleagues (2006) longitudinally investigated parent-child conflict and sibling relationship through adolescence period. They found that increase in conflict between parents and adolescents, specifically; father-child conflict is associated with increase in conflicts between siblings. Tucker and her colleagues (2003) mentioned that low level of conflict with mothers is linked with adolescents' effective conflict resolution. Furthermore, it was shown that mother-adolescent conflict resolution strategies in terms of compromise, attack, and avoidance predicted the same strategy used by adolescents' for sibling conflict resolutions which is in line with family system theory (Reese-Weber & Bartle-Haring, 1998).

1.3.2 Parental Differential Treatment (PDT)

In the recent years, beside other parenting behaviors, parental differential treatment has taken considerable attention from researchers questioning

intrafamilial interactions. Plomin and his colleagues focused on nonshared environment in which sibling differences are interpreted (Rowe & Plomin, 1981; Plomin, 1994). Parental differential treatment (PDT) is described as treating one child more favorably or unequal treatment towards siblings. In other words, researchers have conceptualized PDT in terms of either the extent to which a sibling experience favoritism from parents or the degree of differentiation in the treatment (Daniel & Plomin, 1985; Jensen, Whiteman, Fingerman, & Birditt, 2013). Although parenting behaviors which are correlated between all children in the same family affect child and adolescent development, parental differential treatment is a factor within nonshared environment also has an impact on adolescent development (Feinberg & Hetherington, 2001; Tamrouti-Makkink, Dubas, Gerris, & Aken, 2004) as well as sibling relationships (McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000; Dunn, O'Connor, Rasbash, & Behnke, 2005) above other parenting behaviors.

1.3.2.1 Child and Sibling Outcomes of PDT

While considering the effects of perceived parental differential treatment on adolescent outcomes, a number of studies have suggested that adolescent adjustment is influenced by the extent to which they are differentially treated by parents. That is, poorer self-esteem (McHale et al., 2000), more depressive symptoms (Feinberg & Hetherington, 2001; Shanahan, McHale, Crouter, & Osgood, 2008; Jensen et al., 2013), antisocial behaviors, externalizing behaviors, and internalizing behaviors (Tamrouti-Makkink et al., 2004) and social responsibility (Feinberg & Hetherington, 2001) were found to have significant associations with parental differential treatment.

In the literature, the links between PDT and some structural variables have been examined. For instance, Kowal and Kramer (1997) also investigated the relationship between birth order and perceived differential treatment from parents. Their findings suggest that first-born children are more inclined to report

differential treatment as compared to second-born children in terms of both affection and control, similar to Feinberg, Neiderhiser, Simmens, Reiss, and Hetherington's findings (2000). As regards to differential maternal warmth, McHale et al. (2001) posited that, first-borns are treated by their mothers more favorably when they are in childhood; however, second-borns are more favored by their mothers when they are in adolescence. The findings also supported by Kowal and Kramer's (1997) results, which imply that adolescence period has become a transition period in terms of unfavorable perceptions about differential treatment from parents. The impacts of perceived differential treatment are also found in sex-differential responses as well as in various gender compositions. McHale et al. (2001) found that disfavored earlier-borns in the same-sex sibling pairs tend to perceive the treatment as unfair with respect to earlier-borns in the mixed-sex sibling pairs. In addition, in opposite-sex dyads, mothers are more likely to favor their daughters than sons whereas fathers tend to favor their sons over daughters. This implies that in terms of favoritism parents are more inclined to differentially treat or favor same sex child of theirs. In addition to those child and adolescent outcomes, the effects of parental differential treatment have been studied in the parent-child and sibling relationship. Shanahan et al (2008) found a trend from childhood to adolescence period in which parental differential treatment decreases the positivity between siblings. In a similar way Boll et al. (2003) found that parental treatment in favorably or unfavorably to children results in poorer sibling relationships. That is, equal treatment predicts positive sibling relationships. Moreover, McHale et al.'s results (2001) indicated that children and adolescents having perceptions about lower levels of warmth and higher levels of control from parents compared to their siblings reported negativity in the sibling relationships. Shanahan et al. (2008) posited that the earlier-borns tend to address more conflicts with their parents compared to their younger siblings. That is, older siblings are treated unfavorably in terms of conflict they experience with their parents. In terms of fairness of parental treatment, youths are more likely to say that parents' treatment of them and their siblings is not fair. In contrast, child participants are inclined to report more fairness in

treatment. In other words, reports of parental differential treatment change in different developmental periods. (McHale et al., 2001). Jensen et al. (2013) also reported that the more the siblings are differentially treated by their parents in terms of support, the less they feel intimacy to their siblings. In terms of conflict between siblings, Stocker, Dunn, and Plomin (1989) stated that differential attention, control, and responsiveness from mothers have led to sibling competition. In addition to this, differential affect and responsiveness have resulted in older sibling to have a control over the sibling interaction. Moreover, Boll, Ferring, and Filipp (2003) investigated the association between parental differential treatment and parent-adult children relationship quality. Their findings suggested that if adults experience disfavoritism, they tended to report that the relationship with parents had deteriorated; however, more favoritism from parents was associated with better involvement of the relationship with parents. That may be an antecedent of using avoidant or nonconfrontational strategies in conflict resolution.

Even though the relationships between parental differential treatment and parent-child or sibling relationships have been studied in recent years, to the best of author's knowledge, there is no study investigating the impacts of parental differential treatment on sibling conflict resolution strategies. Based on family systems theory (Minuchin, 1985), the factors affecting specific subsystems may also allow the understanding of the dynamics of other subsystems. Within this perspective both parenting practices such as parental closeness, support, and conflict and parental differential treatment may have an effect on adolescents' conflict resolution strategies.

1.4 Individual Differences in Sibling Conflict and Resolution Strategies

Besides environmental factors affecting sibling relationships, there are some individual differences which contribute to sibling relationships and conflict

resolution. This section would clarify the role of temperamental characteristics of adolescents as an individual difference factor in sibling relationships.

1.4.1 Temperament

Temperament is one of the widely studied individual differences in the developmental psychology and it plays essential role in explaining child, adolescent, and adult outcomes. Researchers have defined temperament as innate individual differences that appear at birth and continue to exist throughout the one's life in a stable manner (Mervielde & De Pauw, 2012). Goldsmith et al. (1987) have also made an integrated definition of temperament:

Temperament consists of relatively consistent, basic dispositions inherent in the person that underlie and modulate the expression of activity, reactivity, emotionality, and sociability. Major elements of temperament are present early in life, and those elements are likely to be strongly influenced biological factors. As the development proceeds, the expression of temperament increasingly becomes to be influenced by experience and context (p. 524).

There are different kinds of theoretical frameworks explaining the structure of temperament. One of the most important reference points in temperament literature is suggested by Chess and Thomas (1985). They identified nine temperament traits which reflect three super-factors: Activity, intensity of reaction, persistence, and attention form the first component, mood quality, approach, withdrawal, adaptability, regularity and predictability generate the second super-factor, and distractibility and responsiveness (as cited in Mervielde & De Pauw, 2012) form the third super factor. Three different types of child temperament in early childhood are also categorized by Thomas and Chess in terms of the intensity of the nine traits. "Easy" children are characterized by easiness in adjusting to novel situations, quickness in forming daily routines, and easiness to calm down. In contrast, "difficult" children are described by slowness in adjusting novel situations and negativity and intensity in reacting to

environmental stimuli and incidents. The last early childhood temperament type is “slow-to-warm up”, identified by showing traits of difficult children like uncomfotability and irritability in novel situations or withdrawal and then adapting slowly through exposure to new environment (Thomas, Chess, & Korn, 1982). Thomas and Chess (1977) have given an emphasis on the notion of “goodness-of-fit”, which is the extent to which a child’s temperament is adaptable to the demands coming from the environment. It means that the balance between the child’s temperament and social environment is crucial for parenting (as cited in Mervielde & De Pauw, 2012).

Another model focusing on the origins of temperament is Kagan’s behavioral inhibition model. Kagan stressed the biological basis of behavioral inhibition such as release of higher levels of cortisol in novel situations (Kagan, Reznick, & Snidman, 1987) and the intensity of GABA receptors (Kagan, 2003). In the model, Kagan has emphasized two types of children in terms of temperamental characteristics: inhibited child and uninhibited child. According to him inhibited child shows high-reactivity and fear in novel situations and unable to behave in relaxed way. However, he defines uninhibited child as low in reactivity and high in sociability. According to Kagan (2013), there is a continuity of behavioral inhibition from infancy to adolescence implying that this may influence psychosocial development of individuals.

Buss and Plomin (1975) also introduced Emotionality-Activity-Sociability (EAS) model as a descriptive framework for temperament. In this model, they concerned about three temperament dimensions: a) “emotionality” involves instable emotional reactions ranging from indifference to tendency to act in extreme emotions such as anger and fear, b) “activity” is associated with engage in behaviors or features of high levels of energy such as tempo and vigor, and c) “sociability” refers to proneness to engage in social relationships with others and to prefer affiliation (as cited in Mervielde & De Pauw, 2012).

Rothbart is another researcher who contributed to temperament literature with psychobiological model of temperament. According to Rothbart, Ahadi, Hershey, and Fisher (2001), not only affective systems are the central dimensions of temperament, but also attentional systems have impacts on self-regulation and they implied that those systems form dimensions of temperament. In that sense, their scales assessing temperament are grounded on reactivity and self-regulation. Reactivity is associated with physiological responses generated from motor, affective, and sensory systems. In contrast, self-regulation is called as modulatory process which facilitates a balance of reactivity. Rothbart and Bates (2006) stated that temperamental characteristics throughout the life could be categorized as super-factors which are surgency, effortful control, and negative affect. Surgency and negative affect correspond with physiological processes including reactivity but effortful control is about the attentional self-regulation process (as cited in Mervielde & De Pauw, 2012). In addition to those aspects, Ellis and Rothbart (2001) proposed that 12 temperamental traits could be included in four higher order categories which are effortful control, surgency, negative affect, and affiliativeness. Detailed description of the temperament dimensions of Rothbart's model will be provided in the method section.

Although the main focus of Rothbart's model is infant temperament, due to the "stability" of temperament by its definition (Ganiban, Saudino, Ulbricht, Neiderhiser, & Reiss, 2008), they have extended the investigation of temperament from infancy into adult years and the current study focused on adolescent temperament characteristics.

In summary, those theories have shed light on temperament as an individual difference factor; therefore, they have provided backgrounds to understand the influence of temperamental characteristics of individuals not only on child and adolescent outcomes but also in close relationships. Therefore, the next two sections will emphasize on the impacts of temperamental characteristics.

1.4.1.1 Effects of Temperament on Child and Adolescent Outcomes

All aforementioned theories have been supported by a number of empirical studies in terms of the influence of temperament on children's and adolescent's development. In the literature, it has been mentioned that temperament affects children's and adolescents' adjustment levels beyond the effects of parenting (Lengua, 2006; Muris, Meesters, & Blijlevens, 2007). Research posited that while some temperamental characteristics have adverse impacts on child and adolescent outcomes, some aspects of temperament influence children and youths positively in terms of adjustment. For example, negative affectivity including frustration, aggressive reactivity, and depressive mood in the early childhood is linked with later externalizing problems (Gilliom & Shaw, 2004). Specifically, in preadolescence period, there are high levels of behavioral and psychological problems if preadolescents are high in frustration level (Muris et al., 2007). It was also found that unregulated anger and frustration resulted in externalizing behaviors (Eisenberg et al., 2001; Lengua, 2006).

Moreover, fear, irritability, and shyness as characteristics of temperamental surgency have an impact on child and adolescent development in negative ways. For instance, fearful and irritable children were more likely to show internalizing behaviors. In addition, a longitudinal study suggested that in the childhood, increase in fear and irritability over three years period lead to both internalizing and externalizing problems (Lengua, 2006). Similarly, in preadolescence, fear is associated with individuals' internalization and externalization problems. That is, there are high levels of behavioral and psychological problems if preadolescents are fearful (Muris et al., 2007). Moreover, difficult temperament characterized by irritability and fear was found to be a risk factor for ego-control and cognitive development in addition to internalizing and externalizing problems (Stams, Juffer, & van IJzendoorn, 2002). Another temperamental characteristic is shyness, presence of shyness in the middle childhood and its continuity over time was

found to be associated with anxiety related problems in adolescence (Prior, Smart, Sanson, & Oberklaid, 2000).

As is seen, high levels of those mentioned temperamental traits resulted in such adverse influence on individuals' development. On the other hand, the presence of high levels of some other temperamental characteristics may provide positive outcomes. In addition, low levels of those traits may cause negative consequences. Specifically, high levels of behavioral and psychological adjustment problems are linked with preadolescents' lower levels of activation and inhibitory control, which are subdomains of effortful control (Muris et al., 2007). In addition, if effortful control goes up, the probability of experiencing externalizing problems decreases (Lengua, 2006). Similarly, Eisenberg, Zhou, Spinrad, Valiente, Fabes, & Liew (2005) found effortful control as a buffer to engage in aggressive behaviors. Valiente, Lemery-Chalfant, Swanson, and Reiser (2008) found a significant positive relation between high level of effortful control and grades; whereas, less effortful control is linked with absenteeism. In terms of perceptual sensitivity, children with high levels of perceptual sensitivity to facial expressions tend to understand others' emotions easily (O'Toole, Roark, & Abdi, 2002). It means that some temperamental traits serve as buffer for adverse life experiences and reinforce positive developmental outcomes.

1.4.1.2 Effects of Temperament on Sibling Relationships/ Conflict/ Resolution

Temperamental traits not only have an influence on child and adolescent outcomes, but studies also suggest that there is a strong relationship between temperament and individuals' close relationships such as sibling relationships (Brody, 1998). Stocker et al. (1989) investigated the quality of sibling relationships in terms of temperament of siblings through video recorded observations, mother reports, and unstructured interactions. They found that in the observations, if older sibling is shy, the relationship is prone to be less controlling and competitive and if younger sibling is sociable, there is less cooperation

between siblings. However, in unstructured condition, high levels of anger and emotional intensity in younger siblings are linked with higher level of competition in the relationship. Furthermore, less control in the relationship was found if younger sibling is characterized by faster recovery from emotional upset. Also, activity level of younger sibling is positively related to competitiveness and negative sibling relationship. In addition, Brody, Stoneman, and Gauger (1996) examined the moderator role of difficult temperament for parent-child and sibling relationships. and they found that older siblings' difficult temperament strengthen the quality of relationship between parent-child and sibling relations, which means that when older children have a difficult temperament, if there was a positive change in parent-child interaction by which parents manage with difficult temperament of the child, changes in relationship between siblings were in the same direction. In other words, the more positive changes in the quality of parent-child relationships, the more siblings think that their relationship with other siblings changes positively. They also found that if older sibling is "easy" in terms of temperament, the quality of relationship with the sibling is also positive. The study also showed an interaction effect of both siblings' temperaments on father-younger child relationship and sibling relationship. Indeed, difficult older sibling with easy younger sibling predicted positive relationship between siblings and father -younger sibling interaction.

In another study, two different approaches in sibling relationships were tested. The first one is "similarity hypothesis" (Munn & Dunn, 1989) and the second one is "the buffering hypothesis" (Brody, Stoneman, & Burke, 1987) (as cited in Stoneman & Brody, 1993). The similarity hypothesis proposed that if siblings are similar to each other, they are more inclined to engage in positive sibling relationships; whereas, the more temperamental dissimilarity between the siblings, they are more likely to experience conflicts. In contrast, the buffering hypothesis advocates that if siblings' temperaments are not similar to each other, positive temperamental traits of one sibling create a buffering effect in order to prevent conflictual interactions between siblings. Stoneman and Brody (1993) tested these

hypotheses and found that conflict between siblings had reached the highest level as a result of the interaction of high activity level in older sibling and high non-adaptability level in younger ones. Moreover, it was also found that if siblings are similar to each other as regards to low activity level, positive relationship between siblings are more likely to occur. These results confirmed the “similarity hypothesis”. In addition, a buffering effect was found when younger sibling had high levels of activity and older sibling had low activity level. That is, since older siblings have dominant roles in sibling relationships, their positive temperamental characteristics, specifically low activity level, determined the positivity level of the relationship. Therefore, it could be said that low activity levels of older siblings served as a buffer in order to prevent conflictual relationships.

As mentioned above, there are a number of studies investigating the relationship between temperamental traits and sibling relationships; however, to author’s knowledge, the role of siblings’ temperaments on the siblings’ conflict resolution strategies has not been examined. However, there is evidence about the role of personality traits on the conflict resolution strategies. Since it has been known that surgency is associated with extraversion, and effortful control is similar to conscientiousness (Rothbart, Ahadi, & Evans, 2000) and agreeableness (Ahadi & Rothbart, 1994; as cited in Jensen-Campbell et al., 2002), and lastly, negative affect is related to neuroticism (Rothbart, Ahadi, & Evans, 2000). Thus, results of the studies focusing on the relations between personality and conflict resolution could give insight to current study. In terms of conflict resolution styles, Antonioni (1998) suggested that extraversion, conscientiousness, and openness to experience were predictors of integrating style in conflict resolution and they were negatively associated with the use of avoiding style. In addition, extraversion predicted controlling as a strategy of interpersonal conflict resolution; whereas, agreeableness and neuroticism were negatively linked with controlling but positively related to avoiding. Furthermore, Park and Antonioni (2007) found that agreeable or extraverted adolescents tend to use more collaboration in conflict resolution. Interestingly, neurotic individuals were also more likely to use

collaboration or avoidance in the conflict. In terms of competition as a strategy of conflict resolution, individuals with high agreeableness were less likely to compete in the conflicts; in contrast, extraverted adolescents were more likely to behave in such a way. Also, agreeable and introverted individuals preferred obliging style as a conflict resolution. Similar to Park and Antonioni (2007), Basım, Çetin, and Tabak (2009) investigated the relationship between big five personality traits and interpersonal conflict resolution strategies. They found that high levels of openness to experience, extraversion, conscientiousness and agreeableness were positively associated with confrontational strategy use which results in collaboration and it seems to be linked with solution orientation strategy in the current study. In addition, high levels of openness to experience and extraversion but low levels of conscientiousness and agreeableness predicted “approach” to conflict rather than avoid it. However, individuals who are low in openness to experience, introverted but conscientious and agreeable are more likely to avoid in conflict and it seems to be nonconfrontational strategy in this study. Last of all, they found that high levels of openness to experience and agreeableness predicted more emotional expression in conflict resolution process. In addition to these personality traits, aggressive adolescents are less prone to use constructive problem-solving strategies but more inclined to solve their problems in an impulsive manner (Arslan, Hamarta, Arslan, & Saygın, 2010; Gerhart, Seymour, Maurelli, Holman, & Ronan, 2013).

As a summary, since temperamental characteristics may have influences on sibling conflicts and conflict resolution strategies, the current study aimed to examine the role of both older and younger siblings’ temperaments that were - effortful control, negative affect, perceptual sensitivity- on conflict resolution tactics of older siblings. Moreover, how older and younger siblings’ temperaments interact when explaining older siblings’ conflict resolution strategies were also investigated.

1.5 The Current Study

The main aim of the current study was to examine the role of perceived parenting behaviors, parental differential treatment, older and younger siblings' temperament and younger siblings' conflict resolution strategies in the prediction of adolescent older siblings' conflict resolution strategies. The second aim of the study was to investigate whether these relations vary depending on the younger siblings' gender. In addition, it was aimed that whether younger sibling's temperamental traits moderate the relationship between older sibling's temperament and conflict resolution strategies utilized by older sibling. Based on hypotheses of the current study are stated below:

1. It is hypothesized that in mixed-sex sibling relationships, older siblings use more non-confrontational strategies as opposed to same-sex sibling relationships. Further, in the same-sex sibling relationships, older siblings are more likely to use solution-oriented strategies as opposed to mixed-sex sibling relationships.

2. It is hypothesized that older sibling's temperamental characteristics also predict their conflict resolution strategies.

2.1. That is, older sibling's higher levels of effortful control and lower levels of negative affect, and lower levels of perceptual sensitivity are expected to predict higher levels of solution-oriented strategy use.

2.2. In contrast, older sibling's high levels of negative affect but low levels of effortful control are expected to predict higher levels of controlling strategy use.

3. In addition, it is hypothesized that there will be a significant relationship between younger sibling's temperamental traits and strategies used when resolving sibling conflict.

3. 1. That is, younger sibling's higher levels of effortful control, lower levels of negative affect, and lower levels of perceptual sensitivity are expected to predict older sibling's higher levels of solution-oriented strategy use.

3. 2. In contrast, younger sibling's lower levels of effortful control, higher levels of negative affect are expected to predict older sibling's higher levels of controlling strategy use.

4. It is expected that adolescents who have experienced high levels of perceived maternal closeness and support tend to utilize more solution-oriented strategies when solving conflicts with their siblings.

5. It is hypothesized that there will be a significant relationship between perceived maternal conflict and adolescent siblings' use of controlling strategies in the resolution of conflicts, such that higher perceived maternal conflict is associated with more controlling strategies utilized by adolescent siblings while lower conflict is associated with lower use of such strategies.

6. It is expected that there will be a significant relationship between perceived maternal differential treatment and the use of solution-oriented strategies. In other words, high levels of maternal emotion expression and low levels of maternal control towards the older sibling as compared to younger sibling is expected to predict solution-oriented strategy use by older siblings.

7. It is hypothesized that younger siblings' use of solution-oriented, nonconfrontational, and controlling strategies predict the same strategies utilized by older sibling, respectively.

8. It is also hypothesized that younger sibling's temperamental characteristics moderate the relationship between older sibling's temperament and their use of conflict resolution strategies.

8. 1. It is expected that when younger sibling has high level of negative affect and older sibling has higher effortful control level, older sibling will tend to use more solution oriented strategy, which confirm buffering hypothesis.

8. 2. It is expected that when younger sibling has high levels of negative affect, older sibling's higher level of negative affect positively predict older siblings' control-oriented and negatively predict solution-oriented strategy use.

8. 3. It is expected that younger sibling's high levels of perceptual sensitivity moderate the relationship between older sibling's higher levels of effortful control and higher levels of solution-oriented strategies used by older siblings.

8.4. It is expected that when both siblings have high levels of perceptual sensitivity, older siblings are more likely to withdraw or avoid from conflicts.

CHAPTER 2

METHOD

2.1 Participants

A total of 172 sibling pairs participated in the study. Adolescents who have siblings were identified and recruited from 19 different high schools such as Anatolian High School, Social Sciences High School, Girls' Vocational School from different SES levels in Denizli. 172 Female adolescents who were 9th graders were the targets of the study. Their ages ranged between 14 and 16 ($M=15.03$, $SD=.56$).

Although all older siblings were female, 84 female younger siblings and 81 male younger siblings¹ who were the closest siblings of target participants took part in the study. Number of siblings were between 2 and 5 ($M=2.84$, $SD=.91$) and 40.7% of ($n=70$) those participants had one sibling, 40.7% ($n=70$) of them had two siblings, 12.2% ($n=21$) had three siblings, 4.1% ($n=7$) had four siblings, 1.7% ($n=3$) had five siblings. Age differences between older and younger siblings who participated in the present study were maximum 4 years. Age of siblings ranged between 10 and 15 ($M=12.34$, $SD=1.09$). 2.3% of the siblings were 10, 23.3% of the siblings were 11, 24.4% of the siblings were 12, 26.7% of the siblings were 13, 14.5% of the siblings were 14, and 1.2% of the siblings were 15 years old².

Mothers' and fathers' ages also ranged between 30 and 50 ($M=37.87$, $SD=3.92$) and between 33 and 57 ($M=41.82$, $SD=3.91$), respectively. Socioeconomic status of participating adolescents indicated 2.3% of mothers ($n=4$) and 1.2% of fathers ($n=2$) were illiterate, 51.2% of mothers ($n=88$) and 33.7% of fathers ($n=58$)

¹ The rest 6 younger siblings did not report their sex.

² The rest 7 younger siblings did not report their ages.

graduated from primary school, 14.0% of mothers ($n= 24$) and 19.8% of fathers ($n= 34$) graduated from elementary school, 22.1% of mothers ($n= 38$) and 24.4% of fathers ($n= 42$) graduated from high school, 10.5% of mothers ($n= 18$) and 18.0% of fathers ($n= 31$) graduated from university, and only 1.2% of fathers ($n= 2$) completed graduate school. Moreover, participants' family income levels per month showed that 28.5% of them ($n= 49$) had income between 0-1000TL, 33.7% of them ($n= 58$) income between 1000-2000TL, 12.2% of the participants ($n= 21$) had income between 2000-3000TL, 9.3% of them ($n= 16$) earned between 3000-4000TL, 6.4% of them ($n= 11$) had income between 4000-5000TL, and income levels of 5.8% of the all participants ($n= 10$) were 5000TL and above.³ (see Table 2.1 for demographic information). All participants voluntarily took part in this study and written informed consents were collected from mothers for both of their children and also separate informed consents were taken from siblings themselves (see Apendices A & B for informed consents and C for demographic information).

Table 2.1 Parents' and Younger Siblings' Demographic Characteristics ($N= 172$)

	Mothers	Fathers	Y. Sibling	Family
Age (Mean; SD)	37.87; 3.92	41.82; 3.91	12.34; 1.09	
Education Levels				
Illiterate	4(2.3%)	2(1.2%)		
Primary School	88(51.2%)	58(33.7%)		
Elementary School	24(14%)	34(19.8%)		
High School	38(22.1%)	42(24.4%)		
University (undergraduate)	18(10.5%)	31(18.3%)		
Master/Ph.D. (graduate)		2(1.2%)		
Income Levels				
0-1000TL				49(28.5%)
1000-2000TL				58(33.7%)
2000-3000TL				21(12.2%)
3000-4000TL				16(9.3%)
4000-5000TL				11(6.4%)
5000 TL and above				10(5.8%)

³ The rest 7 participants did not state their family income levels.

2.2 Measures

2.2.1 The Resolving Conflict in Relationship (RCR):

RCR is a 29-item self-report scale developed for assessment of conflict resolution strategies in close relationships (Thayer, Updegraff, & Delgado, 2008) (Appendix D & E). The RCR developed by Thayer and her colleagues in 2002 and was adapted to Turkish for this study through translation/back translation method⁴. In the present study sibling version of the scale was used (Killoren et al., 2008). According to results of factor analysis, 27 items were included and the RCR scale was composed of three subscales, which are solution-oriented, non-confrontational, and controlling conflict resolution strategies. *Solution-orientation* includes compromise and negotiation related items as resolution strategies such as “I suggest we work together to create solutions to disagreements” and “I give in when my brother/sister also gives in”. *Non-confrontation* includes avoidance and withdrawal related items such as “I avoid bringing up topics that my brother/sister and I argue about” and “I pretend things don’t bother me so I don’t have to argue with my brother/sister.” Finally, *control* subscale includes competition and antagonism related items such as “I raise my voice when trying to get my brother/sister to accept my position” and “I refuse to give in to my brother/sister when he/she disagrees with me”. The Cronbach alphas for original version of the scale were .59, .79, and .78 for younger siblings’ reports of non-confrontation, solution orientation, and control, respectively. For older siblings’ reports of non-confrontation, solution orientation, and control, the Cronbach alphas were .56, .84, and .79, respectively. In the current study, the Cronbach alphas were found to be .80 for controlling subscale, .80 for solution orientation subscale, and .74 for non-confrontation subscale (see 3.1.1. for factor analysis results of the scale for the present study). Older and younger siblings rated their sibling conflict

⁴ Translations of the RCR, EATQ-R, and SIDE into Turkish were done by the researcher and back-translations into English were done by the supervisor.

resolution strategies in a 5-point Likert type scale, from 1 (not at all) to 5 (very often).

2.2.2 The Early Adolescent Temperament Questionnaire-Revised Form (EATQ-R):

The EATQ-R was used to measure temperamental traits of 9- to 15-year-olds. It was originally developed by Capaldi and Rothbart in 1992 and 65-item short version (Ellis & Rothbart, 2001) was used in the present study (Appendix F). In this study, the scale was translated into Turkish with translation and back-translation method. The short-form of the scale was composed of 12 subscales (10 of them temperament scales and 2 of them behavioral scales), which are grouped within four higher-order factors. First higher-order factor, which is “*effortful control*” includes 3 subscales: a) “*attention*”, which could be defined as the ability to concentrate on an activity in addition to shifting attention if it is necessary (e.g. “It is easy for me to really concentrate on homework problems”), b) “*activation control*” consists of items assessing the ability complete an action when there is a strong tendency to avoid it (e.g. “If I have a hard assignment to do, I get started right away”), c) “*inhibitory control*” refers to the capacity to plan and to suppress inappropriate responses (e.g. “I can stick with my plans and goals”). Second higher-order factors, which is *surgency* is also composed of three subscales: a) *high intensity pleasure* is concerned with the pleasure based on activities including high intensity or novelty (e.g. “I think it would be exciting to move to a new city”), b) *fear* is concerned with unpleasant emotions regarding anticipation of distress (e.g. “I worry about my family when I'm not with them”), and c) *shyness* is defined as behavioral suppression to novel, challenging things particularly social (e.g. “I feel shy about meeting new people”). Third higher-order factor, *negative affect* involves also three subscales, which are a) *frustration* is denominated as negative affect concerning blocking of goals or ongoing tasks (e.g. “It really annoys me to wait in long lines”), b) *depressive mood* involves unpleasant emotions and lessened mood, getting loss of enjoyment and

enthusiasm in activities (e.g. "I get sad more than other people realize"), and c) *aggression* is about hostile and aggressive behaviors involving physical violence to people or objects, verbal aggression, and reactive traits (e.g. "When I am mad, I slam doors"). Last higher-order factor involving the following three subscales is *affiliativeness*: a) *affiliation* involves the desire to be warm and close to others without dependence on shyness or extraversion (e.g. "It is important to me to have close relationships with other people "), b) *perceptual sensitivity* refers to the ability to detect and be perceptually aware of slight and low intensity environmental stimulation (e.g. "I am very aware of noises"), and c) *pleasure sensitivity* refers to the extent to which an individual is pleased for less intense, complex, and novel activities (e.g. "I enjoy listening to the birds sing") (Ellis & Rothbart, 2001).

In the current study, effortful control and negative affect as higher order factors and perceptual sensitivity as a lower-order factor were used. Subscales including 39 items in total were rated by both older and younger siblings. In addition, each item was rated in a 5-point Likert type scale, which is from 1 (almost never true) to 5 (almost always true). EATQ-R is computed as the summing of the scores of each item in a related subscale and formed a combined higher-order factor scores (Muris & Meesters, 2009). In the original scale, the Cronbach alphas for activation control, affiliation, aggression, attention, depressive mood, fear, frustration, inhibitory control, pleasure sensitivity, perceptual sensitivity, shyness, and high intensity pleasure were .76, .75, .80, .67, .69, .65, .70, .69, .78, .71, .82, and .71, respectively.

In the present study, according to factor analysis results, the factor structures of higher and lower order factors of the original scale were changed as *effortful control* (including perceptual sensitivity), *negative affect*, and *depressive mood*. 13, 15, and 11 items were included in effortful control, negative affect, and depressive mood and their internal reliability coefficients were found to be .80, .85, and .71, respectively (see Section 3.1.2. for factor analysis results of the scale

for the present study).

2.2.3 Sibling Inventory of Differential Experience (SIDE):

Sibling Inventory of Differential Experience was designed to assess adolescents' perceived differential experiences within different interactions in terms of sibling relationships, parental treatment, and peer relationships of siblings (Appendix G). The scale was originally developed by Daniel and Plomin in 1984 consisting of 59 items. Of the total, 24 items measuring differential interactions of siblings, 9 items measuring parental differential treatment, and 26 items measuring the interaction of siblings with peers. In the current study, 9 items assessing parental differential treatment were administered to the older siblings. The subscale of parental differential treatment was adapted to Turkish by Apalaçi and Alp (1996). It consists of a) differential mother control, b) mother's differential affection, c) differential father control, and d) father's differential affection. *Differential affection* refers to differential understanding, pride, sensitivity, and favoritism of parents toward their children. Further, *differential control* refers to parents' differential punishment, blame, and strict behaviors toward their children.

The target adolescent siblings filled in the scale to measure their perceptions about maternal differential treatment. The original instrument was 5-point Likert type scale from 1 to 5. Both relative and absolute scores could be calculated for parental differential affect and control in the original version. For calculation of relative scores in SIDE, all items coded in a 5-point Likert type scale, which indicates that higher scores indicating higher positive treatment towards themselves relative to their siblings. Then, a mean score for each subscale is calculated. For calculation of absolute scores in SIDE, 5 point Likert type scale is arranged in an order between -2 and +2, which means that scores of "1", "2", "3", "4", and "5" are converted to "-2", "-1", "0", "1", and "2", respectively. A mean score is also calculated for the absolute score. However, 3-point Likert type scale was used in Turkish adaptation. In that version, due to rare use of the scores of

“1”, “2”, “4”, and “5”, the score of “1” was combined with the score of “2”, which corresponds to the score of “1” (my mother/father usually behaves my sibling more often to my sibling than me in this way) and the score of “4” was combined with the score of “5” corresponding to the score of “3” (my mother/father behaves more often to me than my sibling in this way). Lastly, point 2 as a midpoint corresponds to “my mother/father usually behaves to me and my sibling equally”. As in the Turkish version, in the current study, 3-point Likert type scale was used. The absolute score for this version which is calculated by converting 1, 2, and 3 into -1, 0, and 1 (respectively) was used⁵.

In the original version of the scale, factor loadings were between .77 and .93. Specifically, it was reported that the test-retest reliability results were .77, .82, .85, and .77 for differential mother control, mother’s differential affection, differential father control, and father’s differential affection, respectively. In the Turkish adaptation, the Cronbach alphas were from low to moderate. Therefore, in the current study, the scale was re-translated into Turkish through the translation/back translation method. According to factor analysis results, it was decided that parental differential control includes 6 items and parental differential affection includes 3 items. The reliability coefficients were .64 and .41 for differential control and affect, respectively (see 3.1.3. for factor analysis results of the scale). Due to low reliability of differential affect, in the present study only differential control sub-scale was used.

2.2.4 The Adolescent Family Process Measure (AFPM):

The scale was used to assess parenting processes (i.e. parenting practices) in a multidimensional ways. The scale was originally developed by Vazsonyi, Hibbert, & Snider (2003) and was translated into Turkish by Sayıl & Kindap in 2010 (Appendix H). The 25 item original scale is composed of six sub-dimensions

⁵ Both relative and absolute scores of the scale were calculated and analyses were conducted with them, separately. Due to the same results obtained in the analyses, only absolute scores were used.

including closeness, support, monitoring, intimate communication, conflict, and peer approval as parental practices. Some items for each subscale are exemplified below:

1. *Closeness*: My mother/father trusts me.
2. *Support*: My mother/father does not listen to me or my ideas (reversed).
3. *Monitoring*: When I am not at home, my mother/father knows where I am.
4. *Intimate Relationship*: How frequently do you talk with your mother/father about the things which are important for you?
5. *Conflict*: How frequently do you disagree or engage in conflicts with your mother/father?
6. *Peer Approval*: Do your mother/father approve your friendship with opposite-sex?

The Cronbach alphas of the original scale were ranged from .75 to .83 for mothers and from .79 to .86 for fathers. The Cronbach alphas of the Turkish version of the scale were ranged from .64 to .88. In the current study, parental closeness, support, and conflict factors were used and to measure older siblings' perception of their parents' parental practices. Their Cronbach alphas were found as .77, .73, and .70 in the Turkish version, respectively. In the current study, the Cronbach alphas for maternal closeness, support, and conflict were .81, .72, and .71, respectively. The scale was filled in a 5-point Likert type scale which is from 1 (strongly disagree) to 5 (strongly agree) for closeness, support, and monitoring and from 1 (never) to 5 (very often) for intimate communication, conflict, and peer approval.

2.3 Procedure

First, the ethical approval from Human Subjects Ethics Committee of Middle East Technical University was taken. Then, approval from Management of Education in Denizli was obtained in order to reach participants through the schools. Then, the school administrations of the different type of high schools such as from

Anatolian high schools to vocational high schools in Denizli were contacted. Families of the 9th graders who have a younger sibling within the grade of 5 and 8 were given informed consent forms explaining the aim and the content of the study (see Appendix A & B). The aim of the study was briefly mentioned and confidentiality was guaranteed. After that, the scales (Demographic Information Sheet, RCR, EATQ-R, SIDE, & AFPM) were administered to older siblings in the schools. In order to administer RCR and EATQ-R to younger siblings, questionnaires were sent them through their older siblings in closed envelopes and their answers were taken by providing confidentiality. In order to match siblings' reports of measurements, all sibling pairs were given specific numbers and the analyses were conducted based on matched scores of siblings.

CHAPTER 3

RESULTS

This section consists of three main parts: a) factor and reliability analyses of the Resolving Conflict in Relationship scale (RCR), Early Adolescent Temperament Questionnaire-Revised (EATQ-R), and Sibling Inventory of Differential Experience (SIDE), b) descriptive statistics and bivariate correlations of older and younger siblings' conflict resolution strategies, perceived parenting behaviors, maternal differential control, and older and younger siblings' temperamental characteristics and c) nine set of hierarchical regression analyses to examine the relation between older and younger siblings' temperaments (effortful control, negative affect, & depressive mood), perceived parenting practices (maternal closeness, support, & conflict), maternal differential control, younger sibling's conflict resolution strategies, and conflict resolution strategies (solution orientation, control, & non-confrontation) used by older sibling. All the analyses were computed with SPSS 22.

3.1. Factor & Reliability Analyses

Prior to analyze main hypotheses, three exploratory factor analyses were performed through principle axis factoring in order to decide the dimensionality of the scales.

3.1.1. Factor Analysis of the Resolving Conflict in Relationships

Initially, a principal axis factor analysis with varimax rotation was conducted to determine the primary factors of sibling version of The Resolving Conflict in Relationship Scale. Both older and younger siblings' reports ($N = 309$) were

included in the factor analysis⁶. Kaiser-Meyer-Olkin measure of sampling adequacy (.82) was above the cut off point of .5 and Bartlett's test of Sphericity was significant ($\chi^2(406) = 2207,01, p < .001$), which means that the scale was factorable. Based on the suggestions of Tabachnik and Fidell (2007), the scree plot and eigenvalues were inspected and three-factor solution seemed appropriate. Thus, another principle axis factoring with varimax rotation was employed by restricting the number of factors to three. These three factors explained 18%, 11%, and 9% of the total variance, respectively.

The items were retained on particular factor, if they had loadings above .30. Moreover, if there were cross-loadings of the items, the contents of the particular factors, congruity/incongruity of the theoretical construction and the factor loads were investigated and factors were formed in accordance with this criterion.

Results of the factor analysis showed that the first factor was "*control*" as a conflict resolution strategy. Parallel with the original scale, the whole 10 items of controlling subscale were loaded on this factor. The second factor was identified as "*solution-orientation*" conflict resolution strategy. 1 item (item 11) ("I give in when my brother/sister also gives in") loaded on the "*solution orientation*" subscale in the original version did not meet the factor loading criterion of .30; thus, it was excluded from this factor. Moreover, although item 13 ("I hold back rather than argue with my brother/sister") was loaded on the "non-confrontation" conflict resolution strategy in the original scale, in the present study it was loaded on the solution-oriented strategy with factor loading of .55. For this reason, it was thought that "holding back rather than arguing" was interpreted as a solution of conflict in the Turkish sample and it was decided to keep it in factor 2 (solution-oriented strategy). In the final version of factor 2 there were 9 items (see Table 2). The third factor was identified as "*non-confrontation*" conflict resolution strategy. Unlike to the original scale, item 10 ("I act as though the disagreement doesn't

⁶ Principle axis factor analyses were performed for both older and younger siblings, separately. Because the results suggested the same factor structure, older and younger siblings' reports were combined and analyzed together in order to increase the sample size.

mean much to me”) had a low loading hence, it was excluded from the scale. In addition, item 25 (“I pretend things don’t bother me so I don’t have to argue with my brother/sister”) was cross-loaded on both “*solution-orientation*” and “*non-confrontation*” with factor loadings of .33 and .31, respectively. Because of the congruence with other items and theoretical structure of the scale, that item was decided to be kept under its original factor which was “*non-confrontation*”.

For all factors in the RCR, internal reliabilities were also estimated. The results indicated that Cronbach’s alpha coefficients for “*control*” was .80, for “*solution-orientation*” was .80, and for “*non-confrontation*” was .74 indicating quite high internal reliability coefficients. Factor loadings and eigenvalues of each factor and percent of variance explained by those factors were summarized in Table 3.1.

Table 3.1 Factor Loadings, Eigenvalues, and Explained Variance of Three Factor Solution for “Resolving Conflicts in Relationship” ($N = 309$)

	C	SO	N
Factor 1: Control (C)			
<i>Explained variance = 18.19%</i>			
<i>Eigenvalue = 5.27</i>			
When my brother/sister and I disagree, I want my view to win.	.68		
I keep arguing until I get my way when my brother/sister and I disagree.	.65		
I insist my position be accepted during a conflict with my brother/sister.	.62		
I raise my voice when trying to get my brother/sister to accept my position.	.60		
I defend my opinion strongly with my brother/sister.	.57		
I argue with my brother/sister without giving up my position.	.55		
I refuse to give in to my brother/sister when he/she disagrees with me.	.52		
When I feel I am right, I refuse to give in to my brother/sister.	.46		
I do not change my views during a conflict.	.38		
I have the last word when my brother/sister and I disagree.	.31		
Factor 2: Solution orientation (SO)			
<i>Explained variance = 11.01%</i>			
<i>Eigenvalue = 3.19</i>			
I listen to my brother/sister’s point of view when we disagree.	.70		
My brother/sister and I work together to resolve disagreements.	.69		
I suggest we work together to create solutions to disagreements.	.64		
My brother/sister and I calmly discuss our differences when we disagree.	.59		
I hold back rather than argue with my brother/sister.	.55		
My brother/sister and I talk openly about our disagreements.	.50		
I like to reach a solution that my brother/sister and I both agree to.	.49		
I offer many different solutions to disagreements.	.46		
I frequently give in a little if my brother/sister is willing to do the same.	.38		
I pretend things don’t bother me so I don’t have to argue with my brother/sister.	.33		
I give in when my brother/sister also gives in.			.31

Table 3.1 continued Factor Loadings, Eigenvalues, and Explained Variance of Three Factor Solution for “Resolving Conflicts in Relationship” ($N = 309$)

	C	SO	N
<i>Factor 3: Nonconfrontation (N)</i>			
<i>Explained variance = 9.27%</i>			
<i>Eigenvalue = 2.69</i>			
I avoid discussing the problem with my brother/sister.			.62
I avoid my brother/sister when I think he/she wants to discuss a disagreement.			.61
I keep quiet about my views to avoid disagreements with my brother/sister.			.59
I keep my feelings to myself when I disagree with my brother/sister.			.57
I avoid my brother/sister when we disagree.			.56
I leave the room when my brother/sister and I disagree.			.48
I avoid bringing up topics that my brother/sister and I argue about.			.30
I act as though the disagreement doesn't mean much to me.			

3.1.2. Factor Analysis of the Early Adolescent Temperament Questionnaire-Revised (EATQ-R)

The other factor analysis was performed for the identification of two higher-order factors (effortful control and negative affect) and one lower-order factor (perceptual sensitivity) of EATQ-R. As mentioned in the method section in the present study, effortful control which is composed of attention, inhibitory control, and activation control, negative affect which includes frustration, depressive mood, and aggression, and perceptual sensitivity items were used. Thus, in order to see factors structure of these items in a Turkish sample, the analysis with varimax rotation was performed. Both older and younger siblings' reports ($N =$

278) were investigated for the factor structure⁷. Results of Kaiser-Meyer-Olkin measure of sampling adequacy (.85) was higher than the cut off point of .5 and there was a significant results in the Bartlett's test of Sphericity ($\chi^2(741) = 3378.41, p < .001$), which reflects higher factorability of the scale. There were 9 factors having eigenvalues above 1.00 but inspection of the screeplot suggested 5-factor solution.

Initially, it was decided to conduct principle axis factoring with varimax rotation by restricting the number of factors to 7 factor solution because in the original version, two higher-order constructs which were effortful control and negative affect, each had three lower order factors as negative affect including frustration, depressive mood, and aggression and effortful control including activation control, attention, and inhibitory control. In addition to these, perceptual sensitivity from lower level factors was included in the current study.

Then, 5 and 4 factor solutions were investigated; however, the results did not give meaningful factor structures. Therefore, based on the original version of the scale, three-factor solution was examined. The factor structure demonstrated that those three factors accounted for 35% of the total variance in which 19% of variance was explained by the first factor, 11% of variance was explained by the second one, and 6% of variance was explained by the third one. Inclusion criteria for factor items were also same as the previous analyses mentioned above. According to the factor analysis, factors were named as "*negative affect*", "*effortful control*", and "*depressive mood*", respectively. Although depressive mood should be in the negative affect based on the original scale's factor structure, in the present study items related to depressive mood formed another factor with clustering of some items from frustration and attention. Hence, 15 items were included in the final version of "*negative affect*". Item 22 ("I get very upset if I want to do something and my parents won't let me") with factor loadings of .54 and .45 and item 28 ("I

⁷ Principle axis factor analyses were performed for both older and younger siblings separately. Because the results suggested the same factor structure, older and younger siblings' reports were combined and analyzed together in order to increase the sample size.

get irritated when I have to stop doing something that I am enjoying”) with factor loadings of .52 and .33 were cross-loaded on both factor 1 (*negative affect*) and factor 3 (*depressive mood*), respectively. Because of higher factor loadings on negative affect and conceptual congruence with other items, both of them were kept in the “*negative affect*”. In addition, 6 items which measure effortful control in the original version of the adolescent temperament scale, were negatively loaded on negative affect in the current study. These items were, item 5 (“I have a hard time finishing things on time”), item 7 (“It’s hard for me not to open presents before I’m supposed to” -reverse), item 11 (“When someone tells me to stop doing something, it is easy for me to stop”) , item 12 (“I do something fun for a while before starting my homework, even when I’m not supposed to”-reverse), item 18 (“The more I try to stop myself from doing something I shouldn’t, the more likely I am to do it”-reverse), and item 36 (“I tend to get in the middle of one thing, then go off and do something else” -reverse);their factor loadings were -.41, -.42, -.41, -.43, -.60, and -.31, respectively. Why these items were loaded on negative affect rather than effortful control could be explained by the relationship between impulsivity and effortful control. Eisenberg et al. (2004) stated that effortful control and reactive undercontrol were inversely associated. Thus, it could be interpreted that negative loadings of the effortful control items may indicate impulsivity of the adolescents who participated in this study.

For final factor structure of second factor named as “*effortful control*”, factor analysis results indicated that there were 13 items. In the original scale, perceptual sensitivity is a second-order factor of another subscale; yet, in the current factor analysis all four items of perceptual sensitivity were loaded on effortful control.

This is in line with factor structure of effortful control, in the Toddler Behavior Assessment Questionnaire developed by Goldsmith (1996), which consisted of Attentional Focusing, Attentional Shifting, Inhibitory Control, Low Intensity Pleasure, and Perceptual Sensitivity subscales. Thus, it was decided to add those items into effortful control. Moreover, 5 items were cross-loaded negatively on negative affect but positively on effortful control, respectively. Item 29 (“I put off

working on projects until right before they're due”) with factor loadings of -.53 and .37, item 25 (“I finish my homework before the due date”) with factor loadings of -.41 and .39, item 20 (“If I have a hard assignment to do, I get started right away”) with factor loadings of -.40 and .38, item 38 (“I can stick with my plans and goals”) with factor loadings of -.30 and .53, and item 34 (“I pay close attention when someone tells me how to do something”) with factor loadings of -.32 and .44 were determined to be under the effortful control because of conceptual relatedness to other items in that factor. In addition, item 1 (“It is easy for me to really concentrate on homework problems”) was cross loaded on both factor 2 and factor 3 with factor loadings of .44 and -.33, respectively. Due to its conceptual similarity with factor 2 and negative loading on factor 3, this item was kept in factor 2. Lastly, item 39 (“I get upset if I'm not able to do a task really well”) was loaded on factor 2 with factor loading of .48; even though, it was situated in negative affect in the original version. When translating this item to Turkish “upset” was translated as “sad” since in Turkish there is no directly corresponding word to upset.

The final version of the third factor named as “*depressive mood*” is composed of 11 items. All items in the depressive mood subscale were loaded on the third factor. In addition, two items related to attention which are item 21 (“I find it hard to shift gears when I go from one class to another at school”) and item 24 (“When trying to study, I have difficulty tuning out background noise and concentrating”) were negatively loaded on factor 3 with factor loadings of -.40 and -.38, respectively. Loadings of these attention related factors on depressive mood may be explained by the negative relationship between attention and depressive mood because depressive symptoms is strongly linked with deficiency in attention (Castaneda, Tuulio-Henriksson, Marttunen, Suvisaari, & Lönnqvist, 2008). Besides, two frustration related items, item 17 (“It bothers me when I try to make a phone call and the line is busy”) and item 35 (“I get very frustrated when I make a mistake in my school work”) were loaded on the third factor. Also, the other frustration related item which is item 37 (“It frustrates me if people interrupt me

when I'm talking") was cross-loaded on both negative affect and depressive mood with the factor loadings of .34 and .37, respectively. Due to higher loading on factor 3 (*depressive mood*), this item was located in that factor. The reason why these items were loaded on depressive mood rather than negative affect could be interpreted through positive relationship between depressive mood symptoms and frustration. Disruptive Mood Dysregulation Disorder (DMDD) which is a new category of mood disorders for children and adolescents in DSM-V could shed light on giving meaning of such factor loadings (American Psychiatric Association, 2013). If the criteria of DMDD are taken into consideration, it could be stated that items loaded on depressive mood are similar to them. Research also indicated that adolescents who have Disruptive Mood Dysregulation Disorder are more likely to be frustrated than healthy age-mates (Deveney, Connolly, Haring, Bones, Reynolds, Kim, Pine, & Leibenluft, 2013); therefore, the participating adolescents who reported higher depressive mood may feel frustration as well. Factor loadings and eigenvalues of each factor and percent of variance explained by those factors were summarized in Table 3.2.

For final factor structure of EATQ-R, internal reliability estimates were also performed. For factor 1 which resembles "*negative affect*", the Cronbach's alpha coefficient was found to be .85, for factor 2, "*effortful control*", the coefficient was .80, and for the last factor, "*depressive mood*", the the coefficient was .71, reflecting acceptable internal reliability coefficients.

Table 3.2 Factor Loadings, Eigenvalues, and Explained Variance of Three Factor Solution for Early Adolescent Temperament Questionnaire-Revised

	NA	EC	DM
<i>Factor 1: Negative Affect (NA)</i>			
<i>Explained variance = 19.33%</i>			
<i>Eigenvalue = 7.54</i>			
If I get really mad at someone, I might hit them.	.65		
When I'm really mad at a friend, I tend to explode at them.	.65		
I tend to be rude to people I don't like.	.62		
The more I try to stop myself from doing something I shouldn't, the more likely I am to do it.	-.60		
If I'm mad at somebody, I tend to say things that I know will hurt their feelings.	.56		
It really annoys me to wait in long lines.	.54		
I get very upset if I want to do something and my parents won't let me.	.54		.45
I get irritated when I have to stop doing something that I am enjoying.	.52		.33
I pick on people for no real reason.	.48		
When I am angry, I throw or break things.	.48		
I do something fun for a while before starting my homework, even when I'm not supposed to.	-.43		
It's hard for me not to open presents before I'm supposed to.	-.42		
When someone tells me to stop doing something, it is easy for me to stop. (reverse)	-.41		
I have a hard time finishing things on time.	-.41		
I tend to get in the middle of one thing, then go off and do something else.	-.31		
<i>Factor 2: Effortful Control</i>			
<i>Explained variance = 10.55%</i>			
<i>Eigenvalue = 4.12</i>			
I put off working on projects until right before they're due. (reverse)	-.53	.37	
I finish my homework before the due date.	-.41	.39	
If I have a hard assignment to do, I get started right away.	-.40	.38	
I notice even little changes taking place around me, like lights getting brighter in a room.		.57	
I can tell if another person is angry by their expression.		.54	
I can stick with my plans and goals.	-.30	.53	
I tend to notice little changes that other people do not notice.		.52	
I am good at keeping track of several different things that are happening around me.		.48	
I get upset if I'm not able to do a task really well.		.48	
I am very aware of noises.		.47	
It is easy for me to really concentrate on homework problems.		.44	-.33
I pay close attention when someone tells me how to do something.	-.32	.44	
It's easy for me to keep a secret.		.39	

Table 3.2 continued Factor Loadings, Eigenvalues, and Explained Variance of Three Factor Solution for Early Adolescent Temperament Questionnaire-Revised

Factor 3: Depressive Mood (DM)
Explained variance = 5.55%
Eigenvalue = 2.17

I feel pretty happy most of the day. (reverse)		.58
My friends seem to enjoy themselves more than I do.		.51
I get sad more than other people realize.		.51
I get sad when a lot of things are going wrong.		.49
It often takes very little to make me feel like crying.		.45
I find it hard to shift gears when I go from one class to another at school.		-.40
When trying to study, I have difficulty tuning out background noise and concentrating.		-.38
It frustrates me if people interrupt me when I'm talking.	.34	.37
I feel sad even when I should be enjoying myself, like at Christmas or on a trip.		.36
It bothers me when I try to make a phone call and the line is busy.		.32
I get very frustrated when I make a mistake in my school work.		.30

3.1.3. Sibling Inventory of Differential Experience (SIDE)

The factor structure of Sibling Inventory of Differential Experience was also investigated due to low internal reliability coefficients of some factors (i.e. maternal differential affection) in the Turkish version adapted by Apalaçi and Alp (1996) The factor analysis was conducted with varimax rotation with the 156 older siblings. The results of Kaiser-Meyer-Olkin measure of sampling adequacy (.70) was higher than the cut off point of .5 and the Bartlett's test of Sphericity was significant ($\chi^2(36) = 169.10, p < .001$); hence, the scale was factorable. There were three factors which had eigenvalues above 1.00 but screeplot seems to indicate that there may be 2 factors. For this reason, another principle axis factoring was performed by fixing the factor numbers into two based on original version of the scale. The results demonstrated that the first factor named as “*maternal differential control*” and the second factor named as “*maternal*

differential affection” accounted for 28% and 14% of total variance, respectively. As stated above, the inclusion criteria of items on particular factor was the same as before. The factor structure demonstrated that item 1 (“Our mother disciplined us (for example, punished or scolded)”) was loaded on both factors with factor loadings of .47 and -.39 for factor 1 and 2, respectively. Because of negative and lower loading of that item on differential affection and conceptual similarity with other items on differential control, the item was decided to be included in differential control. In addition, the items 4 (“Our mother was sensitive to what we thought or felt (she/he understood us)”) and 8 (“Our mother/father tended to favour one of us”) were negatively loaded on factor 1 with factor loadings of -.42 and -.35 rather than factor 2 as in the original version. The decision about those two items was given after conducting reliability analyses according to original and current factor structures. The Cronbach’s alpha coefficients based on the original version was found to be .61 for maternal differential control and .36 for maternal differential affection; whereas, the Cronbach’s alpha coefficients based on current factor structure formed through extracting item 4 and 8 were .41, indicating poor reliability coefficient as in the previous Turkish version. For that reason, because those items (reverse) increased the internal reliability coefficient of maternal differential control from .61 to .64, they were included in that factor. As a result, final version of maternal differential control consisted of 6 items and maternal differential affection was excluded from further analyses. Factor loadings and eigenvalues of each factor and percent of variance explained by those factors were summarized in Table 3.3.

Table 3.3 Factor Loadings, Eigenvalues, and Explained Variances of Sibling Inventory of Differential Experience ($N = 160$)

	DC	DA
<i>Factor 1: Differential Control</i>		
<i>Explained Variance: 27.63</i>		
<i>Eigenvalue: 2.49</i>		
Our mother disciplined us (for example, punished or scolded)	.70	
Our mother punished us for our misbehaviour	.58	
Our mother was strict with us	.47	-.39
Our mother was sensitive to what we thought or felt (she understood us) (reverse)	-.42	
Our mother tended to favour one of us (reverse)	-.35	
Our mother blamed us for what another family member did	.30	
<i>Factor 1: Differential Affect</i>		
<i>Explained Variance: 14.06</i>		
<i>Eigenvalue: 1.27</i>		
Our mother was proud of the things we did		.57
Our mother showed interest in the things we liked to do		.34
Our mother enjoyed doing things with us		.32

3.2. Data Cleaning

Before the analyzing main hypotheses, the data was screened in terms of accuracy and missing values. A total of 10 cases which have more than 5% missing values for any of scales were deleted. Then, to deal with missing values, separate expectation maximization (EM) analyses, which give more accurate estimates than any other replacement methods, were performed for each item which has less than 5% of the missing values in the RCR, EATQ-R, SIDE, and AFPM. After missing data treatment, the composite scores were formed for each subscale. Then, univariate outliers were detected through examining z scores. 5 univariate outliers were found and they were deleted. After that, skewness and kurtosis were examined with respect to normality, which indicated that only closeness subscale of the Adolescent Family Process Measure was problematic in terms of skewness and kurtosis. Then, 3 multivariate outliers were found for the total of subscales

and they were also deleted. Because of normality problem in closeness subscale, univariate outliers were investigated for that subscale, again. 2 cases were found to be as univariate outliers and after deletion of those cases, the subscale became normal. Then linearity and homoscedasticity were checked with scatter-plots. Multicollinearity assumption was also met due to no correlation between variables higher than .90. In conclusion, further analyses were conducted with 172 cases.

3.3. Descriptive Analyses

Descriptive measures for older and younger siblings' conflict resolution strategies (Resolving Conflict in Relationships-Sibling Form) and temperamental characteristics (Early Adolescent Temperament Questionnaire-Revised), parenting practices (The Adolescent Family Process Measure), and maternal differential control (Sibling Inventory of Differential Experience) were summarized in the Table 3.4.

Table 3.4 Descriptive Statistics for Measures of the Study ($N = 172$)

	Min.	Max.	Mean	SD
Conflict Resolution Strategies				
Solution orientation older	1,67	5,00	3,2987	,70911
Solution orientation _younger	1,33	5,00	2,9834	,78489
Control_older	1,32	4,90	3,4661	,75609
Control_younger	1,30	5,00	3,3339	,74783
Nonconfrontation_older	1,00	4,75	2,6869	,70576
Nonconfrontation_younger	1,00	4,38	2,6547	,70371
Parenting Practices				
Maternal support	4,00	20,00	13,6339	3,40642
Maternal conflict	3,00	14,00	8,0136	2,37026
Maternal differential control	-,67	,83	,0715	,27647
Temperamental Characteristics				
Effortful Control older	2,46	5,00	3,8506	,48812
Effortful control_younger	2,08	5,00	3,7460	,61567
Negative affect_older	1,27	4,33	2,8022	,63433
Negative affect_younger	1,13	4,67	2,8921	,73233
Depressive mood_older	1,73	4,82	3,3301	,57828
Depressive mood_younger	1,18	4,64	2,9913	,57806

3.4. Correlational Analyses

Pearson's bivariate correlation analyses were performed in order to understand the relationship between older and younger siblings' conflict resolution strategies, siblings' temperamental traits, and parenting practices (see Table 3.5).

3.4.1. Correlations between Sibling Conflict Resolution Strategies for Older and Younger Siblings

Bivariate correlations between older siblings' conflict resolution strategies indicated that solution oriented strategy was negatively associated with controlling strategy ($r = -.28, p < .001$) and positively correlated with non-confrontational strategy ($r = .17, p < .05$). However, there was no significant correlation between controlling and non-confrontational strategies. Based on correlation analysis for younger siblings' conflict resolution strategies, negative correlation was found between solution oriented and controlling strategies ($r = -.38, p < .001$); yet, non-confrontational strategies used by younger siblings were not significantly correlated with solution oriented and controlling strategies used by younger siblings.

According to correlations between older and younger siblings' conflict resolution strategies, it was found that solution oriented strategy used by older siblings were positively linked with younger siblings' solution oriented strategies ($r = .49, p < .001$); whereas, it was negatively associated with controlling strategy used by younger siblings ($r = -.16, p < .05$). Moreover, older siblings' controlling strategy used in their sibling conflicts was positively associated with controlling and non-confrontational strategies used by their younger siblings ($r = .25, p < .001, r = .16, p < .05$, respectively) but correlated with solution oriented strategy of younger siblings in a negative way ($r = -.18, p < .05$). Finally, non-confrontational strategy used by older siblings was positively linked with the same strategy used by their younger siblings ($r = .25, p < .001$).

3.4.2. Correlations between Perceived Parenting Behaviors

According to correlation analysis for parenting behaviors, maternal closeness and support found to be significantly correlated in a positive way ($r = .45, p < .001$) and they were negatively associated with maternal conflict ($r = -.49, p < .001, r = -.56, p < .001$, respectively). Maternal differential control was also negatively related with maternal closeness and support ($r = -.28, p < .001, r = -.31, p < .001$, respectively) but positively associated with maternal conflict ($r = .23, p < .05$).

3.4.3. Correlations between Older and Younger Siblings' Temperamental Traits

Bivariate correlation results of older and younger siblings' temperaments showed that older siblings' effortful control was negatively related with older siblings' negative affect ($r = -.22, p < .05$) and younger siblings' effortful control level was negatively associated with younger siblings' negative affect ($r = -.47, p < .001$). In addition, older siblings' negative affect level was positively associated with younger siblings' negative affect ($r = .16, p < .05$) and older siblings' depressive mood ($r = .43, p < .001$). Lastly, there was a positive significant relationship between younger siblings' negative affect and depressive mood ($r = .50, p < .001$). Other correlations between older and younger siblings' temperamental traits were found to be non-significant.

3.4.4. Correlations between Older and Younger Siblings' Conflict Resolution Strategies and Perceived Parenting Behaviors

According to bivariate correlations between older siblings' conflict resolution strategies and parenting behaviors, solution oriented strategies used by older siblings was positively associated with maternal closeness ($r = .35, p < .001$) and support ($r = .22, p < .05$) but negatively related with maternal conflict ($r = -.40, p$

<.001). In addition, while there was a negative significant relationship between controlling strategy and maternal support ($r = -.18, p <.05$), positive significant association was found between that strategy and maternal conflict ($r = .39, p <.001$). Non-confrontational strategy was not significantly correlated with any parenting behaviors.

For younger siblings, correlational analysis showed that solution oriented strategy was positively linked with both perceived maternal closeness and support ($r = .27, p <.001, (r = -.24, p <.001, respectively)$); however, negatively associated with perceived maternal conflict ($r = -.37, p <.001$). Besides, it was found that controlling strategy was only correlated with perceived maternal conflict in a positive way ($r = .18, p <.05$). Non-confrontational strategy was not linked with any maternal parenting behaviors.

When looking at the relations between maternal differential control and conflict resolution strategies used by both older and younger siblings, none of the correlations were significant.

3.4.5. Correlations between Older and Younger Siblings' Conflict Resolution Strategies and Older and Younger Siblings' Temperaments

Correlations between strategies used by older siblings in conflict resolution and their temperamental characteristics demonstrated that solution oriented strategy was correlated with older siblings' effortful control, negative affect, and depressive mood ($r = .26, p <.001, r = -.42, p <.001, r = -.16, p <.05, respectively$). Moreover, controlling strategy used by older sibling was significantly associated with older siblings' negative affect and depressive mood in a positive manner ($r = .48, p <.001, r = .28, p <.001, respectively$). Further, non-confrontational strategy used by older siblings was positively related with negative affect of younger siblings ($r = .20, p <.01$).

When investigating the relationships between younger siblings' conflict resolution strategies and their temperamental characteristics, it was found that solution oriented strategy was associated with effortful control in a positive manner ($r = .30, p < .001$); whereas, negatively linked with both negative affect and depressive mood ($r = -.32, p < .001, (r = -.17, p < .05, respectively)$). In contrast, controlling strategy was negatively correlated with effortful control ($r = -.20, p < .01$) but positively correlated with negative affect ($r = .50, p < .001$) and depressive mood ($r = .24, p < .001$). Lastly, non-confrontational strategy was only associated with depressive mood positively ($r = .19, p < .05$). In addition to those relationships between younger siblings' conflict resolution strategies and their temperamental traits, solution oriented strategy used by younger siblings was adversely related with negative affect of older siblings ($r = -.27, p < .001$).

3.4.6. Correlations between Perceived Parenting Behaviors and Siblings' Temperamental Traits

Correlation analyses examining the relationship between parenting behaviors and older siblings' temperaments indicated that although maternal closeness was positively related with effortful control ($r = .31, p < .001$), there was a negative relationship between maternal closeness and negative affect ($r = -.27, p < .001$). In addition, maternal support was found to be negatively correlated with both negative affect and depressive mood ($r = -.40, p < .001, r = -.33, p < .001, respectively$). Conversely, maternal conflict was positively associated with negative affect and depressive mood ($r = .53, p < .001, r = .29, p < .001, respectively$).

For relationships between younger siblings' temperamental characteristics and parenting behaviors, it was found that maternal closeness was positively linked with effortful control ($r = .16, p < .05$). Furthermore, maternal support was positively associated with effortful control ($r = .25, p < .001$) but negatively

correlated with negative affect ($r = -.20, p < .01$). Maternal conflict was not found to be linked with any temperamental traits of younger siblings.

Table 3.5 Pearson's Correlations between All Variables

		Correlations																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
67	1. Solution (o)	1																
	2. Solution (y)	.49***	1															
	3. Controlling (o)	-.28***	-.18*	1														
	4. Controlling (y)	-.16*	-.38***	.25***	1													
	5. Nonconf. (o)	.17*	.01	-.08	.03	1												
	6. Nonconf. (y)	-.11	.05	.16*	.05	.25***	1											
	7. M. Closeness	.35***	.27***	-.11	-.05	.06	-.02	1										
	8. M. Support	.22**	.24***	-.18*	-.09	-.12	-.07	.45***	1									
	9. M. Conflict	-.40***	-.35***	.39***	.18*	-.10	.10	-.49***	-.56***	1								
	10. Diff. Control	.03	-.06	.15	-.01	-.02	-.02	-.28***	-.31***	.23**	1							
	11. E. Control (o)	.26***	.08	-.03	.02	.09	-.11	.31***	.14	-.15*	.10	1						
	12. E. Control (y)	.03	.30***	.05	-.20**	-.12	.05	.16*	.25***	-.11	-.08	.08	1					
	13. N. Affec (o)	-.42***	-.27***	.48***	.07	-.04	.14	-.27***	-.40***	.53***	.15	-.22**	-.03	1				
	14. N. Affect (y)	-.13	-.32***	.10	.50***	.20**	.06	-.05	-.20**	.19*	-.06	.00	-.48***	.16*	1			
	15. D. Mood (o)	-.16*	-.07	.28***	.05	.06	.13	-.12	-.33***	.29***	.18*	.09	-.05	.43***	.14	1		
	16. D. Mood (y)	-.06	-.17*	.12	.24***	.07	.19**	.00	-.07	.12	-.02	-.04	-.09	.12	.50***	.14	1	

*Significant correlation at the .05 level (2-tailed), ** Significant correlation at the .01 level (2-tailed), *** Significant correlation at the .001 level (2-tailed)

3.5. Results for Hierarchical Regression Analyses

In order to investigate the role of parenting behaviors, siblings' temperaments, and younger sibling's conflict resolution strategy on the older siblings' conflict resolution strategies, nine sets of hierarchical regression analyses were carried out. Specifically, three analyses were conducted for each outcome variable (conflict resolution strategy) in order to investigate all possible temperamental interactions. For all hierarchical regression analyses, younger siblings' age and gender were entered in the first step to see whether conflict resolution strategies of older siblings change according to the age or gender of a sibling. Analyses indicated that neither younger sibling's age nor their gender was related to outcome variables. Thus, they were excluded in all further analyses. Therefore, in **the first step**, older sibling's temperamental traits and in **the second step** younger sibling's temperamental traits were entered. Then, in **the third step** parenting practices including maternal closeness, maternal support, and maternal conflict were entered. In **the fourth step**, maternal differential treatment was entered in order to see whether differential treatment of mother has an effect of older sibling's conflict resolution strategies. After that, younger sibling's conflict resolution strategies including solution-orientation, controlling, and nonconfrontation were entered in **the fifth step**. Finally, in **the sixth step** in order to see whether siblings' temperamental characteristics interacted with each other when explaining older sibling's conflict resolution strategies, one of the younger sibling's temperamental traits consisting of effortful control, negative affect, and depressive mood was picked up as a moderator and the interactions of intended trait with all temperamental characteristics of older sibling were computed for each outcome variable and entered in the final step.

3.5.1. Predicting Older Sibling's Use of "Solution Orientation" as a Conflict Resolution Strategy

Three set of hierarchical regression analyses were employed to determine the factors explaining the use solution orientation when older siblings resolve conflicts with their siblings. For each analysis, effortful control, negative affect, and depressive mood of younger sibling were separately taken in the final step as a moderator.

In all three analyses, older sibling's temperaments, specifically effortful control, negative affect, and depressive mood were entered in **the first step** and they provided statistically significant results, $R^2 = .21$ (adjusted $R^2 = .19$), $F(3, 168) = 14.73$, $p < .001$. In **the second step**, younger sibling's effortful control, negative affect, and depressive mood levels were added and the result indicated that those variables did not account for any additional variance in predicting solution oriented strategy use by older siblings, $R^2 = .22$ (adjusted $R^2 = .19$), $\Delta R^2 = .01$, $F_{inc}(3, 165) = .63$, *ns*). For **the third step**, maternal closeness, maternal support, and maternal conflict as perceived parenting practices were added. It indicated significant results, which means this model explained additional variance in the equation, $R^2 = .28$ (adjusted $R^2 = .24$), $\Delta R^2 = .06$, $F_{inc}(3, 162) = 4.84$, $p < .01$). In **the fourth step**, maternal differential control was entered and the results provided marginally significant increase in R^2 , $R^2 = .30$ (adjusted $R^2 = .25$), $\Delta R^2 = .02$, $F_{inc}(1, 161) = 3.58$, $p < .06$). In **the fifth step**, younger sibling's conflict resolution strategies including solution orientation, control, and non-confrontation were added into the equation. They significantly explained additional variance in predicting solution orientation strategy use by older sibling, $R^2 = .42$ (adjusted $R^2 = .37$), $\Delta R^2 = .12$, $F_{inc}(3, 158) = 10.88$, $p < .001$). In **the final steps**, the interaction terms were entered into the equation and three final models in which each temperamental traits of younger sibling served as a moderator for each model did not yield significant R^2 change in predicting solution orientation strategy used by older siblings: a) younger sibling's effortful control, $R^2 = .42$ (adjusted $R^2 = .36$), $\Delta R^2 = .00$, $F_{inc}(3, 155) = .37$, $Cohen's f^2 = .72$, *ns*, b) younger sibling's negative affect, $R^2 = .43$ (adjusted $R^2 = .37$), $\Delta R^2 = .01$, $F_{inc}(3,$

155) = .91, *Cohen's* $f^2 = .75$, *ns*, and c) younger sibling's depressive mood, $R^2 = .44$ (adjusted $R^2 = .38$), $\Delta R^2 = .02$, *Finc* (3, 155) = 1.59, *Cohen's* $f^2 = .79$, *ns*.

3.5.1.1. Younger Sibling's Effortful Control as a Moderator in Predicting Solution Orientation Strategy

As younger sibling's effortful control level was taken as a moderator in the final step, older sibling's negative affect ($\beta = -.22$, $p < .01$), maternal closeness ($\beta = .15$, $p < .05$), the use of the same strategy by younger sibling (solution orientation) ($\beta = .40$, $p < .001$) significantly predicted solution oriented strategy use by older siblings. Unique variances explained by negative affect of older sibling, maternal closeness, and solution oriented strategy used by younger sibling on older sibling's solution oriented strategy were 3%, 1%, and 11%. In addition, maternal differential control was found to be approaching significance⁸ when predicting solution oriented strategy used by older sibling ($\beta = .12$, $p = .07$). The results indicated that although older siblings who had high scores of negative affect were less likely to resolve their sibling conflicts by using solution oriented strategy, older siblings who felt closer to their mothers and were treated as more controlled by their mothers were more likely to use solution orientation in sibling conflict resolution. Lastly, if younger siblings tend to use the solution oriented strategy, older sibling were more likely to use the same one. None of the interactions were significant (see Table 3.6).

⁸“p values” between .07 and .09 indicate approaching significance and “p value” of .06 represents marginally significant results.

Table 3.6 Hierarchical Regression Analysis in Predicting the Use of Solution Oriented Strategy by Older Siblings: Effortful Control Levels of Younger Siblings as a Moderator

		Effortful Control								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	β	Part
Step 1	Effortful Control (O)						.16	.10	.11	.10
	Negative Affect (O)						-	.09	-.22**	-.16
							.24			
Step 2	Depressive Mood (O)	.45	.21	.21	14.73***	14.73***	-	.09	-.04	-.03
	Effortful Control (Y)						-	.09	-.12	-.10
	Negative Affect (Y)						-	.09	-.05	-.03
Step 3	Depressive Mood (Y)	.47	.22	.01	7.63***	.63	.10	.09	.08	.07
	Maternal Closeness						.04	.02	.15*	.12
	Maternal Support						-	.02	-.06	-.04
Step 4	Maternal Conflict	.53	.28	.06	7.06***	4.84**	-	.03	-.11	-.08
	Differential Control	.55	.30	.02	6.81***	3.58^a	.32	.17	.12 ^b	.11
	Solution Orientation (Y)						.36	.07	.40***	.33
Step 5	Controlling (Y)						.01	.07	.01	.01
	Nonconfrontation (Y)	.65	.42	.12	8.72***	10.88***	-	.07	-.07	-.07
	<i>E. control (y)*</i>						-	.15	-.06	-.06
Step 6	<i>E. control (o)</i>						.14			
	<i>E. control (y)*</i>						-	.14	-.06	-.04
	<i>N. affect (o)</i>						.10			
	<i>E. control (y)*</i>	.65	.42	.00	7.10***	.37	.10	.15	.05	.04
	<i>D. mood (o)</i>									

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.1.2. Younger Sibling's Negative Affect Level as a Moderator in Predicting Solution Orientation Strategy

Similar to previous analysis, when interactions between the younger sibling's negative affect and older sibling's temperamental traits were entered to the equation in the final step, negative affect of older sibling ($\beta = -.18$, $p < .05$),

maternal closeness ($\beta = .17, p < .05$), and the same strategy used by younger ones ($\beta = .41, p < .001$) significantly predicted solution oriented strategy use by older sibling. They also accounted for 2, 2, and 11 percent of variances in the total variance, respectively. In addition, effortful control level of younger sibling was found to be marginally significant ($\beta = -.15, p = .06$), which means that adolescents who had a sibling with low level of effortful control were more likely to use solution orientation in conflict resolution. Moreover, unique effects of effortful control of older sibling and maternal differential control provided approaching significance in predicting solution oriented strategy use by older sibling, ($\beta = .12, p = .08, \beta = .13, p = .07$, respectively). It means that older siblings who had high levels of effortful control or were more controlled by their mothers tended to use more solution oriented strategy when resolving their conflicts. The interactions of younger sibling's negative affect level and older siblings temperamental characteristics were not significant (see Table 3.7).

Table 3.7 Hierarchical Regression Analysis in Predicting the Use of Solution Oriented Strategy by Older Siblings: Negative Affect Levels of Younger Siblings as a Moderator

		Negative Affect								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	β	Part
Step 1	Effortful Control (O)						.18	.10	.12 ^b	.10
	Negative Affect (O)						-.20	.09	-.18*	-.13
	Depressive Mood (O)	.45	.21	.21	14.73***	14.73**	-.07	.08	-.06	-.05
Step 2	Effortful Control (Y)						-.17	.09	-.15 ^b	-.12
	Negative Affect (Y)						-.05	.09	-.05	-.03
	Depressive Mood (Y)	.47	.22	.01	7.63***	.63	.10	.09	.08	.07
Step 3	Maternal Closeness						.04	.02	.17*	.13
	Maternal Support						-.02	.02	-.08	-.06
	Maternal Conflict	.53	.28	.06	7.06***	4.84**	-.04	.03	-.13	-.09
Step 4	Differential Control	.55	.30	.02	6.81***	3.58	.32	.18	.12 ^b	.11
	Solution Orientation (Y)						.37	.07	.41***	.33
Step 5	Controlling (Y)						.02	.07	.02	.02
	Nonconfrontation (Y)	.65	.42	.12	8.72***	10.88**	-.09	.07	-.09	-.08
	<i>N.Affect</i> (y)* E. control (o)						-.15	.13	-.08	-.07
	<i>N.Affect</i> (y)* N. affect (o)						.06	.11	.04	.03
Step 6	<i>N.Affect</i> (y)* D. mood (o)	.65	.43	.01	7.24***	.91	-.10	.13	-.06	-.05

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.1.3. Younger Sibling's Depressive Mood Level as a Moderator in Predicting Solution Orientation Strategy

As younger sibling's depressive mood level was a moderator in the final step, negative affect of older sibling ($\beta = -.21, p < .01$), maternal closeness ($\beta = .16, p < .05$), and the same strategy use by younger ones ($\beta = .41, p < .001$) significantly predicted solution oriented strategy use by older sibling. They also accounted for 3, 2, and 12 percent of unique variances in the total variance, respectively. Moreover, unique effect of younger sibling's negative affect level yielded an approaching significance ($\beta = -.13, p = .08$) and maternal differential control were marginally significant in predicting the outcome, $\beta = .13, p = .06$. That is, older siblings who have younger sibling having low level of negative affect or were more controlled by their mothers tended to use more solution oriented strategy in sibling conflict resolution. Among interaction terms, the interaction between younger and older siblings' depressive mood levels was found to be marginally significant, $\beta = -.15, p = .06$. Simple slope test was carried out to identify the significant dimensions of the interaction. When younger sibling had low levels of depressive mood, depressive mood levels of older ones did not affect the use of solution orientation, when depressive mood levels of younger siblings were high, older siblings who had lower levels of depressive mood tended to use more solution oriented strategy (see Table 3.8) (see Figure 3.1).

Table 3.8 Hierarchical Regression Analysis in Predicting the Use of Solution Oriented Strategy by Older Siblings: Depressive Mood Levels of Younger Siblings as a Moderator

		Depressive Mood								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	β	Part
Step 1	Effortful Control (O)						.16	.10	.11	.10
	Negative Affect (O)						-	.09	-.21**	-.16
	Depressive Mood (O)	.45	.21	.21	14.73***	14.73***	-	.09	-.02	-.02
Step 2	Effortful Control (Y)						-	.09	-.13 ^b	-.11
	Negative Affect (Y)						-	.09	-.00	-.00
	Depressive Mood (Y)	.47	.22	.01	7.63***	.63	.08	.09	.06	.05
Step 3	Maternal Closeness						.04	.02	.16*	.13
	Maternal Support						-	.02	-.05	-.04
	Maternal Conflict	.53	.28	.06	7.06***	4.84**	-	.03	-.12	-.08
Step 4	Differential Control	.55	.30	.02	6.81***	3.58^a	.32	.17	.13^a	.11
Step 5	Solution Orientation (Y)						.37	.07	.41***	.34
	Controlling (Y)						-	.07	-.01	-.01
Step 6	Nonconfrontation (Y)	.65	.42	.12	8.72***	10.88***	-	.06	-.09	-.09
	<i>D. mood (y)* E. control (o)</i>						.01	.16	-.05	-.05
	<i>D. mood (y)* N. affect (o)</i>						.12	.16	.03	-.03
	<i>D. mood (y)* D. mood (o)</i>	.66	.44	.02	7.46***	1.59	-	.17	-.15^a	.11

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

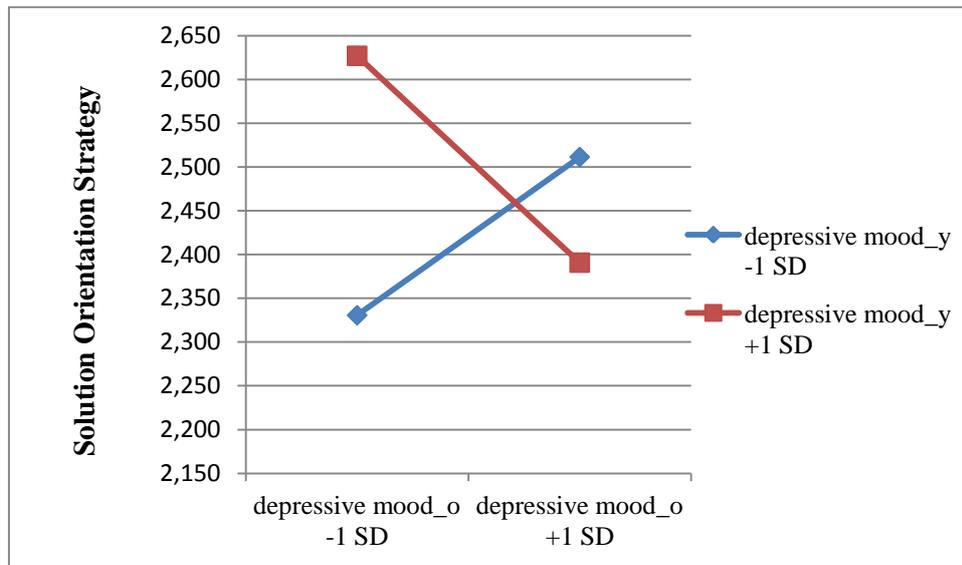


Figure 3.1 Graph for interaction between younger and older siblings’ depressive mood levels in the prediction of solution oriented strategy used by older sibling

3.5.2. Predicting Older Sibling’s Use of “Controlling” as a Conflict Resolution Strategy

Three set of hierarchical regression analyses were carried out to investigate the factors that affect the use of control as a conflict resolution strategy by older siblings. For each analysis, effortful control, negative affect, and depressive mood of younger sibling were separately taken in the final step as a moderator.

In all three analyses, older sibling’s temperaments including effortful control, negative affect, and depressive mood were entered **in the first step** and they provided statistically significant results, $R^2 = .24$ (adjusted $R^2 = .23$), $F(3, 168) = 17.90$, $p < .001$. **In the second step**, younger sibling’s effortful control, negative affect, and depressive mood levels were entered and those variables did not significantly increase the R^2 in predicting controlling strategy used by older siblings, $R^2 = .25$ (adjusted $R^2 = .22$), $\Delta R^2 = .01$, $F_{inc}(3, 165) = .54$, ns . **For the third step**, maternal closeness, maternal support, and maternal conflict as perceived parenting practices were entered. The results showed that the model

provided additional amount of variance to the equation, $R^2 = .29$ (adjusted $R^2 = .25$), $\Delta R^2 = .04$, $F_{inc}(3, 162) = 2.79$, $p < .05$). **In the fourth step**, maternal differential control was entered and there was not a significant increase in R^2 , $R^2 = .29$ (adjusted $R^2 = .25$), $\Delta R^2 = .01$, $F_{inc}(1, 161) = 1.23$, *ns*). **In the fifth step**, younger sibling's conflict resolution strategies consisting of solution orientation, controlling, and nonconfrontation were added into the equation; they significantly contributed to variance explained in predicting control strategy use by older sibling, $R^2 = .34$ (adjusted $R^2 = .29$), $\Delta R^2 = .05$, $F_{inc}(3, 158) = 3.90$, $p < .01$). **In the final steps**, the interaction terms were added into the equation. Three final models in which each temperamental traits of younger sibling was added as a moderator for each model did not account for additional variance in predicting controlling strategy used by older siblings: a) younger sibling's effortful control, $R^2 = .35$ (adjusted $R^2 = .29$), $\Delta R^2 = .01$, $F_{inc}(3, 155) = .36$, *Cohen's* $f^2 = .54$, *ns*, b) younger sibling's negative affect, $R^2 = .35$ (adjusted $R^2 = .29$), $\Delta R^2 = .01$, $F_{inc}(3, 155) = .88$, *Cohen's* $f^2 = .54$, *ns*, and c) younger sibling's depressive mood, $R^2 = .35$ (adjusted $R^2 = .29$), $\Delta R^2 = .01$, $F_{inc}(3, 155) = 1.05$, *Cohen's* $f^2 = .54$, *ns*.

3.5.2.1. Younger Sibling's Effortful Control as a Moderator in Predicting Controlling Strategy

When younger sibling's effortful control level was a moderator in the final step, older sibling's negative affect ($\beta = .38$, $p < .001$), maternal conflict ($\beta = .22$, $p < .05$), and the use of the same strategy by younger sibling (controlling) ($\beta = .24$, $p < .01$) significantly predicted control strategy use by older siblings. Unique variances explained by negative affect of older sibling, maternal conflict, and controlling strategy used by younger sibling on older sibling's controlling strategy were 8%, 2%, and 4%, when all variables were entered in the equation. The results demonstrated that older siblings who had high scores of negative affect were more likely to resolve their sibling conflicts by using controlling strategy. Furthermore, older siblings who experienced more conflicts with their mothers were more likely to use controlling in sibling conflict resolution. Lastly, if

younger siblings tend to use controlling strategy, older siblings were more likely to use the same one as well.

When predicting the controlling strategy used by older siblings, the interaction between younger sibling's effortful control level and older sibling's depressive mood was approaching significance ($\beta = -.14, p = .09$). Simple slope test to show the significant values of moderator (high vs. low) were conducted. The result indicated that when younger sibling had high level of effortful control, older sibling's depressive mood did not predict controlling strategy; however, when younger sibling had low level of effortful control, older siblings with higher depressive mood were tend to use more controlling strategy (see Table 3.9 and Figure 3.2).

Table 3.9 Hierarchical Regression Analysis in Predicting the Use of Controlling Strategy by Older Siblings: Effortful Control Levels of Younger Siblings as a Moderator

Effortful Control										
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	B	Part
Step 1	Effortful Control (O)						.06	.11	.04	.03
	Negative Affect (O)						.45	.10	.38***	.28
	Depressive Mood (O)	.49	.24	.24	17.90***	17.90***	.10	.10	.07	.06
Step 2	Effortful Control (Y)						.07	.10	.06	.05
	Negative Affect (Y)						-.09	.10	-.08	-.05
	Depressive Mood (Y)	.50	.25	.01	9.14***	.54	.01	.10	.01	.01
Step 3	Maternal Closeness						.02	.02	.08	.06
	Maternal Support						.02	.02	.11	.08
	Maternal Conflict	.54	.29	.04	7.22***	2.79*	.07	.03	.22*	.15
Step 4	Differential Control	.54	.30	.01	6.63***	1.23	.23	.20	.09	.08
Step 5	Solution Orientation (Y)						.00	.08	.00	.00
	Controlling (Y)						.24	.08	.24**	.19
Step 6	Nonconfrontation (Y)	.58	.34	.05	6.28***	3.90***	.10	.07	.09	.09
	<i>E. control (y)* E. control (o)</i>						-.03	.17	-.01	-.01
	<i>E. control (y)* N. affect (o)</i>						.11	.16	-.06	-.05
	<i>E. control (y)* D. mood (o)</i>	.60	.35	.01	5.31***	1.09	-.28	.16	-.14^b	-.11

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

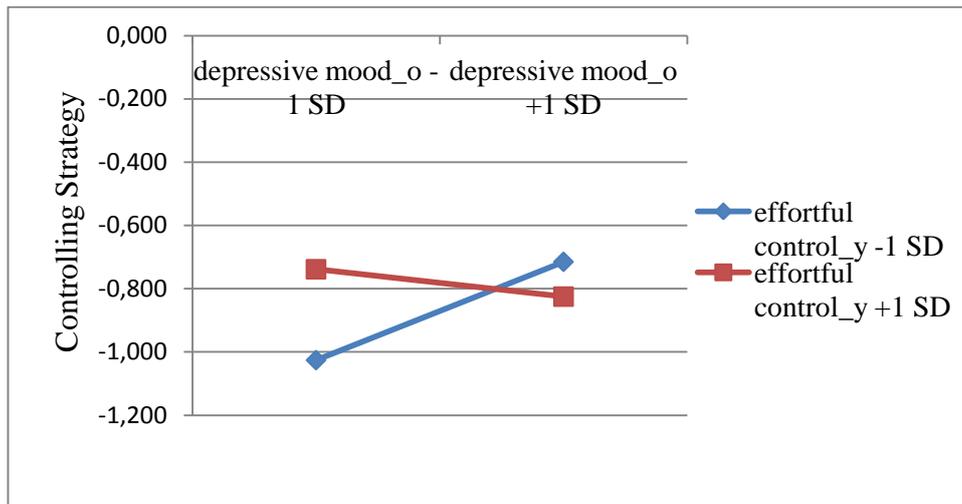


Figure 3.2 Graph for the interaction between younger sibling's effortful control level and older sibling's depressive mood level in predicting controlling strategy used by older sibling

3.5.2.2. Younger Sibling's Negative Affect Level as a Moderator in Predicting Controlling Strategy

When younger sibling's negative affect interacted with older sibling's temperamental traits in the final step, negative affect of older sibling ($\beta = .36, p < .001$), maternal conflict ($\beta = .23, p < .05$), and the same strategy use by younger ones ($\beta = .23, p < .01$) significantly predicted controlling strategy use by older sibling. They also accounted for 7, 2.5, and 4 percent of unique variances, respectively. The results showed that older siblings who had high scores of negative affect or who had conflictual relationship with their mothers were more likely to use that strategy. Also, if their younger siblings used controlling strategy, they tended to use that strategy as well. Any interaction terms between older and younger siblings' temperamental characteristics did not significantly predict controlling strategy used by older siblings (see Table 3.10).

Table 3.10 Hierarchical Regression Analysis in Predicting the Use of Controlling Strategy by Older Siblings: Negative Affect Levels of Younger Siblings as a Moderator

		Negative Affect								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	B	Part
Step 1	Effortful Control (y)						.06	.11	.04	.03
	Negative Affect (y)						.43	.10	.36***	.28
	Depressive Mood (y)	.49	.24	.24	17.90***	17.90***	.11	.10	.08	.06
Step 2	Effortful Control (y)						.07	.10	.05	.05
	Negative Affect (y)						-.10	.10	-.09	-.05
	Depressive Mood (y)	.50	.25	.01	9.14***	.54	.01	.10	.01	.01
Step 3	Maternal Closeness						.02	.02	.09	.06
	Maternal Support						.02	.02	.11	.08
	Maternal Conflict	.54	.29	.04	7.22***	2.79*	.07	.03	.23*	.15
Step 4	Differential Control	.54	.30	.01	6.63***	1.23	.25	.20	.09	.08
Step 5	Solution Orientation (y)						-.00	.08	-.00	.00
	Controlling (y)						.24	.08	.23**	.19
	Nonconfrontation (y)	.58	.34	.05	6.28***	3.90***	.10	.07	.08	.09
Step 6	<i>N.Affect</i> (y)*						.01	.15	.00	-.07
	E.control (o)									
	<i>N.Affect</i> (y)*						-.13	.13	-.09	.03
	N.affect (o)									
	<i>N.Affect</i> (y)* D.mood (o)	.59	.35	.01	5.25***	.88	.23	.15	.12	-.05

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.2.3. Younger Sibling's Depressive Mood Level as a Moderator in Predicting Controlling Strategy

As younger sibling's depressive mood level was a moderator in the final step, negative affect of older sibling ($\beta = .40$, $p < .001$), maternal conflict ($\beta = .21$, $p < .05$), and the same strategy used by younger ones ($\beta = .23$, $p < .01$) significantly

predicted controlling strategy used by older sibling. They also accounted for 9, 2, and 3 percent of unique variances in the total variance, respectively. The interaction between younger sibling's depressive mood levels and older sibling's effortful control level was found to be approaching significance, $\beta = -.12$, $p = .09$. To explore the interaction Simple slope test was run. The result of this analysis did not provide any significant interactions for both low and high value of moderator (see Table 3.11).

Table 3.11 Hierarchical Regression Analysis in Predicting the Use of Controlling Strategy by Older Siblings: Depressive Mood Levels of Younger Siblings as a Moderator

Depressive Mood										
	Predictors	R	R ²	ΔR^2	F	Finc	B	SE	B	Part
Step 1	Effortful Control (o)						.08	.12	.05	.05
	Negative Affect (o)						.48	.10	.40***	.30
	Depressive Mood (o)	.49	.24	.24	17.90***	17.90***	.06	.10	.05	.04
Step 2	Effortful Control (y)						.05	.10	.05	.04
	Negative Affect (y)						-	.10	-.10	-.06
	Depressive Mood (y)	.50	.25	.01	9.14***	.54	.03	.10	.02	.02
Step 3	Maternal Closeness						.02	.02	.06	.05
	Maternal Support						.03	.02	.11	.08
	Maternal Conflict	.54	.29	.04	7.22***	2.79*	.07	.03	.21*	.15
Step 4	Differential Control	.54	.30	.01	6.63***	1.23	.26	.20	.09	.08
Step 5	Solution Orientation (y)						.00	.08	.00	.00
	Controlling (y)						.23	.08	.23**	.18
	Nonconfrontation (y)	.58	.34	.05	6.28***	3.90**	.07	.07	.07	.06
Step 6	<i>D. mood</i> (y)*						-	.19	-.12^b	-.11
	E. control (o)						.31			
	<i>D. mood</i> (y)*						-	.19	-.05	-.04
	N. affect (o)						.10			
	<i>D. mood</i> (y)*	.60	.35	.01	5.30***	1.05	.12	.19	.05	.04

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.3. Predicting Older Sibling's Use of "Non-confrontation" as a Conflict Resolution Strategy

For the prediction of non-confrontational strategy use by older siblings, three set of hierarchical regression analyses were conducted. In the final step of each separate analysis, effortful control, negative affect, and depressive mood of younger sibling were taken as a moderator one by one.

In all three analyses, effortful control, negative affect, and depressive mood as older sibling's temperaments were entered in **the first step** and statistically significant result was not obtained, $R^2 = .01$ (adjusted $R^2 = -.01$), $F(3, 168) = .73$, *ns*. For **the second step**, younger sibling's effortful control, negative affect, and depressive mood levels were entered and those variables did not significantly increase the R^2 in predicting non-confrontational strategy use by older siblings, $R^2 = .05$ (adjusted $R^2 = .02$), $\Delta R^2 = .04$, $F_{inc}(3, 165) = 2.34$, *ns*). In **the third step**, maternal closeness, maternal support, and maternal conflict as perceived parenting behaviors were added and the model provided additional amount of variance to the equation, $R^2 = .10$ (adjusted $R^2 = .05$), $\Delta R^2 = .05$, $F_{inc}(3, 162) = 2.86$, $p < .05$). In **the fourth step**, maternal differential control was entered and there was not a significant increase in R^2 , $R^2 = .10$ (adjusted $R^2 = .05$), $\Delta R^2 = .00$, $F_{inc}(1, 161) = .07$, *ns*). In **the fifth step**, younger sibling's conflict resolution strategies involving solution orientation, controlling, and nonconfrontation were added into the equation. All together, they significantly contributed to the variance in predicting nonconfrontational strategy use by older sibling, $R^2 = .18$ (adjusted $R^2 = .11$), $\Delta R^2 = .08$, $F_{inc}(3, 158) = 4.83$, $p < .01$). In **the final steps**, the interaction terms were added into the equation. Three final models in which each temperamental traits of younger sibling was added as a moderator for each model did not explained any additional variance in predicting non-confrontation strategy used by older siblings: a) younger sibling's effortful control, $R^2 = .19$ (adjusted $R^2 = .10$), $\Delta R^2 = .01$, $F_{inc}(3, 155) = .55$, $Cohen's f^2 = .23$, *ns*, b) younger sibling's negative affect, $R^2 = .18$ (adjusted $R^2 = .10$), $\Delta R^2 = .01$, $F_{inc}(3, 155) = .35$,

Cohen's $f^2 = .22$, *ns*, and c) younger sibling's depressive mood, $R^2 = .18$ (adjusted $R^2 = .10$), $\Delta R^2 = .00$, $F_{inc}(3, 155) = .26$, *Cohen's* $f^2 = .22$, *ns*.

3.5.3.1. Younger Sibling's Effortful Control as a Moderator in Predicting Non-confrontation Strategy

When younger sibling's effortful control level was a moderator in the final step in predicting non-confrontation level of older sibling, younger sibling's negative affect ($\beta = .24$, $p < .05$), maternal support ($\beta = -.23$, $p < .05$), maternal conflict ($\beta = -.23$, $p < .05$), and the use of the same strategy by younger sibling (non-confrontation) ($\beta = .27$, $p < .001$) significantly predicted non-confrontational strategy used by older siblings. When all variables were entered into the equation unique variances explained by negative affect level of younger sibling, maternal support, maternal conflict, and non-confrontational strategy use by younger sibling on older sibling's non-confrontational strategy were 2.5%, 3%, 2.5% and 7% respectively. Those results indicated that older siblings who had a sibling with high levels of negative affect were more likely to resolve their sibling conflicts by using non-confrontational strategy. Furthermore, older siblings who experience less conflict with their mothers or are less supported by their mothers tend to use more non-confrontational strategy in sibling conflict resolution. Lastly, as younger siblings' use of controlling strategy increased so as the older siblings' use of the same strategy. None of the interactions were significant in the final step (see table 3.12).

Table 3.12 Hierarchical Regression Analysis in Predicting the Use of Non-confrontation Strategy by Older Siblings: Effortful Control Levels of Younger Siblings as a Moderator

		Effortful Control								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	B	Part
Step 1	Effortful Control (O)						.12	.12	.08	.07
	Negative Affect (O)						-	.11	-.05	-.04
	Depressive Mood (O)	.11	.01	.01	.73	.73	.01	.11	.01	.01
Step 2	Effortful Control (Y)						-	.10	-.02	-.02
	Negative Affect (Y)						.23	.11	.24*	.16
	Depressive Mood (Y)	.23	.05	.04	1.55	2.35^b	-	.11	-.06	-.05
Step 3	Maternal Closeness						.01	.02	.03	.02
	Maternal Support						-	.02	-.23*	-.17
	Maternal Conflict	.32	.10	.05	2.02*	2.86*	-	.03	-.23*	-.16
Step 4	Differential Control	.32	.10	.00	1.81^a	.07	-	.21	-.01	-.01
Step 5	Solution Orientation (Y)						-	.08	-.02	-.02
	Controlling (Y)						-	.08	-.07	-.06
	Nonconfrontation (Y)	.42	.34	.08	2.61**	4.83**	.27	.08	.27***	.26
Step 6	<i>E. control (y)* E. control (o)</i>						.02	.18	.01	.01
	<i>E. control (y)* N. affect (o)</i>						-	.16	-.09	-.07
	<i>E. control (y)* D. mood (o)</i>	.43	.35	.01	2.21**	.55	.21	.17	.11	.09

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.3.2. Younger Sibling's Negative Affect Level as a Moderator in Predicting Non-confrontational Strategy

As younger sibling's negative affect interacted with older sibling's temperamental traits in the final step, negative affect of younger sibling ($\beta = .25, p < .05$), maternal support ($\beta = -.22, p < .05$), maternal conflict ($\beta = -.22, p < .05$), and the same strategy used by younger ones ($\beta = .29, p < .001$) significantly predicted older sibling's use of non-confrontational strategy in sibling conflict resolution. They explained 3, 2.6, 2, and 7 percent of the total variance, respectively. However, none of the interaction terms between older and younger siblings' temperamental characteristics predicted non-confrontational strategy use by older siblings (see Table 3.13).

Table 3.13 Hierarchical Regression Analysis in Predicting the Use of Non-confrontation Strategy by Older Siblings: Negative Affect Levels of Younger Siblings as a Moderator

		Negative Affect								
	Predictors	R	R ²	ΔR^2	F	Finc	B	SE	β	Part
Step 1	Effortful Control (O)						.13	.12	.09	.08
	Negative Affect (O)						-.08	.11	-.07	-.05
	Depressive Mood (O)	.11	.01	.01	.73	.73	.02	.11	.02	.02
Step 2	Effortful Control (Y)						.01	.10	.00	.00
	Negative Affect (Y)						.24	.11	.25*	.17
	Depressive Mood (Y)	.23	.05	.04	1.55	2.35^b	-.09	.11	-.07	-.06
Step 3	Maternal Closeness						.01	.02	.03	.02
	Maternal Support						-.05	.02	-.22*	-.16
	Maternal Conflict	.32	.10	.05	2.02*	2.86*	-.07	.03	-.22*	-.16
Step 4	Differential Control	.32	.10	.00	1.81^a	.07	-.05	.21	-.02	-.02
Step 5	Solution Orientation (Y)						-.02	.08	-.02	-.01
	Controlling (Y)						-.08	.08	-.08	-.07
	Nonconfrontation (Y)	.42	.34	.08	2.61**	4.83**	.29	.08	.29***	.27
Step 6	<i>N. affect (y)*</i>						.15	.16	.08	.07
	<i>E. control (o)</i>									
	<i>N. affect (y)*</i>						.01	.14	.01	.00
	<i>N. affect (o)</i>									
	<i>N. affect (y)*</i>	.43	.19	.01	2.16**	.55	-.05	.16	-.03	-.02
	<i>D. mood (o)</i>									

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

3.5.3.3. Younger Sibling's Depressive Mood Level as a Moderator in Predicting Non-confrontation Strategy

When younger sibling's depressive mood level was taken as a moderator in the final step, younger sibling's negative affect level ($\beta = .23, p < .05$), maternal support ($\beta = -.25, p < .05$), maternal conflict ($\beta = -.23, p < .05$), and non-confrontational strategy use by younger ones ($\beta = .29, p < .001$) significantly predicted non-confrontational strategy use by older sibling. The unique variances accounted by those variables were 2, 3, 2.7, and 7 percent, respectively. The interactions between younger sibling's depressive mood level and older sibling's temperamental characteristics were not significant (see Table 3.14).

Table 3.14 Hierarchical Regression Analysis in Predicting the Use of Non-confrontation Strategy by Older Siblings: Depressive Mood Levels of Younger Siblings as a Moderator

		Depressive Mood								
	Predictors	R	R ²	ΔR ²	F	Finc	B	SE	B	Part
Step 1	Effortful Control (O)						.14	.12	.09	.08
	Negative Affect (O)						-	.11	-.05	-.04
	Depressive Mood (O)	.11	.01	.01	.73	.73	.01	.11	.01	.00
Step 2	Effortful Control (Y)						-	.10	-.01	-.01
	Negative Affect (Y)						.22	.11	.23*	.15
	Depressive Mood (Y)	.23	.05	.04	1.55	2.35^b	-	.11	-.07	-.05
Step 3	Maternal Closeness						.01	.02	.04	.03
	Maternal Support						-	.02	-.25*	-.18
	Maternal Conflict	.32	.10	.05	2.02*	2.86*	-	.03	-.23*	-.16
Step 4	Differential Control	.32	.10	.00	1.81^a	.07	-	.21	-.02	-.01
Step 5	Solution Orientation (Y)						-	.08	-.02	-.02
	Controlling (Y)						-	.09	-.06	-.05
	Nonconfrontation (Y)	.42	.34	.08	2.61**	4.83**	.29	.08	.29***	.27
Step 6	<i>D. mood (y)* E. control (o)</i>						.11	.19	.05	.04
	<i>D. mood (y)* N. affect (o)</i>						.04	.19	.02	.02
	<i>D. mood (y)* D. mood (o)</i>	.43	.18	.00	2.14**	.26	.09	.20	.04	.03

* $p < .05$, ** $p < .01$, *** $p < .001$, ^amarginally significant, ^bapproaching significance. Note: Standard Error (SE) scores and β values in the final steps were reported.

CHAPTER 4

DISCUSSION

The main aim of the present study was to investigate the predictors of conflict resolution strategies used by 14 to 16 year old female adolescents with their younger sisters and brothers. Solution oriented, controlling, and non-confrontational resolution strategies of older siblings were predicted by younger siblings' gender, temperamental characteristics (effortful control, negative affect, & depressive mood) of older and younger siblings, perceived parenting behaviors (maternal closeness, maternal support, & maternal conflict), maternal differential control, and conflict resolution strategies used by the younger sibling. In addition, younger sibling's temperamental characteristics were tested as moderator of the relationship between older sibling's temperamental traits and their use of conflict resolution strategies. In this last chapter, first the results of the present study will be discussed in the light of literature. Then, contribution and limitations and implications of the study will be highlighted, and finally future suggestions will be included.

4.1. Discussion of Findings in Relation to Hypotheses of the Study

4.1.1. The Role of the Younger Sibling's Gender

The first goal of the current study was to investigate whether gender composition of the sibling pairs (same-sex vs. mixed-sex) was related to the conflict resolution strategy used by older sibling. With this aim, it was predicted that in mixed-sex sibling relationships, older siblings would use more non-confrontational strategies compared to those with same-sex siblings. Further, in the same-sex sibling relationships, older siblings would tend to use solution-oriented strategies as opposed to those with mixed-sex siblings. The results indicated that having same-sex or mixed-sex sibling did not predict older sibling's use of solution oriented,

controlling, and nonconfrontational strategy when resolving their sibling conflicts. The literature also suggested contradictory findings about gender composition. It seems that although gender of siblings is important in childhood (Howe et al., 2004) and gendered relationships are found in friendships (Killoren et al., 2008), gender lose its importance in adolescence. Therefore, the results may be interpreted by context and age. In friend relationships, individuals usually tend to establish same-sex relationships due to nonobligatory structure (Laursen & Bukowski, 1997). Maccoby (1990) also mentioned that even though individuals are incrementally engaged in mixed-sex relationships because of attraction of opposite sex during adolescence, same-sex relationships protect their importance. Not only in childhood but also in adolescence period, individuals tend to prefer same-sex friends. However, sibling relationships may only consist of same-sex or mixed-sex compositions. Therefore, it may be speculated that in friendships, an individual is able to differentiate other party's demands in conflicts by considering gender of other person; whereas, in sibling relationships, due to obligatory relationship in siblings from childhood to adolescence, it may be expected that siblings may change their conflict resolution strategies based on other mechanisms rather than gender because they may rearrange their strategies according to their siblings.

In addition, this finding could be explained by power and status in sibling relationships. In the literature, Buhrmester and Furman (1985; 1990) indicated that power and status in older siblings are more likely to affect sibling relationships. Howe et al. (2004) also suggested that the impact of power and status may differ in boys and girls. As in line with Howe and her colleagues (2004), in Turkey, patriarchal structure is dominant and male power appear over females (Kandiyoti, 1995; as cited in Sakallı, 2001). Therefore, conflict resolution strategies in same-sex and mixed-sex sibling relationships of female adolescents may not be affected as much as in male adolescents. In order to shed more light on this relatively unexplored issue, in future studies all gender compositions can be investigated.

4.1.2. The Role of Older and Younger Siblings' Temperaments

The results indicated that there was a relationship between temperamental traits of older and younger siblings and conflict resolution strategies (solution orientation, controlling, and nonconfrontation) used by older female siblings.

Before discussing temperamental traits in the light of the literature, it should be mentioned that hypotheses concerning younger and older siblings' temperamental traits had been specified based on "effortful control", "negative affect", and "perceptual sensitivity" as temperamental characteristics to be tested. However, after conducting factor analysis of EATQ-R, in the current study "negative affect", "effortful control" and "depressive mood" were formed as three factors different than originally planned. Thus, while hypotheses about the role of older and younger siblings' perceptual sensitivity levels (hypotheses 2.1, 3.1, 8.3, and 8.4) could not be tested; hypotheses about depressive mood had not been proposed at the beginning of the current study.

When looking at the direct relationships between older/younger sibling's temperamental traits and conflict resolution strategy use by older sibling, first of all, older siblings who had low levels of negative affect were more likely to use solution-oriented conflict resolution strategy. In addition, there was a positive relationship between older siblings' use of controlling strategy and their negative affect. Indeed, older siblings with high level of negative affect tended to use more control in order to resolve conflicts with their younger siblings. These findings in terms of both solution orientation and controlling strategies used by older sibling supported second hypothesis (2.1 and 2.2) of the study. As it was mentioned in the introduction, to the best of author's knowledge, the impacts of temperamental traits on conflict resolution strategies have not been studied before. Hence, studies investigating the role of personality on conflict resolution may shed light on the current findings. Similar to second hypothesis, Moberg (2001) stated that individuals who define themselves as less neurotic were more inclined to reach a

solution by approaching a conflict in a direct way. However, in terms of controlling strategy, evidence in the literature is somewhat contradictory. While some studies indicated that people with high neuroticism tend to avoid conflicts (Antonioni, 1998; Moberg, 2001), others mentioned that individuals who were high in neuroticism tend to show strong negative reactions when face conflicts (Gunthert, Cohen, & Armeli, 1999) and compete with others (Barry & Friedman, 1998). There is only one study which was conducted by Turkish participants aged between 18 and 26 also showed that neuroticism was not related to interpersonal conflict resolution strategies (Basım, Çetin, & Tabak, 2009). The reason for such contradictory findings in the literature may be due to the nature of neuroticism. Neuroticism includes several dimensions such as anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability (Gosling, Rentfrow, & Swan, 2003). Indeed, not only externalization but also internalization behaviors are involved in neuroticism. For that reason, neurotic individuals may not decide how to react to interpersonal conflict. Furthermore, in the current study according to factor analysis results, negative affect involved items focusing on externalizing problems rather than internalizing ones. Research also supported that externalizing behaviors such as aggression are associated with offensive reactions and attacking to resolve conflict (Deutsch, Coleman, & Marcus, 2011). Therefore, individuals with higher level of negative affect may be associated with more controlling behaviors in sibling conflict resolution.

There were not any specific expectations about the relationship between older sibling's temperament and their non-confrontational strategy use. This exploratory part of the study indicated that none of the temperamental characteristics of older siblings was related to their use of non-confrontational strategy in conflict resolution.

In spite of the relation between the older sibling's negative affect and the use of solution orientation and controlling strategies, younger one's negative affect was not related to those strategies used by older sibling and the hypotheses were not

confirmed (hypotheses 3.1 & 3.2). Due to the fact that there was not any direct evidence in literature for this hypothesis, it may be estimated that the relationships between younger sibling's temperamental traits and the use of older one's conflict resolution strategy are weak as a course of its nature. In dyadic studies, partner effect represents the influence of a person's behaviors or traits on partner's outcomes; however, that effect tends to be weaker than actor effect which is the effect of a person's behaviors or traits on her/his own outcomes (Kenny, Kashy, & Cook, 2006). That might be the reason why younger sibling's temperamental characteristics were not found to be significant for solution orientation and controlling strategies used by older sibling.

However, in the prediction of non-confrontational strategy use by older sibling, there was a positive relationship between younger sibling's negative affect level and older sibling's use of nonconfrontation as a conflict resolution strategy when looking it exploratorily. Adolescents who had younger sibling with higher level of negative affect were more likely to avoid conflicts among them. According to Killoren et al.'s (2008) three factor model of conflict resolution, solution orientation and controlling strategies requires extra effort to think about self and other party, but non-confrontational strategy does not demand any concern. Therefore, it was speculated that due to negative characteristics of other party (sibling), the female adolescent may feel an urge to avoid conflicts rather than using complex and effortful resolution strategies. Although there were not any studies investigating this relationship, Antonioni (1998) found a relation between neuroticism and non-confrontational strategy use. Therefore, maybe, negative affect of other party may also result in the same outcome regarding conflict resolution choices.

Findings about the influences of depressive mood levels of older and younger siblings on conflict resolution strategies demonstrated that neither older sibling's nor younger sibling's depressive mood level predicted use of any strategy in sibling conflict resolution. With respect to these results, depressive mood was a

second order factor in negative affect in the original version of the scale (Ellis & Rothbart, 2001), in the current study, results of the factor analysis showed that it was a separate factor than negative affect. Depressive mood included not only depression but also frustration/irritability and attention related items. As mentioned in the factor analysis results of EATQ-R, items that made up this factor seemed to be associated with Disruptive Mood Dysregulation Disorder defined in DSM-V. It may be possible that the new depressive mood factor might measure current psychological state rather than temperamental trait.

In addition, it was expected that effortful control of older and younger siblings would separately predict older sibling's conflict resolution strategy use. Unlikely to the hypotheses (2.1 & 2.2) and literature concerning the relationship between agreeableness or conscientiousness, which effortful control may serve as a base for and conflict resolution strategies used by individuals, effortful control levels of older and younger siblings did not provide any significant results in the prediction of solution oriented, controlling, and nonconfrontational strategies used by older sibling. Although there was not any direct relationship between older and younger siblings' effortful control and conflict resolution strategy use by older ones, the impacts of older sibling's temperaments on conflict resolution strategies were found when effortful control level of younger sibling was treated as a moderator. The exploratory findings displayed that effortful control level of younger sibling and depressive mood level of older ones were interacted in predicting the use of controlling strategy with approaching significance level. That is, if the adolescent had younger sibling with lower level of effortful control, her lower level of depressive mood was associated with decrease in the use of controlling strategy when resolving sibling conflicts. The result also supported buffering hypothesis in some extent (Stoneman & Brody, 1993). In the literature, controlling strategy was identified as destructive conflict resolution strategy (Howe et al., 2002). Therefore, it may be stated that lower level of depressive mood protects siblings from destructive conflict resolution.

However, neither solution oriented nor nonconfrontational strategies were associated with older sibling's temperaments (effortful control, negative affect, and depressive mood) when effortful control of younger sibling was tested as a moderator. As stated above, other mechanisms may have an influence on the relationship between the temperamental interactions and conflict resolution strategies.

Moreover, interactions between older siblings' temperamental characteristics and younger sibling' negative affect were investigated. The finding showed that when younger sibling's negative affect level was identified as a moderator, the results did not provide any significant relationship between older sibling's temperamental characteristics and strategies used by older sibling (solution orientation, controlling, & nonconfrontation). For those three interaction terms, there was only one hypothesis (8.2) in which we proposed that when younger sibling has high levels of negative affect, older sibling's higher level of negative affect would predict older siblings' control-oriented strategy positively and solution-oriented strategy use negatively. However, the result did not confirm our hypothesis. A possible explanation about this nonsignificant finding may be that the interaction effects of both siblings' negative affect levels on conflict resolution strategies may be mediated by other factors such as quality of sibling relationship. Thomas, Chess, and Birch (1968) described difficult temperament as high in negative affect and high in emotionally intense reactions to situations (as cited in Brody et al., 1992) and Brody et al. (1989) stated that difficult temperament is related to negativity and conflict in sibling relationships (as cited in Stoneman & Brody, 1993). With respect to the relationship between sibling relationship quality and conflict resolution, Rinaldi and Howe (1998) mentioned that negative sibling relationships are linked with the use of destructive strategies in siblings' conflict resolutions. Thus, in future studies a mediated moderation analysis could be conducted in order to explain this relationship.

The exploratory results regarding younger sibling's depressive mood level as a moderator demonstrated that the interaction between younger and older sibling's depressive mood levels negatively predicted the use of solution orientation by older sibling. It means that when younger sibling has high levels of depressive mood, older sibling's lower level of depressive mood increases the use of solution oriented strategy. This finding could be explained by "buffering hypothesis" (Stoneman & Brody, 1993). According to buffering hypothesis, positive temperamental trait of one sibling may serve as a buffer in order to maintain positive and constructive form of the relationship despite negative temperament of other sibling. In this finding, it could be seen that older sibling with lower levels of depressive mood buffers the detrimental impacts of younger one's negative temperamental traits in the use of solution orientation strategy. Other than this finding, when depressive mood of younger one was a moderator, controlling and nonconfrontational strategies utilized by older sibling was not predicted by older sibling's temperamental characteristics.

4.1.3. The Role of Parenting Practices & Maternal Differential Control

The results showed that parenting practices including closeness to mother, mother's support, conflict with mother, and differential control of mother had an influence on older sibling's conflict resolution strategies used with their siblings.

Firstly, adolescent's closeness level to their mothers predicted their use of solution oriented strategy, in other words the more maternal closeness they perceived, the more solution oriented strategy use they displayed. Thus, the hypothesis about the relationship between perceived maternal closeness and the use of solution orientation strategy was confirmed (hypothesis 4). In the literature, perceived warmth from mother was found to be associated with adolescent's positive behaviors (Wang et al., 2011). This finding lent support to family systems theory to some extent. Based on this theory (Minuchin, 1985), the factors influencing specific subsystems may also affect the understanding of other subsystems'

dynamics. Specifically, individuals whose mothers are closer may tend to behave more constructively to their siblings. However, the adolescents perceived closeness to their mothers did not predict the use of controlling or avoiding as a strategy. It might be speculated that destructive ways of conflict resolution compared to constructive one may be influenced by other parenting behaviors.

Furthermore, there was a negative relationship between the maternal support and the use of nonconfrontational strategy by older sibling. Indeed, older sibling who perceived less support from her mother tended to avoid when faced with conflict. The literature investigating the relationship between parenting practices and sibling relationship indicated that support from mother was negatively linked with adverse adolescent outcomes (Lee et al., 2006; Soenens et al., 2006) and warmth between siblings that are both in line with family systems theory (Derkman et al., 2011). Also, non-confrontational strategy compared to solution-oriented strategy is more destructive way of resolving conflicts (Howe et al., 2002); thus, female adolescent who feels less support from mother may prefer such strategy when resolving the conflicts with her sibling.

In contrast, perceived support from mother did not predict the solution oriented and controlling behaviors of older sibling in an unexpected way (hypothesis). It was also speculated that because solution orientation and controlling strategies may need more effortful mind in conflict resolution compared to non-confrontational strategies (Killoren et al., 2008), support from mothers might not predict the use of those strategies.

Moreover, conflict between the older sibling and mother during adolescence was also found to be related to use of sibling conflict resolution strategies. It was obviously seen that older sibling having conflictual relationship with her mother is more likely to use controlling strategy when resolving conflicts with her sibling as it was expected (hypothesis 5). Also, older sibling who has less conflictual relationship with her mother tends to avoid or withdraw from conflicts with

siblings. Consistent with family systems theory, Tucker et al. (2003) suggested that conflictual frequency between family members was related to more use of ineffective strategies when children resolve their conflicts with their mothers, fathers, and siblings.

Last of all, in addition to those parenting practices explaining conflict resolution strategies used by older sibling, differential maternal control towards older children positively predicted solution oriented strategy use. That is, if older sibling perceives more maternal control towards herself than towards her younger sibling, she tends to use more solution oriented strategy when resolving conflicts with her younger sibling. However, neither controlling nor non-confrontational strategies used by older sibling were predicted by differential control from mothers. In the literature, experiencing differential control from parents was linked with negativity and competition between siblings (Tseung & Schott, 2004); therefore, it was expected that differential control over older sibling may decrease the use of solution oriented strategy in sibling conflicts (hypothesis 6). In contrast, the relationship between differential control and the use of solution orientation was found to be positively linked in an unexpected way. Two possible explanations could exist. One possibility is that differential control items seem to measure not only negative type of control such as punishment but also positive one such as monitoring. For example, negative type of parental differential control over one sibling is related to poor self-esteem (McHale et al., 2000) and externalizing behaviors (Richmond, Stocker, & Rienks, 2005). On the contrary, positive type of nonshared parental control was positively linked with child adjustment (Anderson, Hetherington, Reiss, & Howe, 1994). For that reason, this subscale might not be linked with intended outcome. Another possibility is that the perceptions about differential control by female Turkish adolescents may be attributed to being older sibling. That is, they may perceive that their mothers teach them maternal roles by controlling their behaviors and giving responsibilities more than their younger siblings; therefore, they may be more likely to behave more solution oriented way towards their younger siblings.

4.1.4. The Role of Younger Sibling's Use of Conflict Resolution Strategies

It was found that strategies used by younger sibling predicted the use of same strategy by older one. In a specific way, the more the younger sibling uses solution orientation, controlling, and nonconfrontation when resolving conflicts with her/his older sibling, the more the older one do the same as well. This result supported the norm of reciprocity in interactions. The literature suggested that one of the main features of sibling relationships is reciprocity. Especially, siblings whose ages are closer are more likely to engage in reciprocal interactions like peers (Howe & Recchia, 2005). Park and Antonioni (2007) also suggested that friends are also inclined to use the same strategy utilized by other side. Moreover, parallel with social learning theory, interparental conflict resolution strategies may mediate the relationship between younger and older siblings' conflict resolution strategies. Indeed, in the literature the use of conflict resolution strategies by parents was related to conflict resolution strategy use by siblings. Therefore, both siblings may learn strategies used in conflict resolution by observing their parents' conflict resolution strategies (Reese-Weber & Kahn, 2005).

4.1.5. Conclusion

As a result, findings related to the influence of siblings' temperamental traits on conflict resolution strategies used by older sibling showed that older and younger siblings' temperamental characteristics had impacts on solution oriented, controlling, and nonconfrontational strategies use by older sibling. In that sense, dispositional view in conflict resolution was supported to some extent. According to dispositional view, temperament or personality characteristics of individuals have an impact on the perceptions about conflict and decisions about conflict resolution strategies. In addition, maternal closeness, support, conflict, and differential control were linked with older sibling's use of conflict resolution strategies. Moreover, in predicting older sibling's conflict resolution strategies,

younger sibling's use of the same strategy had a crucial role. These findings also indicated that environmental factors have an impact on conflict resolution patterns by confirming situational view to some extent. However, these findings also recommended that some other factors may have an impact on sibling's conflict resolution patterns, indicated sophisticated nature of conflict resolution.

4.2. Contributions of the Study to the Existing Literature and Strengths of the Study

Although there are a number of studies examining the relationship between parenting practices and the nature of sibling relationships (Milevsky, 2011); however, there is no study exploring the relations between parenting and sibling conflict resolution strategies. There are some studies investigating the relationship between individuals' personalities and their conflict resolution strategies (Antonioni, 1998; Park & Antonioni, 2007, & Basım et al., 2009), but the present study is the first to investigate the specific temperamental traits as well as parenting practices simultaneously in adolescent sibling population. Furthermore, this study is also first to address the interaction between different temperamental characteristics of siblings in predicting older sibling's use of conflict resolution strategies. In that sense, through exploration of both environmental and individual mechanisms underlying Turkish adolescent siblings' functioning in terms of resolution of conflicts between siblings, this study drew attention to certain aspects of social development during the adolescence period. Moreover, the data was collected from various high schools and SES levels as well as adolescents with various IQ levels participated in the study, which made the sample more diverse. Lastly, with respect to younger sibling's use of conflict resolution strategies, not only older sibling's perceptions about younger one's conflict resolution tactics use but also self-reports from younger siblings were collected. Analyses were conducted with these two scales separately. It was thought that due to in the perceptions about younger sibling's use of conflict resolution strategies, R^2 were overestimated, self-reports of younger siblings were evaluated.

4.3. Limitations of the Study

The most crucial limitation is about the design of the current study. It was cross-sectional study which prevents us to make causal interactions. In addition, as mentioned above, despite variety in structure of sample, the findings could not be generalized to other situations and people because data collection was completed only in Denizli. Therefore, the external validity of the results may be low. Moreover, younger siblings filled in the questionnaire at their homes. Thus, the results may be affected by other confounding variables such as intrusion of parents when their children fill out the scales or asking for parents' help by children. Furthermore, self-reports might increase social desirability bias; therefore, observational methods could be used in further research. Finally, the targets of the study were only female older siblings; thus, all gender composition could not be investigated. Because patriarchal structure and male dominance in the Turkish families (Kandiyoti, 1995; as cited in Sakallı, 2001), older male siblings' conflict resolution strategies should be examined as well.

4.4. Future Suggestions and Implications

As mentioned above, the current study contributed to the existing literature in some aspects concerning conflict resolution strategies utilized by siblings. Even though, there are some questions which answers are still uncertain. Hence, in this part, some suggestions will be provided for future research in order to understand sibling conflict resolution in a detailed way. Initially, in order to understand whether conflict resolution strategies change or not from childhood to adolescence and find out any causal directions, researchers should seek to elucidate it longitudinally. Additionally, studies addressing some other measurement techniques apart from hierarchical regression should be done. For example, dyadic analysis, specifically the Actor-Partner Interdependence Model could be performed in the future studies. As known, conflicts between siblings and sibling

relationships are dyadic by nature and interdependence between dyads and bidirectional effects could be investigated by means of this model. The use of this model will also help to understand factors associating with conflict resolution strategies utilized by both older and younger siblings. It is also advised that some other underlying mechanisms of sibling conflict resolution should be studied. For instance, cognitive control mechanisms, conflict resolution strategies used by other dyads in the family, and emotional understanding of siblings are worth to investigate.

As stated in the introduction part, increase in perceived warmth and decrease in conflict between parents and children are associated with the use of more compromising in conflict resolution (Tucker et al., 2003) and the relationship between one dyad influence on other dyads based on family systems theory (Minuchin, 1985). Moreover, reciprocal influence of siblings' conflict resolution strategies indicated that such mechanisms could occur in other relationships. That's why, effective interventions could be prepared for parents and adolescents. Furthermore, perceived dyadic empathy results in satisfaction in the relationship (Kimmes, Edwards, Wetchler, & Bercik, 2014) and the relationship quality is linked with effective conflict resolution strategies used by siblings (Tucker et al., 2003). For this reason, some other interventions focusing on empathy could be performed in order to develop the use of solution-oriented conflict resolution strategy among adolescents through improving the quality of interpersonal relations.

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APPENDICES

APPENDIX A: Veli Onay Mektubu



1956

Psikoloji Bölümü
Department of Psychology

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY
06531 ANKARA-TURKEY

Tel: 90 (312) 210 31 82
Faks:90 (312) 210 79 75

Veli Onay Mektubu

Sayın Veliler,

Bu tez çalışması Orta Doğu Teknik Üniversitesi psikoloji bölümü gelişim psikolojisi yüksek lisans öğrencisi Hurigül Bayram tarafından Prof. Dr. Sibel Kazak Berument danışmanlığında yürütülmektedir. Bu tez çalışmasının amacı, ebeveynlik uygulamalarının, farklılaşmış ebeveyn yaklaşımının ve kardeşlerin mizaçlarının ergenlikteki kardeşlerin çatışma çözme stratejileri ve yaşadıkları çatışma stilleri üzerindeki etkisini incelemektir. Ayrıca, küçük kardeşin çatışma çözme stratejilerinin büyük kardeşi nasıl etkilediği de araştırılacaktır. Bu amaçları gerçekleştirebilmek için çocuklarınızın bazı anketleri doldurmasına ihtiyaç duymaktayız.

Katılıma onay verdiğiniz takdirde büyük çocuklar anketleri okul ortamında dolduracaklardır. Ayrıca, küçük çocuklarınız için anketler büyük çocuklar aracılığıyla size ulaştırılacaktır. Yapılacak uygulamanın çocuklarınızın psikolojik durumuna olumsuz etkisi olmayacağından emin olabilirsiniz. Çocuklarınızın vereceği cevaplar kesinlikle gizli tutulacak ve bu cevaplar sadece bilimsel araştırma amacıyla kullanılacaktır. Bu formu imzaladıktan sonra rahatsız olduğunuz takdirde çocuklarınız çalışmadan ayrılma hakkına sahiptir. Araştırma sonuçlarının özeti isterseniz tarafımızdan sizlere ulaştırılacaktır.

Araştırmayla ilgili sorularınızı aşağıdaki e-posta adreslerini veya telefon numaralarını kullanarak bize yöneltebilirsiniz.

Saygılarımızla,

Prof. Dr. Sibel Kazak Berument
Tel: 0 312 210 3184

Hurigül Bayram
Tel: 0 505 650 68 16

e-posta: sibel@metu.edu.tr
gul.bayram@metu.edu.tr

e-posta:

Lütfen bu araştırmaya katılmak konusundaki tercihinizi aşağıdaki seçeneklerden size en uygun gelenin altına imzanızı atarak belirtiniz.

A) Bu araştırmaya tamamen gönüllü olarak çocuklarımve'nın katılımcı olmasına izin veriyorum. Çalışmayı istediğim zaman yarıda kesip bırakabileceğimizi biliyorum ve verilen bilgilerin bilimsel amaçlı olarak kullanılmasını kabul ediyorum.

Veli Adı-Soyadı.....

İmza

.....

Tel No:.....

B) Bu çalışmaya çocuklarım ve'nın katılımcı olmasına izin vermiyorum.

Veli Adı-Soyadı.....

İmza

.....

APPENDIX B: Gönüllü Katılım Formu



1956

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY
06531 ANKARA-TURKEY

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Tel: 90 (312) 210 31 82
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Gönüllü Katılım Formu

Sevgili Katılımcı,

Bu tez çalışması Orta Doğu Teknik Üniversitesi psikoloji bölümü gelişim psikolojisi yüksek lisans öğrencisi Huriğül Bayram tarafından Prof. Dr. Sibel Kazak Berument danışmanlığında yürütülmektedir. Bu tez çalışmasının amacı, ebeveynlik uygulamalarının, farklılaşmış ebeveyn yaklaşımının ve kardeşlerin mizaçlarının kardeşler arası çatışma çözme stratejileri üzerindeki etkisini incelemektir. Ayrıca, küçük kardeşin çatışma çözme stratejilerinin büyük kardeşi nasıl etkilediği de araştırılacaktır. Bu amaçları gerçekleştirebilmek için sizlerin bazı anketler doldurmanıza ihtiyaç duymaktayız.

Yapılacak uygulamanın sizlerin psikolojik durumuna olumsuz etkisi olmayacağından emin olabilirsiniz. Ayrıca, sizlerden kimlik belirleyici hiçbir bilgi istenmeyecektir. Vereceğiniz cevaplar kesinlikle gizli tutulacak ve bu cevaplar sadece bilimsel araştırma amacıyla kullanılacaktır. Bu formu imzaladıktan sonra rahatsız olduğunuz takdirde çalışmadan ayrılma hakkına sahipsiniz. Araştırma sonuçlarının özeti tüm katılımcılardan toplanacak verilerin özeti olacak ve verdiğiniz bilgiler birey bazında değerlendirilmeyecektir. Araştırma sonuçlarının özeti isterseniz tarafımızdan sizlere ulaştırılacaktır.

Araştırmayla ilgili sorularınızı aşağıdaki e-posta adreslerini veya telefon numaralarını kullanarak bize yöneltebilirsiniz.

Saygılarımızla,

Prof. Dr. Sibel Kazak Berument
Tel: 0 312 210 3184

Huriğül Bayram
Tel: 0 505 650 68 16

e-posta: sibel@metu.edu.tr
gul.bayram@metu.edu.tr

e-posta:

Lütfen bu araştırmaya katılmak konusundaki tercihinizi aşağıdaki seçeneklerden size en uygun gelenin altına imzanızı atarak belirtiniz.

A) Bu araştırmaya tamamen gönüllü olarak katılıyorum. Çalışmayı istediğim zaman yarıda kesip bırakabileceğimizi biliyorum ve verilen bilgilerin bilimsel amaçlı olarak kullanılmasını kabul ediyorum.

Ad-Soyad:

İmza

Tel No:.....

B) Bu çalışmaya katılmayı kabul etmiyorum.

Ad-Soyad:.....

İmza

APPENDIX C: Demografik Bilgi Formu

Yönerge: Lütfen aşağıdaki soruların her birini cevaplayınız.

Yaşınız:

Evdeki kardeş sayısı:

Kardeşlerinizin yaşı ve cinsiyeti: 1)_____ O) Kız O) Erkek 2)_____ O) Kız O) Erkek

Annenizin yaşı: _____

Babanızın yaşı: _____

Anne ve babanızın şu anki medeni durumu: O) Evli O) Dul O) Boşanmış

Annenizin mesleği: _____ **Babanızın mesleği:** _____

Annenizin eğitim durumu:

O) Okuma yazma bilmiyor O) İlkokul mezunu O) Ortaokul mezunu
O) Lise mezunu O) Üniversite mezunu O) Lisansüstü eğitim

Babanızın eğitim durumu:

O) Okuma yazma bilmiyor O) İlkokul mezunu O) Ortaokul mezunu
O) Lise mezunu O) Üniversite mezunu O) Lisansüstü eğitim

Ailenizi hangi gelir düzeyinde tanımlarsınız?

O) 0-1000 TL O) 1000-2000 TL O) 2000- 3000 TL
O) 3000-4000 TL O) 4000-5000 TL O) 5000 TL ve üzeri

APPENDIX D: Kardeşler Arası Çatışma Çözme Stratejileri Anketi

Kardeşler arası ilişkiler bazı anlaşmazlıklar ve fikir ayrılıkları barındırır. Bu anlaşmazlıklar çok küçük de olabilir çok büyük de. Örneğin, kardeşinizle sizin eşyalarınızı sormadan aldığı için veya sizinle dalga geçtiği için tartışabilirsiniz.

Buradaki soruları yanıtlamadan önce lütfen kardeşinizle geçen yıl boyunca yaşadığınız anlaşmazlıkları düşünün. Her cümle için kardeşinizle anlaşmazlıklarınızda o ifadenin **sizi (a)** ne kadar yansıttığına daha sonra ise **kardeşinizi (b)** ne kadar yansıttığına karar verin. Burada amaç sizin ve kardeşinizin küçük fikir ayrılıklarında bile (televizyonda izlenecek program gibi) bu farklılığa nasıl tepki verdiğinizi anlamaktır.

NOT: Lütfen tüm soruları cevapladığınızdan emin olunuz.

Büyük Kardeş Formu

	Neredeyse hiç	Oldukça az	Bazen	Oldukça çok	Neredeyse her zaman
1) a) Kardeşimle tartıştığımız konular hakkında bahsetmekten kaçınırım.	1	2	3	4	5
b) Kardeşim, tartıştığımız konular hakkında bahsetmekten kaçınır.	1	2	3	4	5
2) a) Eğer kardeşim kısa sürede yumuşamaya istekli olursa sıklıkla ben de aynısını yaparım.	1	2	3	4	5
b) Eğer ben kısa sürede yumuşamaya istekli olursam sıklıkla kardeşim de aynısını yapar.	1	2	3	4	5
3) a) Kardeşimle kendi fikirlerimden vazgeçmeden tartışırım.	1	2	3	4	5
b) Kardeşim, benimle kendi fikirlerinden vazgeçmeden tartışır.	1	2	3	4	5
4) a) Kardeşimle anlaşmazlıklardan kaçınmak için görüşlerimi saklı tutarım.	1	2	3	4	5
b) Kardeşim, benimle anlaşmazlıklardan kaçınmak için görüşlerini saklı tutar.	1	2	3	4	5
5) a) Kardeşimle aramızdaki anlaşmazlıklara çözüm üretmek için birlikte çalışmayı öneririm (konuşmak, hareket etmek).	1	2	3	4	5
b) Kardeşim, aramızdaki anlaşmazlıklara çözüm üretmek için birlikte çalışmayı önerir (konuşmak, hareket etmek).	1	2	3	4	5
6) a) Kendi fikrimi kardeşime kabul ettirmeyi denediğimde sesimi yükseltirim.	1	2	3	4	5
b) Kardeşim, kendi fikrini bana kabul ettirmeyi denediğinde sesimi yükseltir.	1	2	3	4	5
7) a) Bir anlaşmazlığı tartışmak istediğini düşündüğümde kardeşimden uzak dururum.	1	2	3	4	5
b) Kardeşim, bir anlaşmazlığı tartışmak istediğimi düşündüğünde benden uzak durur.	1	2	3	4	5
a) Kardeşimle aramızdaki anlaşmazlıklara çok farklı çözümler sunarım.	1	2	3	4	5
8) b) Kardeşim, aramızdaki anlaşmazlıklara çok farklı çözümler sunar.	1	2	3	4	5

	Neredeyse hiç	Oldukça az	Bazen	Oldukça çok	Neredeyse her zaman
9) a) Kardeşimle çatışmamız boyunca benim fikrimi kabul etmesi için ısrar ederim.	1	2	3	4	5
b) Kardeşim, çatışmamız boyunca kendi fikrini kabul ettirmek için ısrar eder.	1	2	3	4	5
10) a) Kardeşimle aramızdaki anlaşmazlıkların benim için bir anlamı yokmuş gibi davranırım.	1	2	3	4	5
b) Kardeşim, aramızdaki anlaşmazlıkların onun için bir anlamı yokmuş gibi davranır.	1	2	3	4	5
11) a) Kardeşimle aramızdaki anlaşmazlıklarda, o pes ettiğinde ben de pes ederim.	1	2	3	4	5
b) Kardeşimle aramızdaki anlaşmazlıklarda, ben pes ettiğimde o da pes eder.	1	2	3	4	5
12) a) Kardeşimle çatışmalarımız esnasında fikirlerimi değiştirmem.	1	2	3	4	5
b) Kardeşim, çatışmalarımız esnasında fikirlerini değiştirmez.	1	2	3	4	5
13) a) Kardeşimle tartışmak yerine kendimi tutmayı (kontrol etmeyi) tercih ederim.	1	2	3	4	5
b) Kardeşim, benimle tartışmak yerine kendini tutmayı (kontrol etmeyi) tercih eder.	1	2	3	4	5
14) a) Kardeşim ve ben anlaşamadığımız konuları (fikirlere) sakın bir şekilde tartışırız.	1	2	3	4	5
b) Kardeşim ve ben anlaşamadığımız konuları (fikirlere) sakın bir şekilde tartışırız.	1	2	3	4	5
15) a) Kardeşim benimle anlaşamadığında, ona boyun eğmeyi reddederim.	1	2	3	4	5
b) Ben kardeşimle anlaşamadığımda, kardeşim bana boyun eğmeyi reddeder.	1	2	3	4	5
a) Kardeşimle anlaşmazlığa düştüğümde hislerimi kendime saklarım.	1	2	3	4	5
16) b) Kardeşim, benimle anlaşmazlığa düştüğünde hislerini kendine saklar.	1	2	3	4	5
a) Kardeşim ve ben anlaşmazlıklarımız hakkında açıkça konuşuruz.	1	2	3	4	5
17) b) Kardeşim ve ben anlaşmazlıklarımız hakkında açıkça konuşuruz.	1	2	3	4	5

	Neredeyse hiç	Oldukça az	Bazen	Oldukça çok	Neredeyse her zaman
18) a) Kardeşim ve ben anlaşamadığımızda istediğimi yaptırana kadar tartışmayı devam ettiririm.	1	2	3	4	5
b) Kardeşim ve ben anlaşamadığımızda, kardeşim istediğini yaptırana kadar tartışmayı devam ettirir.	1	2	3	4	5
19) a) Kardeşimle anlaşamadığımızda odayı terk ederim.	1	2	3	4	5
b) Kardeşim, anlaşamadığımızda odayı terk eder.	1	2	3	4	5
20) a) Kardeşimle anlaşamadığımızda kardeşimin bakış açısını dinlerim.	1	2	3	4	5
b) Kardeşim, anlaşamadığımızda benim bakış açımı dinler.	1	2	3	4	5
21) a) Kardeşimle anlaşamadığımız zaman son sözü ben söylerim.	1	2	3	4	5
b) Kardeşimle anlaşamadığımız zaman, son sözü kardeşim söyler.	1	2	3	4	5
22) a) Kardeşimle anlaşamadığımızda ondan uzak dururum.	1	2	3	4	5
b) Kardeşimle anlaşamadığımızda, benden uzak durur.	1	2	3	4	5
23) a) Anlaşmazlıkları çözmek için kardeşim ve ben birlikte çalışırız (konuşuruz, hareket ederiz).	1	2	3	4	5
b) Anlaşmazlıkları çözmek için kardeşim ve ben birlikte çalışırız (konuşuruz, hareket ederiz).	1	2	3	4	5
24) a) Kardeşimle anlaşamadığımızda kendi görüşümün kazanmasını isterim.	1	2	3	4	5
b) Kardeşim, anlaşamadığımızda kendi görüşünün kazanmasını ister.	1	2	3	4	5
25) a) Bazı şeyler beni rahatsız etmiş gibi davranırım bu yüzden kardeşimle tartışmak zorunda kalmayız.	1	2	3	4	5
b) Kardeşim bazı şeyler onu rahatsız					

etmiyormuş gibi davranır bu yüzden benimle tartışmak zorunda kalmaz.	1	2	3	4	5
26) a) Kardeşime karşı kendi fikrimi şiddetle savunurum.	1	2	3	4	5
b) Kardeşim, bana karşı kendi fikrini şiddetle savunur.	1	2	3	4	5
a) Kardeşimle aramızdaki sorunu onunla tartışmaktan kaçınırım.	1	2	3	4	5
27) b) Kardeşim, aramızdaki sorunu benimle tartışmaktan kaçınır.	1	2	3	4	5
28) a) Her ikimizin de anlaşığı bir çözüme ulaşmak hoşuma gider.	1	2	3	4	5
b) Her ikimizin de anlaşığı bir çözüme ulaşmak kardeşimin hoşuna gider.	1	2	3	4	5
29) a) Haklı olduğumu hissettiğim zaman, kardeşime boyun eğmeyi reddederim.	1	2	3	4	5
b) Kardeşim haklı olduğunu hissettiği zaman, bana boyun eğmeyi reddeder.	1	2	3	4	5

APPENDIX E: Farklı Deneyimlere Dayanan Kardeş Envanteri

Bu anket, kardeşin ve sen büyürken sizi birbirinizden farklı kılan özellikler konusunda sana sorular sormak üzere düzenlenmiştir. Bütün sorular için kendini kardeşinle karşılaştırmanı istiyorum. Her soru için seni kardeşinden farklı kılan özellikler üzerine düşün. Sana, anne ve babanın seninle ve kardeşinle nasıl bir iletişim halinde olduğunu soracağız.

Seni ve kardeşini farklı kılan özellikler için anneniz ile olan ilişkilerinizi düşünerek sorulara cevap verin.

Numaralandırma aşağıdaki gibidir:

1= Genelde, annem kardeşime benden daha fazla bu şekilde davranmıştır.

2= Genelde, annem kardeşime ve bana aynı şekilde davranmıştır.

3= Genelde, annem bana kardeşimden daha fazla bu şekilde davranmıştır.

Örnek: İlk soru annenin sana mı yoksa kardeşine mi daha sert davrandığını sormaktadır.

Eğer annen;

kardeşine sana davrandığından daha sert davranıyorsa “1”i

ikinize de aynı ölçüde sert davranıyorsa “2”yi

sana karşı daha sert ise “3”ü işaretle (X).

		ANNEM	
	Kardeşime daha fazla 1	İkimize de Aynı 2	Bana daha fazla 3
1) Annem bize sert/kuralcı davranır.			
2) Annem yaptıklarımızla gurur duyar/övünür.			
3) Annem bizimle bir şeyler yapmaktan keyif alır.			
4) Annem bizim ne düşündüğümüze ve ne hissettiğimize karşı duyarlıdır/bizi anlar.			
5) Annem uygunsuz/yanlış davranışlarımız için bizi cezalandırır.			
6) Annem yapmaktan hoşlandığımız şeylere ilgi gösterir.			
7) Annem bir başka aile bireyinin yaptığı şeyden bizi sorumlu tutar/suçlar.			
8) Annem bizden birini kayırmaya eğilimlidir(kayırır).			
9) Annem bizi azarlayarak ve ya cezalandırarak disipline eder.			

APPENDIX F: Erken Ergenlik Mizaç Ölçeği - Revize Edilmiş Kısa Formu

Yönergeler

Aşağıdaki sayfada, insanların kendilerini tanımlamak için kullanabileceği bir dizi ifade bulacaksınız. İfadeler çok sayıda aktivite ve tutumlara değinmektedir.

Her bir ifade için lütfen **size** en doğru gelen ifadeyi **daire** içine alınız. İfadeler için herhangi bir doğru cevap yoktur. Herkes ifadelere farklı yanıtlar verebilir. Lütfen aklınıza gelen ilk cevabı daire içine alınız.

İfadenin sizi ne kadar doğru tanımladığıyla ilgili aşağıdaki derecelendirmeyi kullanacaksınız:

Eğer ifade:

Sayıyı daire içine alın:

Sizin için neredeyse hiç doğru değilse	1
Sizin için genellikle doğru değilse	2
Sizin için bazen doğru bazen doğru değilse	3
Sizin için genellikle doğruysa	4
Sizin için neredeyse her zaman için doğruysa	5

NOT: Lütfen tüm soruları cevapladığınızdan emin olunuz.

Her ifade sizin için ne kadar doğrudur?	Neredeyse hiç doğru değil	Genellikle doğru değil	Bazen doğru, bazen değil	Genellikle doğru	Neredeyse her zaman doğru
1) Ödev sorunlarına odaklanmak benim için gerçekten kolaydır.	1	2	3	4	5
2) Günün büyük bir bölümünde kendimi oldukça mutlu hissedirim.	1	2	3	4	5
3) Eğer birine kızdıysam, onun duygularını inciteceğini bildiğim halde onu incitecek şeyleri söylemeye yatkınım (söylerim).	1	2	3	4	5
4) Işığın odada daha parlak hale gelmesi gibi çevremde gerçekleşen en ufak değişiklikleri bile fark ederim.	1	2	3	4	5
5) İşleri zamanında bitirmekte zorlanırım.	1	2	3	4	5
6) Kızgın olduğumda, birşeyleri fırlatırım ya da kırarım.	1	2	3	4	5
7) Hediyeleri açmamam istendiğinde hediyeleri açmadan beklemek benim için zordur.	1	2	3	4	5
8) Arkadaşlarım kendi kendilerine benim eğlendiğimden daha fazla eğleniyormuş gibi görünürler.	1	2	3	4	5
9) Başka insanların farketmediği küçük şeyleri farketmeye yatkınım (fark ederim).	1	2	3	4	5
10) Birine gerçekten kızarsam, ona vurabilirim.	1	2	3	4	5
11) Birisi benden yaptığım bir şeyi durdurmamı/bırakmamı istediğinde, o şeyi durdurmak/bırakmak benim için kolaydır.	1	2	3	4	5

12) Yapmamam gerektiği zaman bile ödevime başlamadan önce bir süreliğine eğlenceli bir şeyler yaparım.	1	2	3	4	5
13) Çoğunlukla azıcık bir şey bile beni ağlamaklı yapmaya yeter.	1	2	3	4	5
14) Gürültülerin çok farkındayım.	1	2	3	4	5
15) Hoşlanmadığım insanlara karşı kaba davranmaya yatkındır.	1	2	3	4	5
16) İnsanların ifadelerine bakarak sinirli olduklarını anlayabilirim.	1	2	3	4	5
17) Birini aramaya çalıştığımda ve o kişinin telefonu sürekli meşgul olduğu için ulaşamadığımda, bu durum beni rahatsız eder.	1	2	3	4	5
18) Yapmamam gereken bir şey için ne kadar kendimi engellemeye çalışırsam çalışayım yine de o şeyi yapma eğilimi gösteririm (yaparım).	1	2	3	4	5
19) Başka kişilerin farkettiklerinden daha fazla üzülürüm.	1	2	3	4	5
20) Yapmam gereken zor bir görevim/ödevim varsa, hemen başlarım.	1	2	3	4	5
21) Okulda bir dersten çıkıp diğer derse girdiğimde yeni derse alışmakta/konsantre olmakta zorlanırım.	1	2	3	4	5
22) Birşey yapmak istediğimde ve annem-babam buna izin vermezse kendimi çok engellenmiş hisseder, sinirlenirim.	1	2	3	4	5
23) Hayatımda birçok şey ters gittiği zaman üzülürüm.	1	2	3	4	5
24) Çalışmaya çalışırken etraftaki gürültüyü göz ardı etmekte ve konsantre olmakta zorlanırım.	1	2	3	4	5
25) Teslim tarihinden önce ödevlerimi bitiririm.	1	2	3	4	5

26) Çevremde gerçekleşen birçok farklı şeyi takip etmede (izlemede, her birinde dikkat etmede) iyiyimdir.	1	2	3	4	5
27) Sır saklamak benim için kolaydır.	1	2	3	4	5
28) Eğlenerek yaptığım bir şeyi bırakmak zorunda kaldığımda gerilirim/sinirlenirim.	1	2	3	4	5
29) Projelerimin üzerinde çalışmayı, teslim tarihinin hemen öncesine kadar ertelerim.	1	2	3	4	5
30) Bir arkadaşına gerçekten kızdığımda, ona patlamaya yatkınım.	1	2	3	4	5
31) Eğlenmemin/zevk almamın beklendiği zamanlarda (örneğin gezide ya da yılbaşı partisinde) bile kendimi üzgün hissederim.	1	2	3	4	5
32) Uzun kuyruklarda beklemek gerçekten canımı sıkıyor, beni sinirlendirir.	1	2	3	4	5
33) Hiçbir sebep olmaksızın insanlara sataşırım.	1	2	3	4	5
34) Bir kişi bir şeyin nasıl yapıldığını söylediğinde/gösterdiğinde, o kişiyi pür dikkat dinlerim/izlerim.	1	2	3	4	5
35) Ödevlerimde bir yanlış yaptığımda gerilirim/sinirlenirim.	1	2	3	4	5
36) Bir şeyin tam ortasına geldiğimde onu bırakıp başka bir şey yapmaya yatkınım.	1	2	3	4	5
37) Konuşurken insanların sözümü kesmesi beni gerer/sinirlendirir.	1	2	3	4	5
38) Planlarıma ve amaçlarıma sadık kalabilirim.	1	2	3	4	5
39) Bir ödevi/işini gerçekten iyi yapamazsam bu beni üzer.	1	2	3	4	5

APPENDIX G: Ergen Aile Süreci Ölçeği

Aşağıdaki ifadeleri dikkatlice okuyunuz ve her bir durumu düşününüz ve size uyan seçeneği daire içine alarak belirtiniz.	Hiç uygun değil	Uygun değil	Biraz uygun	Uygun	Çok uygun
1) Okulda ne yaptığımı annemle sık sık paylaşırım.	1	2	3	4	5
2) Annem bana yeterince ilgi/sevgi gösterir.	1	2	3	4	5
3) Benim için olabilecek en kötü şeylerden biri annemi hayal kırıklığına uğratmaktır.	1	2	3	4	5
4) Üzerinde çok çalıştığım bir şeyi bitirdiğim zaman annem genellikle benimle gurur duyar	1	2	3	4	5
5) Annem bana güvenir.	1	2	3	4	5
6) Arkadaşlarımla anneleriyle ilişkilerini düşündüğümde, ben anneme daha yakınımdır.	1	2	3	4	5
7) Bazen annem insanların içinde beni küçük düşürür.	1	2	3	4	5
8) Annem bazen beni ya da fikirlerimi dinlemez.	1	2	3	4	5
9) Annem bazen davranışlarımı beğenmediğini belli eder.	1	2	3	4	5
10) Sanki annem benim şimdi olduğumdan daha farklı bir insan olmamı istiyor.	1	2	3	4	5
Aşağıdaki ifadeleri dikkatlice okuyunuz ve her bir durumun sizin için ne kadar sıklıkla gerçekleştiğini düşününüz. Size uyan seçeneği daire içine alarak belirtiniz.	Hiçbir Zaman	Çok Seyrek	Bazen	Sık Sık	Her Zaman
11) Annemle ne sıklıkta anlaşmazlık yaşar ya da tartışırın?	1	2	3	4	5
12) Annem seni kızdırdığında ne sıklıkta onunla konuşmazsın?	1	2	3	4	5
13) Anneme ne sıklıkta kızsın?	1	2	3	4	5

APPENDIX H: Kardeşler Arası Çatışma Çözme Stratejileri Anketi

Kardeşler arası ilişkiler bazı anlaşmazlıklar ve fikir ayrılıkları barındırır. Bu anlaşmazlıklar çok küçük de olabilir çok büyük de. Örneğin, ablanızla sizin eşyalarınızı sormadan aldığı için veya sizinle dalga geçtiği için tartışabilirsiniz.

Buradaki soruları yanıtlamadan önce lütfen ablanızla geçen yıl boyunca yaşadığınız anlaşmazlıkları düşünün. Her cümle için ablanızla anlaşmazlıklarınızda o ifadenin **sizi** ne kadar yansıttığına/anlattığına karar verin ve size uyan seçeneği daire içine alın. Burada amaç sizin küçük fikir ayrılıklarında bile (televizyonda izlenecek program gibi) bu farklılığa nasıl tepki verdiğinizi anlamaktır.

NOT: Lütfen tüm soruları cevapladığınızdan emin olunuz.

Küçük Kardeş Formu

	Neredeyse hiç	Oldukça az	Bazen	Oldukça çok	Neredeyse her zaman
1) Ablamla tartıştığımız konular hakkında bahsetmekten kaçınırım.	1	2	3	4	5
2) Eğer ablam kısa sürede yumuşamaya istekli olursa sıklıkla ben de aynısını yaparım.	1	2	3	4	5
3) Ablam kendi fikirlerimden vazgeçmeden tartışırım.	1	2	3	4	5
4) Ablamla anlaşmazlıklardan kaçınmak için görüşlerimi saklı tutarım.	1	2	3	4	5
5) Ablamla aramızdaki anlaşmazlıklara çözüm üretmek için birlikte çalışmayı öneririm (konuşmak, hareket etmek).	1	2	3	4	5
6) Kendi fikrimi ablama kabul ettirmeyi denediğimde sesimi yükseltirim.	1	2	3	4	5
7) Bir anlaşmazlığı tartışmak istediğini düşündüğümde ablamdan uzak dururum.	1	2	3	4	5
8) Ablamla aramızdaki anlaşmazlıklara çok farklı çözümler sunarım.	1	2	3	4	5
9) Ablamla çatışmamız boyunca benim fikrimi kabul etmesi için ısrar ederim.	1	2	3	4	5
10) Ablamla aramızdaki anlaşmazlıkların benim için bir anlamı yokmuş gibi davranırım.	1	2	3	4	5
11) Ablamla aramızdaki anlaşmazlıklarda, o pes ettiğinde ben de pes ederim.	1	2	3	4	5
12) Ablamla çatışmalarımız esnasında fikirlerimi değiştirmem.	1	2	3	4	5
13) Ablamla tartışmak yerine kendimi tutmayı (kontrol etmeyi) tercih ederim.	1	2	3	4	5

14) Ablam ve ben anlaşamadığımız konuları(fikirleri) sakın bir şekilde tartışırız.	1	2	3	4	5
15) Ablam benimle anlaşamadığında, ona boyun eğmeyi reddederim.	1	2	3	4	5
16) Ablamla anlaşmazlığa düştüğümde hislerimi kendime saklarım.	1	2	3	4	5
17) Ablam ve ben anlaşmazlıklarımız hakkında açıkça konuşuruz.	1	2	3	4	5
18) Ablam ve ben anlaşamadığımızda istediğimi yaptırana kadar tartışmayı devam ettiririm.	1	2	3	4	5
19) Ablamla anlaşamadığımızda odayı terk ederim.	1	2	3	4	5
20) Ablamla anlaşamadığımızda kardeşimin bakış açısını dinlerim.	1	2	3	4	5
21) Ablamla anlaşamadığımız zaman son sözü ben söylerim.	1	2	3	4	5
22) Ablamla anlaşamadığımızda ondan uzak dururum.	1	2	3	4	5
23) Anlaşmazlıkları çözmek için ablam ve ben birlikte çalışırız (konuşuruz, hareket ederiz).	1	2	3	4	5
24) Ablamla anlaşamadığımızda kendi görüşümün kazanmasını isterim.	1	2	3	4	5
25) Bazı şeyler beni rahatsız etmiş gibi davranırım bu yüzden ablamla tartışmak zorunda kalmayız.	1	2	3	4	5
26) Ablama karşı kendi fikrimi şiddetle savunurum.	1	2	3	4	5
27) Ablamla aramızdaki sorunu onunla tartışmaktan kaçınırım.	1	2	3	4	5
28) Her ikimizin de anlaştığı bir çözüme ulaşmak hoşuma gider.	1	2	3	4	5
29) Haklı olduğumu hissettiğim zaman, ablama boyun eğmeyi reddederim.	1	2	3	4	5

APPENDIX I: Turkish Summary

1. GİRİŞ

1.1. Kardeş İlişkileri

1.1.1. Kardeş İlişkilerinin Doğası

Kardeşlerle kurulan ilişkiler bireyin yaşamındaki en önemli etkileşimlerden birisidir ve doğası gereği kardeşlik bireyin sosyal ağına önemli ve etkili kişiler ekler (Dunn, 2002). Diğer ilişkilerin aksine kardeş ilişkileri özgün özelliklere sahiptir (Cicirelli, 1995). Örneğin, arkadaşlık ilişkisine kıyasla, kardeş ilişkileri doğası gereği irade dışıdır. Buna ek olarak, kardeşlerle kurulan ilişkiler bireyin hayatında en uzun süreli ve kalıcı ilişkilerdir. Kardeş ilişkilerini diğerlerinden ayıran başka bir nokta ise diyagonal bir yapıya sahip olmasıdır. Yani, arkadaş ilişkileri karşılıklılık ve ebeveyn ilişkileri tamamlayıcılık esaslarına dayanırken, kardeş ilişkileri her ikisini de içinde barındıran bir yapıya sahiptir (Dunn, 1983). Bu sebeple de yapılan çalışmalar kardeş ilişkilerinin bireyin gelişiminde önemli bir etkiye sahip olduğunu göstermektedir (Milevsky, 2011).

1.1.2. Çocukluktan Ergenliğe Geçişte Kardeş İlişkileri

Literatürde, kardeş ilişkilerinin zamandan etkilenip etkilenmediğine dair yapılan araştırmalar tutarsız bulgular içermektedir. Dunn ve ark. (2004) çocukluk ve ergenlik dönemindeki kardeş ilişkilerinin birbiriyle pozitif yönde ilişkili olduğuna değinmektedir. Yani, çocukluktan ergenliğe kardeşlerin birbirlerine davranışlarında ve duygularında fark edilebilir bir devamlılık olduğu söylenebilir. Fakat bazı çalışmalarda ise ergenlik döneminde yaşanan fiziksel, psikolojik ve sosyal değişime vurgu yaparak, kardeş ilişkilerinin kalitesinin bu faktörlerden etkilenerek değişebileceği savunulmaktadır (Dunn, 1992; aktaran Noller, 2005). Bir başka çalışmada ise kardeş ilişkilerinin kalitesinin ergenlik döneminde U

şeklinde bir desen sergilediği belirtilmektedir. Diğer bir deyişle, ergenliğin ilk döneminde kerdeş ilişkilerindeki pozitiflik azalmakta fakat sonrasında tekrar artmaktadır (Buhrmester & Furman, 1990). Enlemsel çalışmalara kıyasla, boylamsal bir çalışmada ise, Brody, Stoneman ve McCoy (1994) ergenliğe geçişte ve sonrasında kerdeş ilişkilerindeki olumsuzluğun artan bir eğilim sergilediğine değinmişlerdir.

1.2 Kerdeş İlişkilerinde Çatışma

1.2.1 Çatışma Tanımları ve Kerdeş Çatışmalarının Doğası

Çatışma insan yaşamının merkezinde, kaçınılmaz ve dinamik yapıdaki örüntülerden biridir. Cicirelli (1995) çatışmayı iki tarafın katıldığı kavga ve mücadele içeren karşılıklı zıtlaşma ve anlaşmazlığın olduğu sosyal bir durum olarak tanımlamaktadır.

Kişilerarası çatışmayı konu edinen araştırmalar çatışmanın süreçlerine ve bireyin ilişkilerindeki etkisine değinmişlerdir. Shantz'a göre (1987), kişilerarası çatışmayı tanımlayan 5 süreç vardır. Bunlardan ilki çatışmanın sıklığı ve süresi, ikincisi çatışmanın konusu, üçüncüsü çatışmayı başlatan kişinin kim olduğu, dördüncüsü çatışma çözme stratejileri ve sonuncusu ise çatışmanın sonuçlarıdır. Bu çalışmada ise, bu süreçler arasından spesifik olarak ergenlik dönemindeki bireylerin çatışma çözme stratejileri incelenmiştir.

Literatürde, araştırmacılar çatışma çözme stratejilerini yapıcı ve yıkıcı stratejiler olarak ikiye ayırmakta ve bu iki strateji türü arasındaki farklılıklara dikkat çekmektedirler. Yapıcı stratejiler düşük düzeyde duygusal yoğunluk içeren ve genellikle işbirliği, problem çözmeye odaklanma ve beyin fırtınası gibi uzlaşmayı teşvik edici çatışma yönetme davranışlar olarak tanımlanırken, yıkıcı stratejiler yüksek düzeyde duygusal yoğunluk içeren düşmanca, kaçınmacı, ya da zorlayıcı davranışları içerisinde barındırmaktadır (Howe ve ark., 2002).

Bireyler hayatları boyunca diğerleriyle karşılıklı hoşnutluk içeren etkileşimde bulunmayaeğilimlidirler fakat çatışma ise oldukça yaygın ve ergenlik gibi hayatın değişik dönemlerinde kaçınılmaz bir deneyimdir (Campione-Barr & Smetana, 2010). Ergenlik dönemi boyunca, ebeveyn-çocuk çatışmalarının yanı sıra kardeşlerarası çatışmalar da oldukça fazla yaşanmaktadır (Brody ve ark., 1994)

1.2.2 Kardeş Çatışmalarını Açıklayan Teoriler

Literatürde kardeş çatışmaları ile ilgili faktörleri ve kardeşlerin çatışmalarını nasıl çözdüklerini açıklayan bazı teorilerden bahsedilmektedir. Bunlardan ilki “aile sistemleri teorisi”dir (Minuchin, 1985). Bu teoriye göre, aile içindeki alt sistemler hem birbirini hem de bütünüyle aile sistemini etkilemektedir. Örneğin, ebeveyn-çocuk veya eşler arasındaki bir olumsuzluk kardeşler arası iletişimi de aynı doğrultuda etkilemektedir (Kim ve ark., 2006). Buna ek olarak, Reese-Weber ve Kahn (2005), yaptıkları çalışmada, ebeveynler arasındaki çatışma çözüm stratejilerinin ebeveyn-çocuk arasındaki çatışmalarda kullanılan stratejilerle ilişkili olduğu ve onun da kardeşler arası çatışma çözüm stratejilerini aynı doğrultuda etkilediğini bulmuşlardır. Bu sebeple, bu çalışma ebeveyn davranışlarının ergen kardeşlerin çatışma çözme stratejileri üzerindeki rolünü de araştırmaktadır. Bir diğer önemli teori ise “sosyal öğrenme teorisi”dir (Bandura, 1989). Bu teoriye göre, kardeşler kullandıkları çatışma çözme stratejilerini birbirlerini veya başkalarını gözlemleyerek ya da davranışları taklit ederek öğrenmektedirler. Örneğin, Reese-Weber ve Kahn (2005) yaptığı çalışmada kardeşlerin kullandıkları çatışma çözme stratejilerini ebeveynlerini model alarak öğrendiklerini göstermektedir. Sosyal öğrenme teorisine karşıt bir bakış açısıyla, kardeş özdeşim kurmama (deidentification) süreci kardeşler arası ilişkiyi etkileyen faktörleri açıklamaya yardımcı olmaktadır. Bu süreç doğrultusunda kardeşler farklı bir kişilik yaratarak ve farklı yolları izleyerek birbirlerinden farklı olmaya çalışmaktadırlar. Bu eğilimin temel amacı kendilerini diğerlerinden farklı ve eşsiz olarak tanımlamaktır ve bu süreç farklı mizaç ve kişilik özelliklerini sürecin kaynakları olarak ele almaktadır (Whiteman, Becerra & Killoren, 2009).

1.2.3 Çatışma Çözme Stratejileri Örüntülerini Anlama

Sweeney ve Carruthers (1996) çatışma çözmeyi uzlaşmaya varmak için çatışmadaki her iki taraf tarafından kullanılan süreç olarak tanımlamaktadır (aktaran Holt & DeVore, 2005).

Bu süreci anlamak için, Blake ve Mouton'ın öne sürdüğü "çift yönlü ilgi modeli" ile birlikte çatışma çözme stratejileri ile ilgili çalışmalar son 50 yılda hız kazanmıştır (Sorenson, Morse ve Savage, 1999). Bu çalışmada, ilk önce Blake ve Mouton tarafından modellenen, daha sonra ise Pruitt tarafından geliştirilen çift yönlü ilgi modelinin Killoren, Thayer ve Updegraff (2008) tarafından kullanılan üç boyutlu modeli ile kardeşlerin çatışma çözme stratejileri incelenmiştir. Bu modele göre bireylerin çatışmalarını çözmeye kullandıkları stratejiler bazı motivasyonel faktörlerden etkilenmektedir. Bu faktörlerden biri "kendine ilgi", diğeri ise "diğer tarafa ilgi"dir. Kendine ilgi bireyin kendi ile ilgili ihtiyaçları ve sonuçları karşılamaya yönelik iken diğer tarafa ilgi ise çatışmadaki karşı tarafın ihtiyaçlarını ve isteklerini karşılamaya yöneliktir (Pruitt, 1983). Bu modele göre kontrol edici strateji, yüzleşmeden kaçınmacı strateji ve çözüm odaklı strateji olmak üzere 3 boyut bulunmaktadır. Kontrol edici stratejiler rekabet, düşmanlık ve olumsuzluk içeren davranışlarla ilgilidir ve birey tamamıyla kendine yönelik davranışlarda bulunur. Fakat yüzleşmeden kaçınmacı stratejiler çatışmadan çekilme ve kaçınma gibi davranışlarla ilintilidir ve birey ne kendi ne de diğer tarafın ihtiyaçlarını gidermeye yönelik davranışlarda bulunur. Son olarak, çözüm odaklı stratejilerde uzlaşma ve anlaşma amaçlanmakta ve birey hem kendinin hem de diğer tarafın ihtiyaçlarını düşünerek hareket etmektedir.

Ergen kardeşlerin çatışma çözme stratejilerini inceleyen pek az sayıda araştırma bulunmaktadır. Thayer ve arkadaşları (2008) Meksikalı ergen kardeşlerle yaptıkları çalışmada ergenlikteki bireylerin en sık çözüm odaklı stratejileri kullandıklarını ve daha az uzlaşmadan kaçınmacı ve kontrol edici stratejiler kullandıklarını bulmuşlardır. Kardeşler arası çatışma çözme stratejilerini etkileyen

faktörlere bakıldığında ise kardeşler arası içtenliğin daha çok yapıcı ve çözüm odaklı stratejiler ile ilişkili olduğu bulunmuştur (Recchia & Howe, 2009). Buna ek olarak, Ross ve arkadaşları'nın (2006) yaptığı bir çalışmada ise eğer büyük kardeş, küçük kardeşin kullandığı stratejiyi olumlu olarak görüyorsa kardeşini suçlamaya daha az eğilimli olduğu bulunmuştur.

1.2.4 Kardeşler Arası Çatışma Çözme Stratejilerinde Cinsiyet Farklılıkları

Kardeşler arası çatışma çözme stratejilerini inceleyen neredeyse tüm çalışmalarda cinsiyet farklılıklarına bakılmıştır. Bu bağlamda, cinsiyet sosyalleşmesi ve cinsiyetçi sosyal ilişkiler ve iletişim stilleri bu cinsiyet farklılıklarını açıklamada bir temel olarak düşünülmektedir. Gidden' a göre (1993), çocuklar cinsiyet rollerini ebeveynlerden öğrenerek kendi cinsiyetleri doğrultusunda sosyalleşirler ve davranırlar. Bu şekilde de kızlar ve erkekler farklı iletişim ve ilişki stilleri edinirler. Maccoby (1990) de kızlar ve erkeklerin ilişkisel farklılıklarına değinmiştir. Ona göre kızlar daha içten ve entegre ilişkiler kurarken, erkekler karşı tarafı daha daraltıcı olmakta ve kendilerini daha az ifade edebilmektedirler. Bu açıdan bakıldığında kız ve erkeklerin girdiği farklı süreçlerin çatışmalarını çözmede kullandıkları stratejileri de etkilediği düşünülebilir.

Ergen bireylerin çatışma çözme stratejilerini oluştururken cinsiyetlerine bağlı olarak farklı stratejiler kullanıp kullanmadığını inceleyen çalışmalarda yetersiz ve tutarlı olmayan sonuçlara rastlanmaktadır. Bazı çalışmalar kardeşlerin çatışma çözme stratejilerinin cinsiyete göre farklılaşmadığını gösterirken (Killoren ve ark., 2008), bazı çalışmalar kızların arkadaşlarıyla çatışmalarını çözerken erkeklere göre daha uzlaşmacı ve nazik olduğunu (Owens, Daly & Slee, 2005), erkeklerin ise daha kontrol edici bir strateji kullandığını göstermektedir (Thayer ve ark., 2008).

Literatürdeki karışık bulgulardan dolayı, bu çalışmada büyük kardeşlerin çatışma çözme stratejilerinin küçük kardeşlerin cinsiyetine göre değişip değişmediğine bakılmaktadır.

1.3 Kardeşlerin Çatışma Çözme Örüntülerinde Çevresel Etkiler

Son yıllarda yapılan çalışmalar göz önünde bulundurulduğunda, ebeveynliğin kardeş ilişkilerini etkileyen çevresel faktörlerden biri olduğu düşünülmektedir (Milevsky, 2011).

1.3.1 Ebeveynlik

1.3.1.1 Ebeveynlik ve Ergen ve Kardeş Sonuçları ile İlişkisi

Ebeveynlik, ebeveynlerin çocukların doğumdan yetişkinliğe kadar fiziksel, psikolojik, sosyal, bilişsel ve duygusal gelişimlerini etkilediği bir süreç olarak tanımlanmaktadır (Bornstein, 2013) ve çocukların ve gençlerin sosyalleşme sürecinde en temel role sahip olduğu bilinmektedir (Kiff, Lengua & Zalewski, 2011).

Ebeveynlik stilleri hakkında yapılan kuramsal çalışmalar göz önünde bulundurulduğunda, Baumrind'in (1972; 1991) ebeveynlik tipolojisi literatüre katkıda bulunan en önemli çalışmalardan biridir. Baumrind ebeveynliği destek ve kontrol boyutlarını içeren demokratik, otoriter ve izin verici ebeveynlik olarak üç stile ayırmıştır. Daha sonra, Baumrind'in tipolojisini baz alarak, Maccoby ve Martin (1983) ebeveynliği dört boyutta incelemiştir. Bu tipolojide Baumrind'in öne sürdüğü demokratik ve otoriter ebeveynlik stilleri aynı kalmakta, izin verici ebeveynlik stili müsamahakâr ve ihmalkâr olmak üzere ikiye ayrılmaktadır. Demokratik ebeveynlik çocuğun merkeze alındığı, tutarlı, en uygun ölçüde kontrolün ve sıcaklığın sağlandığı ebeveyn çocuk ilişkisi olarak tanımlanmaktadır. Otoriter ebeveynlik ise demokratik ebeveynliğin tam aksine kısıtlayıcı,

cezalandırıcı ve çocuğun isteklerinin reddedildiği bir stil olarak nitelendirilmektedir. Bu stile sahip ebeveynler kurallar koyarak çocuklarının bu kurallara itaat etmesini beklerler. İzin verici ebeveynlik stili ise çocuğun davranışlarının kabul edildiği, yüksek düzeyde sıcaklık ve toleransın bulunduğu fakat kısıtlayıcı bir tutumun sergilenmediği bir ebeveynlik olarak tanımlanmaktadır (Baumrind 1971; 1991). Maccoby ve Martin'in (1983) tanımladığı müsamahakâr ebeveynlik stili Baumrind' in izin verici ebeveynlik stili gibi desteğin yüksek ama kontrolün düşük düzeyde olduğu bir stildir. Fakat ihmalkâr ebeveynlik stilinde hem destek hem de kontrol en düşük seviyededir (aktaran Teti & Candelaria, 2002).

Bu alanda oldukça fazla çalışma vardır ve bu çalışmalar ebeveynlik stillerinin çocuklar ve ergenler üzerindeki olumlu ve olumsuz etkilerinin yanı sıra kardeş ilişkileri üzerinde de önemli bir etkiye sahip olduğunu göstermektedir (Milevsky, 2011). Örneğin, Milevsky, Schlecter ve Machlev (2011) yaptıkları bir çalışmada otoriter ve ihmalkâr ebeveynlere sahip ergenlerin kardeşleriyle ilişkilerini daha az destekleyici olarak tanımladıklarını ortaya koymuşlardır. Buna ek olarak, demokratik ebeveynlik stili de ihmalkâr ve otoriter ebeveynlik stillerine kıyasla kardeşler arasındaki sıcaklıkla daha fazla ilişkili olduğu bulunmuştur.

Baumrind' in ebeveynlik tipolojisini baz alarak birçok çalışma yapılmasına rağmen, Darling ve Steinberg (1993) ebeveynlik stillerinin çocuk ve ergenleri doğrudan etkilemediğini onun yerine spesifik ebeveyn davranışlarının çocuk ve ergenler üzerinde etkileri olduğunu öne sürmüştür. Bu bağlamda, bu çalışmada Darling ve Steinberg'in kavramsallaştırdığı ebeveynlik davranışlarının Steinberg ve Silk (2002) tarafından geliştirilen ebeveyn-ergen ilişkilerinde özerklik, uyum ve çatışma olarak üç ebeveyn davranışı boyutu incelenmiştir. Özerklik, karşılıklı bağlılık ve bağımsızlığı dengeli bir biçimde geliştirmek için ebeveynin ergen çocuğunu ne kadar kontrol ettiğiyle ilgilidir ve psikolojik kontrol, izleme, süpervizyon ve destek gibi ebeveyn davranışları içerir. Uyum ise ebeveynlerin çocuklarıyla ilişkilerinde nasıl davranışlar sergilediğiyle ilgilidir ve ebeveyne ait

sıcaklık, katılım ve yakınlık gibi davranışlar içerir. Son olarak çatışma boyutu muhalif, düşmanca ve tartışmacı bir iletişim içeren davranışları temsil eder.

Ebeveyn davranışlarının çocuk ve ergenler üzerindeki etkilerini inceleyen çalışmalar özerkliği kapsayan ebeveyn davranışlarının olumlu ergen davranışlarıyla olumlu yönde ama antisosyal davranışlarla olumsuz yönde ilişkili olduğunu göstermektedir (Jacobson & Crockett, 2000). Benzer şekilde, uyumu kapsayan ebeveyn davranışlarının da ergen davranışlarıyla ve karde ilişkilerinin kalitesiyle olumlu yönde ilişkili olduğu gözlemlenmiştir (Wang ve ark., 2011; Kim ve ark., 2006). Çatışma boyutu düşünüldüğünde ise ebeveynve ergen arasındaki çatışma arttıkça kardeşler arasındaki çatışmanın da arttığı ve ergenleri olumsuz yönde etkilediği bulunmuştur (Trentacosta ve ark., 2011; Kim ve ark., 2006).

1.3.2 Algılanan Farklılaşmış Ebeveyn Yaklaşımı

Son yıllarda, diğer ebeveyn davranışlarının yanı sıra aile içi etkileşimi etkileyen bir başka ebeveynlik boyutunun da farklılaşmış ebeveyn yaklaşımı olduğu yapılan çalışmalarda ortaya koyulmuştur. Farklılaşmış ebeveyn yaklaşımı ebeveynlerin bir çocuğa diğer(ler)inden daha avantajlı ve olumlu yaklaşması veya çocuklara karşı eşit olmayan bir muamele göstermesi olarak tanımlanabilir (Daniel & Plomin, 1985).

1.3.2.1 Algılanan Farklılaşmış Ebeveyn Yaklaşımının Çocuklar ve Kardeşler Üzerindeki Etkileri

Algılanan farklılaşmış ebeveyn yaklaşımının ergenler üzerindeki etkileri göz önünde bulundurulduğunda, yapılan çalışmalar antisosyal davranışlarla (Tamrouti-Makkink ve ark., 2004), depresif bulgularla (Crouter ve Osgood, 2008) ve daha düşük özgüvenle (McHale ve ark., 2000) ilişkili olduğunu göstermektedir. Buna ek olarak, algılanan farklılaşmış ebeveyn yaklaşımının ergenlik döneminde

kardeş ilişkilerindeki pozitif olma halini olumsuz yönde etkilediği (Shanahan ve ark., 2008) ve kardeşler arasındaki rekabeti arttırdığı (Stocker, Dunn & Plomin, 1989) bulunmuştur. Bahsedildiği gibi algılanan farklılaşmış ebeveyn davranışlarının kardeş ilişkileri üzerindeki etkileri dünya yazınında araştırılmış olmasına rağmen, yazarın bildiği kadarıyla farklılaşmış ebeveyn davranışlarının kardeşler arası çatışma çözme stratejileri üzerindeki etkisi hakkında herhangi bir çalışma bulunmamaktadır.

Sonuç olarak ebeveyn davranışları ile ilgili yapılan çalışmalar ışığında, hem annenin yakınlığı, anneden alınan destek ve anne-ergen çatışmasının gibi ebeveyn davranışlarının hem de algılanan farklılaşmış anne yaklaşımının ergen kardeşlerin çatışma çözme stratejileri üzerinde etkileri olabileceği düşünülmektedir.

1.4 Kardeşler Arası Çatışma ve Çözüm Starejilerinde Bireysel Farklılıklar

Kardeş ilişkilerini etkileyen çevresel faktörlerin yanında bireysel faktörler de kardeş ilişkileri ve çatışma çözme stratejileri üzerinde etkiler yaratabilmektedir.

1.4.1 Mizaç

Mizaç gelişim psikolojisinde sıkça çalışılan bireysel farklılıklar arasında yer almakta ve ilgili yazın mizacın çocuk ve ergenlerin gelişimi üzerinde etkileri olduğunu göstermektedir. Araştırmacılar mizacı doğumdan itibaren var olan ve bireyin hayatı boyunca sabit bir şekilde devam eden bireysel farklılık olarak tanımlanmaktadır (Mervielde & De Pauw, 2012).

Literatürde, mizaç kavramını açıklayan birçok teorik sistem bulunmaktadır. Bunlardan en önemlisi Chess ve Thomas (1985) tarafından geliştirilmiştir ve dokuz ayrı mizaç özelliğinin (Ritmiklik, aktivite düzeyi, yaklaşma veya uzaklaşma, uyumluluk, tepki, duygu durumu kalitesi, tepki yoğunluğu, dikkat dağınıklığı ve dikkat) üç ana faktörde birleşmesi ile oluşturulmuştur (aktaran Mervielde & De Pauw, 2012). Mizacı açıklamaya yardımcı bir diğer teori ise

Kagan'ın davranışsal engelleme modelidir (Kagan, Reznick & Snidman, 1987). Davranışsal engellenmenin biyolojik temeline vurgu yapan Kagan, mizaç özellikleri bakımından çocukları iki tipe ayırmıştır. Ona göre, engellenmiş çocuk yeni durumlara karşı korkulu ve tepkisel yaklaşırken, engellenmemiş çocuk daha sosyal ve daha az tepkiseldir. Bir diğer mizaç modeli ise Buss ve Plomin'in (1975) öne sürdüğü Duygusalılık-Aktivite-Sosyallik (Emotionality-Activity-Sociability) modelidir. Bu modelde üç boyut bulunmakta ve mizaç bu boyutlarda değerlendirilmektedir.

Son olarak, Rothbart mizaç yazınına psikobiyolojik bir model sunmuştur. Bu modele göre hem duygu hem de dikkat sistemi mizacın boyutlarını oluşturmaktadır (Rothbart, Ahadi, Hershey & Fisher, 2001). Bu bağlamda, Rothbart ve Bates (2006) mizacı olumsuz duygulanım, kabarma ve çaba gerektiren kontrol olmak üzere üç ana boyuta ayırmıştır (aktaran Mervielde & De Pauw, 2012) . Bunlara ek olarak, Ellis ve Rothbart (2001) 12 mizaç özelliğini olumsuz duygulanım, kabarma, katılımcılık ve çaba gerektiren kontrol faktörleri altında incelemiştir.

1.4.1.1 Mizacın Çocuk ve Gençler Üzerindeki Etkileri

Konu ile ilgili yapılan çalışmalar, farklı mizaç özelliklerinin bireylerin gelişimlerini olumlu ya da olumsuz olarak etkilediğini göstermektedir. Örneğin, düzenlenemeyen kızgınlık ve engellenmişlik ilk ergenlik döneminde ergenin dışsallaştırıcı davranışlarıyla (Eisenberg ve ark., 2006), korku ve sinirlilik ise içselleştirici davranışlarıyla (Muris ve ark., 2007) ilişkilendirilmiştir. Diğer taraftan, çaba gerektiren kontrolün ergenlerin olumlu davranışlarıyla olumlu yönde ama dışsallaştırıcı ve saldırgan davranışlarla olumsuz yönde ilişkili olduğu görülmüştür (Eisenberg ve ark., 2005).

1.4.1.2 Mizacın Kardeş İlişkileri/Çatışma/Çatışma Çözme Üzerindeki Etkileri

Çalışmalar mizaç özelliklerinin sadece çocuk ve ergen davranışlarını etkilemediğini aynı zamanda kardeş ilişkilerini de içeren yakın ilişkiler üzerindeki etkisini de göstermektedir (Brody, 1998). Stocker ve arkadaşları (1989) mizaç ile kardeş ilişkilerinin kalitesi arasındaki ilişkiyi incelemiş ve kardeşlerin mizaç yapılarının ilişkilerinin kalitesini etkilediğini bulmuşlardır. Kardeş ilişkilerinin kalitesini inceleyen bir başka çalışmada ise bir kardeşin olumlu mizaç özelliklerinin diğer kardeşin olumsuz özelliklerine tampon oluşturduğu bulunmuştur (Stoneman & Brody, 1993).

İlgili yazında mizaç ve kardeş ilişkilerinin kalitesi hakkında çalışmalar varken, mizacın kardeş çatışmalarını çözme stratejileri üzerindeki etkisi bu zamana dek araştırılmamıştır. Bu sebeple, kişilik ve mizaç arasındaki ilişki göz önünde bulundurularak, kişiliğin çatışma çözme stratejileri üzerindeki etkisi bu çalışma için baz alınmıştır. Çünkü konuyla ilgili çalışmalar kişilik özelliklerinin bireylerin çatışma çözme stratejilerini yordadığını göstermektedir (Park & Antonioni, 2007).

1.5 Mevcut Çalışma

Bu çalışmanın esas amacı ebeveyn davranışlarının, farklılaşmış anne yaklaşımının, kardeşlerin mizaç özelliklerinin ve küçük kardeşin çatışma çözme stratejilerinin büyük kardeşin çatışma çözme stratejileri üzerindeki etkilerini incelemektir. Ayrıca, bu çalışmada bu ilişkilerin küçük kardeşin cinsiyetine göre değişip değişmediği de incelenmektedir.

2. YÖNTEM

2.1 Örneklem

Bu çalışmaya Denizli ilinden 172 kardeş çifti katılmıştır. 19 farklı okuldan 9.sınıfta okuyan kız öğrencilere ulaşılmış ve kendisinden en fazla dört yaş küçük

kız ve erkek kardeři olan kız öğrenciler gönüllülük esasıyla bu çalışmaya katılmıştır.

2.2 Ölçekler

Bu çalışmada ergenlerin ve kardeşlerinin kardeşler arası çatışma çözme stratejilerini ölçmek için İlişkilerde Çatışma Çözme Ölçeği'nin kardeş formu kullanılmıştır. Erken Ergenlik Mizaç Ölçeği de hem küçük hem de büyük kardeşlerin mizaç özelliklerini ölçmek için kullanılmıştır. Her iki ölçek de hem büyük hem de küçük kardeşlere uygulanmıştır. Bunlara ek olarak Farklı Deneyimlere Dayanan Kardeş Envanteri büyük kardeşlerin kardeşlerinden farklı olarak annelerinden ne kadar olumlu ve hassas bir yaklaşım gördüğünü ve anneleri tarafından ne kadar kontrol edildiğini ölçmek için kullanılmıştır. Bu ölçek sadece büyük kardeşlere uygulanmıştır. Bahsedilen üç ölçek Türkçe'ye çevirme-geri çevirme yöntemiyle adapte edilmiştir ve faktör analizleri yapılarak bu çalışmada kullanılmıştır. Çalışmada kullanılan bir diğer ölçek ise Ergen Aile Süreci Ölçeği'dir. Bu ölçek ergenlerin annelerinden gördüğü yakınlık, destek ve çatışma içeren davranışları ölçmek için kullanılmıştır ve bu ölçeği de sadece büyük kardeşler doldurmuştur.

3. SONUÇLAR

3.1 Faktör ve Güvenirlik Analizleri

Ana hipotezleri test etmeden önce Türkçe'ye çevirilen ölçeklerin faktör yapılarına karar vermek için faktör analizleri yapılmıştır. İlk olarak İlişkilerde Çatışma Çözme Ölçeği için, daha sonra Erken Ergenlik Mizaç Ölçeği için ve son olarak da Farklı Deneyimlere Dayanan Kardeş Envanteri için Varimax döndürme yöntemi kullanılarak açıklayıcı faktör analizleri yapılmıştır. Analiz sonuçlarına göre İlişkilerde Çatışma Çözme Ölçeği için orijinal ölçekte olduğu gibi çözüm odaklı, kontrol edici ve yüzleşmeden kaçınmacı stratejiler olmak üzere toplamda 27

maddeden oluşan üç faktör belirlenmiştir. Faktörler için güvenilirlik katsayıları sırasıyla .80, .80 ve .74 olarak bulunmuştur. Erken Ergenlik Mizaç Ölçeği için ise faktör yapısında 39 madde ve üç faktör belirlenmiştir. Orijinal ölçekte çaba gerektiren kontrol dikkat, aktivasyon kontrolü ve engelleyici kontrol olmak üzere üç alt boyuttan oluşurken, yeni faktör yapısında algısal duyarlılık da bu üst faktöre yüklenmiştir. Analize göre olumsuz duygulanım faktörü düş kırıklığı/hüsran ve kızgınlık alt boyutlarını içermektedir ve orijinal ölçekte bu faktörde yer alan depresif duygu durum ise bu çalışmada ayrı bir faktör olarak belirlenmiştir. Faktörler için güvenilirlik katsayıları sırasıyla .80, .85 ve .71 olarak bulunmuştur. Son olarak, Farklı Deneyimlere Dayanan Kardeş Envanteri için ise orijinal ölçekte olduğu gibi toplamda 9 maddeden oluşan annenin farklılaşmış duygu gösterimi ve annenin farklılaşmış kontrolü olmak üzere 2 faktör ortaya çıkmıştır. Faktörlerin güvenilirlik katsayıları .41 ve .64 olarak saptanmıştır. Annenin farklılaşmış duygu gösterimi için belirlenen güvenilirlik katsayısı istenilen düzeyde olmadığı için bu faktör ana analizlerden çıkarılmıştır.

3.2 Korelasyon Analizi

İki değişkenli korelasyon analizleri yapılmıştır ve bu doğrultuda büyük ve küçük kardeşlerin çatışma çözme stratejileri ve mizaçları ve algılanan anne davranışlarının birbirleriyle ilişkili olduğu bulunmuştur.

3.3. Hiyerarşik Regresyon Analizleri Sonuçları

Çalışma kapsamında her bir çatışma çözme stratejisi için 3 set hiyerarşik regresyon analizi yapılmıştır. Kardeşin yaşı ve cinsiyetinin çatışma çözme stratejilerini anlamlı ölçüde yordamadığı görülmüş ve bu değişkenler asıl analizlerden çıkarılmıştır. Her analiz için ilk aşamada büyük kardeşin mizaç özellikleri, ikincisinde küçük kardeşin mizaç özellikleri, üçüncüsünde algılanan anne davranışları, dördüncüsünde farklılaşmış anne yaklaşımı, beşincisinde küçük kardeşin çatışma çözme stratejileri son aşamada ise büyük ve küçük kardeşlerin

mizaç özelliklerinin etkileşimleri eklenerek bu değişkenlerin büyük kardeşlerin çatışma çözme stratejileri ile ilişkileri incelenmiştir.

3.5.1 Çözüm Odaklı Strateji Kullanımı

Büyük kardeşin çözüm odaklı strateji kullanımını yordamada gerçekleştirilen üç set hiyerarşik regresyon analizinde, büyük kardeşin olumsuz duygulanımı azaldıkça ($\beta = -.22, p < .01$), kendisini annesine daha yakın hissettikçe ($\beta = .15, p < .05$) ve küçük kardeşi de yine çözüm odaklı strateji kullandıkça ($\beta = .40, p < .001$) kendisinin çözüm odaklı strateji kullanımını aynı doğrultuda artmaktadır. Ayrıca, annenin büyük kardeşe küçüğe kıyasla daha fazla kontrol uygulaması büyük kardeşin çatışmalarını çözüm odaklı bir strateji kullanarak çözmesini anlamlı bir şekilde yaklaşılarak olumlu yönde yordamaktadır ($\beta = .12, p = .07$). Kardeşlerin mizaç özelliklerinin etkileşiminin etkilerine bakıldığında ise, sadece depresif duygu durumu yüksek olan küçük kardeşe sahip ve kendi depresif duygudurumları düşük olan ergenlerin daha fazla çözüm odaklı strateji kullandığı bulunmuştur ($\beta = -.15, p < .06$).

3.5.2 Kontrol Edici Strateji Kullanımı

Büyük kardeşin kontrol edici strateji kullanımını yordamada, büyük kardeşin olumsuz duygulanımı ($\beta = .38, p < .001$), annesi ile yaşadığı çatışma ($\beta = .22, p < .05$) ve küçük kardeşi de aynı stratejiyi kullandıkça (kontrol edici) ($\beta = .24, p < .01$), büyük kardeşin kardeş çatışmalarını çözerken daha fazla kontrol edici bir strateji izlediği görülmüştür. Kardeşlerin mizaç özelliklerinin etkileşiminin etkilerine bakıldığında ise çaba gerektiren kontrolü düşük küçük kardeşlere sahip ergenlerin, kendi depresif duygu durumları yüksekse daha fazla kontrol edici strateji kullanmaya eğilimli oldukları saptanmıştır ($\beta = -.14, p = .09$).

3.5.3 Yüzleşmeden Kaçınmacı Strateji Kullanımı

Yüzleşmeden kaçınmacı strateji kullanımını yordamada yapılan üç set hiyerarşik regresyon analizinde, küçük kardeşin olumsuz duygulanımı arttıkça ($\beta = .24, p < .05$), büyük kardeş annesinden daha az destek gördükçe ($\beta = -.23, p < .05$) ve annesiyle daha az çatışma yaşadıkça ($\beta = -.23, p < .05$) kardeşiyle çatışmalarında daha fazla yüzleşmeden kaçınmaya çalışmakta olduğu bulunmuştur. Ek olarak, küçük kardeşin de kardeş çatışmalarında aynı stratejiyi kullanması büyük kardeşin yüzleşmeden kaçınmacı strateji kullanımını olumlu yönde anlamlı bir şekilde yordamıştır ($\beta = .27, p < .001$). Kardeşlerin mizaç özelliklerinin etkileşiminin etkilerine bakıldığında ise hiçbir mizaç özelliği etkileşiminin büyük kardeşin kardeş çatışmalarında kullandığı yüzleşmeden kaçınmacı stratejiyi yordamadığı görülmüştür.

4. TARTIŞMA

4.1 Cinsiyet Farklılıkları ile İlgili Bulgular:

Regresyon analizleri sonuçlarına göre, beklentinin aksine küçük kardeşin cinsiyetinin büyük kardeşin kardeş çatışmalarını çözerken kullandığı hiçbir stratejiyi yordamadığı bulunmuştur. Giriş kısmında da bahsedildiği gibi ilgili yazında kardeş çatışmalarını çözme stratejileri ile yapılan çalışmalarda cinsiyet farklılıkları ile ilgili bulgular yetersiz ve çelişkilidir. Bu beklenmedik sonuç da iki farklı şekilde açıklanabilir. Bilindiği gibi kardeş ilişkileri arkadaş ilişkilerinin aksine doğası gereği zorunlu ilişkilerdir. Bu sebeple her birey farklı veya aynı cinsiyette kardeşe sahip olmayabilir. Fakat arkadaş ilişkilerinde durum daha farklıdır. Arkadaş ilişkileri kadın ve erkeklerden oluşan karma bir yapıya sahip olabilir. Bu sebeptendir ki arkadaşlar karşı cinse ve hemcinsine çatışma esnasında nasıl davranabileceğini ayırtabilir ve farklı stratejiler geliştirebilir. Fakat kardeşler bu şansa sahip olamayabileceğinden stratejilerini sadece varolan kardeşine göre düzenlemeyi öğrenir (Maccoby, 1990). Ayrıca bu çalışmada büyük kardeşler sadece kızlardan oluşmaktadır ve sonraki çalışmalarda bütün cinsiyet

kompozisyonlarına bakılarak cinsiyet farklılıkları ile ilgili daha kapsamlı bulgular edinilebilir.

4.2 Kardeşlerin Mizaç Özellikleri ile İlgili Bulgular:

Hem büyük hem de küçük kardeşleri mizaç özelliklerinin büyük kardeşlerin kardeş çatışmalarını çözme stratejileri üzerinde önemli bir rolü olduğu söylenebilir. Konuyla ilgili yazın taramasında kişilik özelliklerinin de çatışma çözme taktiklerini yordadığı göz önünde bulundurulduğunda, bireysel farklılıkların kardeş ilişkileri gibi kişiler arası çatışma çözme stratejilerini etkilediği görülmektedir. Ayrıca, kardeşlerin mizaç özelliklerinin etkileşimleri de büyük kardeşlerin kardeş çatışmalarını çözerken kullandıkları stratejileri yordamaktadır ve olumlu mizaç özelliklerine sahip bir kardeşin diğerinin olumsuz mizaç özelliğinin oluşturabileceği olumsuz sonuçlar konusunda bir tampon özelliği taşıdığı da bulgularca desteklenmektedir.

4.3 Ebeveynlik Davranışları ve Annenim Farklılaşmış Kontrolü ile İlgili Bulgular:

Algılanan ebeveynlik davranışlarının büyük kardeşlerin çatışma çözme stratejileri üzerindeki etkilerinin önemi bu çalışma ile desteklenmektedir. Büyük çocuğun kendisini annesine yakın hissetmesi, annesinden aldığı destek, annesiyle yaşadığı çatışma ve annesinin büyük çocuğa küçükten daha çok kontrol uygulaması büyük kardeşin kullandığı stratejiyi belirlemede oldukça önemlidir. Bulgular hem sosyal öğrenme teorisi hem de aile sistemleri teorisi tarafından desteklenmektedir.

4.4 Küçük Kardeşin Kullandığı Stratejiler ile İlgili Bulgular:

Analizler sonucunda, bulgular küçük kardeşlerin kullandığı stratejilerin büyük kardeşlerin kullandığı aynı stratejileri yordadığını göstermektedir. Bu bulgu ilgili

yazında bahsedilen ilişkilerdeki karşılıklık ilkesi ve sosyal öğrenme teorisi ile desteklenmektedir.

4.5 Çalışmanın Katkıları

Kardeş ilişkilerini inceleyen yazında ebeveynlik davranışlarının, kardeşlerin mizaç özelliklerinin ve annenin farklılaşmış yaklaşımının kardeş ilişkilerinin kalitesi ve doğası üzerindeki etkilerini inceleyen oldukça fazla çalışma vardır (Milevsky, 2011). Fakat bu çalışmanın diğerlerinden farklı olmasının sebebi ilk kez kardeşler arası çatışma çözme stratejilerinin ilgili değişkenlerle ilişkisini incelemesidir. Ayrıca, bu çalışma kardeşlerin mizaç özelliklerinin etkileşimlerinin çatışma çözme stratejileri üzerindeki etkisine bakılması yönüyle de bir ilk teşkil etmektedir.

4.3. Çalışmanın Sınırlılıkları:

Bu çalışma enlemsel bir desene sahip olması nedeniyle herhangi bir neden-sonuç ilişkisi kurulamamaktadır. Bu sebeple, sonraki çalışmalar boylamsal desen oluşturularak yapılabilir. Ayrıca, verilerin sadece Denizli ilinden toplanmış olması çalışmanın genellenebilirliğini sorgulatmaktadır. Son olarak, büyük kardeşlerin sadece kız olması cinsiyet farklılıkları ile ilgili bulguların sınırlı olduğunu göstermektedir.

4.4 Öneriler:

Bu çalışma boylamsal bir desenle diydik analizi gibi daha farklı analiz teknikleri kullanılarak tekrarlanabilir. Ayrıca, aile sistemleri teorisinde belirtildiği gibi aile içi sistemlerin birbirini etkilediği göz önünde bulundurularak etkili çatışma çözme stratejilerini öğretmek adına daha çeşitli müdahale programları geliştirilebilir.

Appendix J: Tez Fotokopisi İzin Formu

ENSTİTÜ

Fen Bilimleri Enstitüsü	<input type="checkbox"/>
Sosyal Bilimler Enstitüsü	<input checked="" type="checkbox"/>
Uygulamalı Matematik Enstitüsü	<input type="checkbox"/>
Enformatik Enstitüsü	<input type="checkbox"/>
Deniz Bilimleri Enstitüsü	<input type="checkbox"/>

YAZARIN

Soyadı : Bayram
Adı : Huri Gül
Bölümü : Psikoloji

TEZİN ADI (İngilizce) : What Determines The Sibling Conflict Resolution Strategies of Adolescents? Parents, Siblings, or Temperament?

TEZİN TÜRÜ : Yüksek Lisans Doktora

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz.

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: