

LONELINESS WITH REGARD TO MATERNAL AND PATERNAL  
ACCEPTANCE-REJECTION AND SIBLING RELATIONSHIP QUALITY IN  
HIGH SCHOOL STUDENTS

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Approval of the Graduate School of Social Sciences

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## ABSTRACT

### LONELINESS WITH REGARD TO MATERNAL AND PATERNAL ACCEPTANCE-REJECTION AND SIBLING RELATIONSHIP QUALITY IN HIGH SCHOOL STUDENTS

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The purpose of this study is to predict loneliness level of high school students with regard to perceived parental acceptance-rejection, maternal and paternal, and sibling relationship quality after controlling gender, age, grade, school type, field of study, birth order and number of siblings. Cluster random sampling was used and sample composed of 1451 participants (672 male, 779 female). Participants were mostly from Anatolian and Vocational high school students in Ankara and age varied between 14 and 19. Turkish versions of UCLA Loneliness Scale (Demir, 1989), Maternal Acceptance-Rejection Questionnaire-Child Short Form and Paternal Acceptance-Rejection Questionnaire-Child Short Form (Yılmaz & Erkman, 2008), Sibling Relationship Quality Questionnaire (Apalaci, 1995) and Demographic Information Form were administered to participants. Multiple hierarchical regression analysis was used. Results showed that 1.7% of the variance in loneliness was explained by model 1 including demographic variables but model 1 did not give significant results ( $R^2 = .017$ ,  $F_{inc(14, 1436)} = .96$ ,  $p > .05$ ). After adding mother and father acceptance score in model 2,  $R^2$  was significant and 18.1% ( $R^2 = .181$ ,  $F_{inc(16, 1434)} = 19.17$ ,  $p < .001$ ). In the model 3, sibling variables were added to the model and  $R^2$  change was significant and  $R^2$  was 19.6% ( $R^2 = .196$ ,  $F_{inc(20, 1430)} = 16.396$ ,  $p < .05$ ).

Mother acceptance 5.4%, father rejection 2.4%, sibling warmth 1%, sibling conflict 0.4% and sibling rivalry 0.3% variance explained in loneliness. The results will have implications for both counselors, developing programs to increase parental involvement in school and for future research.

**Keywords:** Loneliness, Parental Acceptance, Parental Rejection, Sibling Relationship Quality

## ÖZ

### LİSE ÖĞRENCİLERİNİN YALNIZLIK DÜZEYLERİNİN ANNE VE BABADAN ALGILANAN KABUL-RED DUYGULARI İLE KARDEŞ İLİŞKİLERİ KALİTESİ BAKIMINDAN İNCELENMESİ

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Bu araştırmanın amacı, cinsiyet, yaş, sınıf, okul türü, alan türü, doğum sırası ve kardeş sayısı demografik özelliklerinin kontrol edilmesiyle birlikte anne ve babadan algılanan kabul red duyguları ile kardeş ilişkisi kalitesinin yalnızlık düzeyini açıklamadaki rolünü incelemektir. Araştırmanın katılımcılarını belirlemek için kümeden seçkisiz örnekleme (cluster random sampling) yöntemi kullanılmıştır ve çalışmada toplam 1451 katılımcı (672 erkek, 779 kız) yer almıştır. Katılımcılar Ankara'daki ağırlıklı olarak Anadolu ve Meslek Lisesi türündeki liselerdeki 14-19 yaş aralığındaki öğrencileri kapsamaktadır. Katılımcılar demografik bilgi formu ile UCLA Yalnızlık Ölçeği (Demir, 1989), Anneden Algılanan Kabul-Red Ölçeği-Çocuk Kısa Formu ile Babadan Algılanan Kabul Red Ölçeği-Çocuk Kısa Formu (Yılmaz & Erkman, 2008) ve Kardeş İlişkisi Kalitesi Envanterini (Apalaçi, 1995) doldurmuşlardır. Veriye çoklu hiyerarşik regresyon analizi yapılmıştır. Demografik değişkenlerinden oluşan 1. model, yalnızlıktaki varyansın yalnızca % 1,7'sini açıklamış ancak bu da istatistiksel olarak anlamlı bulunmamıştır ( $R^2 = .017$ ,  $F_{inc(14, 1436)} = .96$ ,  $p > .05$ ). İkinci modelde anne ve baba kabul puanı eklendikten sonra,  $R^2$  değişimi istatistiksel olarak anlamlı sonuç vermiş ve % 16,4 olmuştur ( $R^2 = .181$ ,  $F_{inc(16, 1434)} = 19.17$ ,  $p < .001$ ). Üçüncü modelde kardeş değişkenleri modele eklenmiş ve açıklanan toplam varyans % 19,6 olmuştur ( $R^2 = .196$ ,  $F_{inc(20, 1430)} = 16.396$ ,  $p < .05$ ). Değişkenlerin tek tek ne kadar

varyans açıkladığı hesaplandığında, anneden algılanan sıcaklık % 5,4, babadan algılanan sıcaklık % 2,4, kardeş sıcaklığı % 1, kardeş çatışması % 0,4 ve kardeş rekabeti % 0,3 varyansı anlamlı olarak açıklamıştır. Araştırma sonuçlarının psikolojik danışmanlar ve aile katılımını arttırmak için geliştirdikleri programları ve gelecekteki bilimsel çalışmalar üzerinde önemli etkileri olacağı düşünülmektedir.

**Anahtar kelimeler:** Yalnızlık, Ebeveyn Kabulü, Ebeveyn Reddi ve Kardeş İlişkisi Kalitesi.

*To the quiet moments and fantastic people in my life*

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## LIST OF ABBREVIATIONS

- MoNE: Ministry of National Education  
PART: Parental Acceptance-Rejection Theory  
EKRÖ: Ebeveyn Kabul Red Ölçeđi-Kısa Form  
PARQ: Parental Acceptance-Rejection Questionnaire  
SRQQ: Sibling Relationship Quality Questionnaire  
AMOS: Analysis of Moment Structures  
SPSS: Statistical Package for the Social Sciences  
EFA: Exploratory Factor Analysis  
CFA: Confirmatory Factor Analysis  
WHO: World Health Organization

## CHAPTER I

### INTRODUCTION

#### 1.1 Background to the Study

Loneliness is a complex, universal feeling that is experienced by individuals objectively and subjectively due to being lonely or the perception of being alone. Therefore, it is not an easy concept to define with its both objective and subjective sides. Perlman and Peplau's (1984) definition is an old but still relevant and common definition, which defines loneliness as an unpleasant experience that occurs when a person's network of social relationship is significantly deficient in either quality or quantity. Peplau and Perlman (1982) also define it as the aversive state experienced when a discrepancy exists between the interpersonal relationships one wishes to have and those one currently perceives have. Both definitions clarify the characteristics of the loneliness as negative, aversive, undesirable and painful feeling. Importance of individuals' perception in feeling alone as a cognitive element is also stressed in the definitions. Loneliness is generally associated with negative feelings about issues in social relationships while some loneliness feelings come from within the individual, regardless of their social situation.

Weiss (1973) classify loneliness in two types: emotional and social loneliness. Emotional loneliness mostly occur due to the absence or lack of close and intimate relationship with family, children, spouse or the partner while social loneliness results from lack of satisfactory relationship with desired social groups and not being accepted as a member. Existential and representational loneliness types are also presented in the literature. Mayers, Khoo and Svartberg (2002) defined existential loneliness as self-perception of isolation accompanied by feelings of meaninglessness, helplessness and lack of freedom and unavoidable transitions of life may engender these feelings. Similar to existential loneliness, representational loneliness is also related with

emotions and Bering (2008) defines representational loneliness as a feeling conscious about the idea that self cannot be totally understood by significant others because no one can experience loneliness like this. It differs from existential loneliness at the point that presence of others may exacerbate the representational loneliness.

Adolescence is a critical period in life, which includes many dramatic physical, psychological, and social changes (Frisen, 2007). Change is stressful and adolescence is defined by change. Stress may arise from common, usual experience or unusual events. Stressors related to family and home and negotiation of new independence are prominent, including battles over rules and boundaries and extent of autonomy, although most adolescent report good family relationship (Coleman, 2011). Leaving from childhood and entering into the adult world may create loneliness in adolescents. The loneliness phenomenon comes to their attention. In this case adolescents work to adapt to changing body and psychological maturity, as well as to changing societal and social structure. The sensitivity of this process increases the importance of establishing close relationships. Transition to adolescent or early adulthood period can be challenging for high school students. Of course, adolescence is neither the conclusion to the developmental phase nor a period of instability that precedes the stability of adulthood. It is similar to many other times of transitions that occur over the course of a life cycle. Referring to crisis as the process of an individual's development via recognizing it dynamic, positive time of reorganization is newer vision (Bonino, Cattelino & Ciairano, 2005) and it is not aimed to emphasize adolescence period as negative, unwanted life time in this current study, rather it is emphasized as quick changes are occurring and it is one of the transition period in individual's life cycle.

Although in most of the families, it is wrong to characterize adolescence as a conflict period, it is important to keep in mind that this is a restructuring period where changes in family relations occur (Collins & Laursen, 2004). During the adolescence period, which is experienced by most of the attending participants of the current study, the idea of separation from parents and psychological independence became apparent. The adolescent incrementally separates from mother and father then reorganize his or her

relations with same sex and opposite sex friends. Considering the role of lack of interaction with the environment in the development of loneliness feeling, sudden changes in the adolescence period cause their frequent experience of loneliness. In comparison to an adult, an adolescence's life is more complex and ambiguous because of definition of social roles, cognitive development, individuation efforts, identity seeking, psychological independence and beginning to take responsibility for their future plans (Ostrov & Offer, 1980).

Galambos and Almeida (1992) identify the reason of family issues of adolescence as moral behavior conflicts, relations with family members, academic achievement, fulfilling their responsibilities, social interactions, clothing and hair styles. These changes and issues increase the intense need for interpersonal relationships and confusion and indecision of young people result in creating new solidarity groups with other teenagers. Nevertheless, they may still want to know that their parents beside him or her and want to feel the support of their parents. If adolescent feels the reverse, this case leads to a life of loneliness arising from adolescent family relationships.

The ones who we feel closest are not always but mostly our family members in the first place. At the dawn of the 21<sup>th</sup> century, the world is transforming with all its units including family structures, parent-child and sibling relations. It is still a common wisdom that home is sweet and a safety harbor. If the families are not the source of support, they will not only not ease the loneliness but will also deepen it. The type of relationship with family and siblings determines it.

A human as a social unit interacts with the environment and satisfies physical and psychological needs. As the individual communicates with the society, s/he develops from every aspect in particular to the personal characteristic. Beside the changes and developments, people are also faced with some problems with the effect of their environments. Urbanization brought new lifestyles and individuality became prominent. Reduction in solidarity results in individuals living in more isolated and insulated social relations. Increasing number of people cannot find people whom they can trust and in this case it constitutes an increasingly fragmented society and social

ties, which are essential, and center of daily life which are shrinking or losing its existence (McPherson, Smith-Lovin & Brashears, 2006). The progress in this direction of social relations caused to occur loneliness. McPherson, Smith-Lovin, and Brashears (2006) found that during the last two decades, the number of those who had “no one to talk to” has doubled. It appears that in every age group there is a large portion of the population that is lonely. And despite Facebook, emails, cell phones, blogging, and text messaging, social isolation is at an all-time high (McPherson, Smith-Lovin & Brashears, 2006). Whether internet use is beneficial or detrimental to feeling of loneliness is still a popular topic of study.

Family is an important institution in terms of process of socialization and civilization. Siblings and parents are an indispensable part of most children’s social worlds. The effects of parents on the development of their children, who are in need of receiving positive response from them, are undeniable. Families vary in terms of their positive or negative affect expression toward their children whereas the need of child for receiving warmth does not vary. Siblings also have an undeniable function in the socialization process. Although, friends and school environments meet the affect needs of teenagers partially, parent-child and sibling interactions still remain important. Brothers or sisters can be a source of frequent companionship, help, or emotional support. Older siblings can serve as caretakers, teachers, or models; in some instances they can even help compensate for absent or distant parents (Furman & Buhrmester, 1985).

Bowlby’s theory of attachment (1977) asserted that failure to establish strong emotional bonds in early childhood results in emotional distress and personality disturbances in later life. The bond between parent and child will not only impact the ability to build relationship but will also affect the quality of those relationships. Hecht and Baum (1984) used this idea as a basis and put forth a developmental perspective on loneliness and their study revealed a moderate to strong relationship between feeling lonely and early-disrupted attachment. Previous research has also shown evidences about the importance of parent-child relationship to loneliness (Shaver & Rubenstein, 1980; Jones, 1981; Young, 1982). However, another family relationship

with the potential to impact loneliness is the sibling relations which promotes high level of social interaction. Furman and Buhrmester (1985) supported that many skills for healthy social development may be learned from sibling interactions. This study was searching for whether one's sibling relationship quality and the level of experience of loneliness are related to each other. The sibling relationship is an intense family relationship that has the potential to affect people's perception of their social relationships and thus their experience of loneliness (Ponzetti & James, 1997).

The aim of this study was to examine the loneliness levels with regard to perceived maternal and paternal acceptance differences and sibling relationship quality in high school students in Ankara. The concept of parental acceptance and rejection comes from Rohner's Paternal and Acceptance Rejection Theory (1960), which covers a socialization and life span development of human being. The first hypothesis was that students with higher parental rejection scores would be lonelier than students with higher acceptance score. Second hypothesis was warmer sibling relations and higher rivalry score showing being more favoured sibling in the relationship would negatively correlate with loneliness. Third hypothesis was the sibling relationship conflict and power would have significant negative correlation with loneliness level of students. In the study, demographic variables including gender, age, grade, school type, field of study, birth order and number of siblings were control variables.

## **1.2 Purpose of the Study**

The purpose of the present study was to find out the influence of perceived level of maternal and paternal acceptance-rejection and sibling relationship quality on loneliness level of high school students when gender, age, grade, school type, field of study, birth order and number of siblings were controlled.

## **1.3 Research Question**

Based on this aim, the following research question was interpreted.

- How well perceived level of maternal and paternal acceptance-rejection scores and sibling relationship quality predict the loneliness level of high school students, after controlling for gender, age, grade, school type, field of study,

birth order and number of siblings?

#### **1.4 Significance of the Study**

This study was one of the first attempts to investigate predictive value of parental acceptance and rejection scores on loneliness in Turkey, and also in terms of studying mother and father separately. Most studies that describe parents of adolescents focus on mothers; some report the average of maternal and paternal scores; few examine mothers and fathers separately (Lerner & Steinberg, 2009).

Under the topic of family relations, sibling dimension of family relations was included for the first time. Sibling relationship quality has not been examined with the context of loneliness. Most of the studies regarding sibling relations examined the quality of the relationship with a sibling with disabilities. There was a gap in knowledge about the course of sibling relationships in adolescence period. Relatively little research has been conducted on the qualities of sibling relationship in Turkey. The effects of birth order, age difference and gender of sibling were mostly examined.

While loneliness was being associated with interpersonal relationships with parents and siblings, demographic characteristics of participants including gender, age, grade, school type, field of study, birth order, and number of siblings were also examined. The predictor value of mentioned demographic variables have not been widely examined or reported in the literature.

In addition, most of the studies done with the Parental Acceptance-Rejection Questionnaire (PARQ) were researching about the relationship between PARQ results and psychological adjustment, self-concept, resiliency or academic achievement. There was no such study about perceived parental acceptance-rejection regarding loneliness.

The results of this study will make contribution to works of counselors and families when intervening loneliness in individuals. Recognition of how family structure, mainly parents' closeness and sibling relationships, effect adolescents in terms of

loneliness is needed to identify related risk group with high loneliness level. It also might be possible to determine how this affects the school environment and allow making necessary interventions. Therefore, for individuals who suffer from loneliness, providing individual and group counseling sessions with them in cooperation with their families help to reduce the loneliness of those people and other negative consequences associated with loneliness such as depression, maladjustment to the environment, substance abuse, suicidality etc.

In high schools, when school counselors conclude a student with high level of loneliness, they should also take into consideration the maternal and paternal acceptance level and sibling relationship quality of that student. Understanding the antecedents and consequences of adolescent loneliness will help school counselors and educators to develop appropriate health-promoting intervention programs. This study gave a general idea about the relation of adolescent with their parent and siblings.

### **1.5. Definition of the Terms**

In the succeeding section, the definitions of the terms used throughout the study are presented.

*Age* is length of time that has passed since the person was born.

*Gender* refers to the sex, means being either the male or female division of a species.

*Grade* is a particular level the person has in the school, being either 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> grade student in high school.

*School type* is in the present study refers to being either Anatolian high school student or vocational high school students mainly. As a third category, there are other schools including science and social science high schools.

*Field of study* is the preference of high school student after 9<sup>th</sup> grade whether to specialize in Math and Science courses, Turkish and Math courses, Turkish and Social Sciences courses or language courses.

*Birth order* is order of a child is born and it has three levels in this study: first born child, middle child and last born. Only child was excluded from the sample since sibling relationship quality is one of the independent variables.

*Number of siblings* is the total amount of sibling a person has.

*Loneliness* is the situation in which the individual feels not understood and lonely (Russell, Peplau, & Cutrano, 1980); an unpleasant mood experienced as a result of the difference between the current social relations and desired social relations (Peplau & Perlman, 1981).

*Parental rejection* is acts of maltreatment have been classified as follows: to refuse to recognize the value of the child, to decline to accept, to discard as useless or unsatisfactory, based on the definitions developed by the 1983 International Conference on Psychological Abuse of Children and Youth (as cited in Karay, 2001). Examples: actively refusing to help the child, threatening a child differently from siblings or peers in ways that show dislike for the child and result in parental rejection.

*Parental acceptance* is parental love and affection is expressed in both physical and verbal ways. Warmth can be expressed through physically with kissing, holding, smiling, hugging etc. and on the other hand, expressions of verbal warmth consist of saying nice things, complimenting or praising (Erdem, 1986). All forms of behaviors giving the message of being cared and loved are under the title of acceptance. Parental acceptance-rejection score include four classes of behavior which are hostility/aggression, indifference/neglect, undifferentiated rejection and warmth/affection. This perceived paternal acceptance and rejection send children the message that the child tend either to be loved or rejected by the mother or/and father. In short, Child PARQ asks children to assess the way they feel their mother or father treat them at the present (Rohner, 2003).

*Sibling Relationship Quality* identifies characteristics of sibling relationships on which children vary. These characteristics include warmth, conflict, rivalry and relative status-power dimensions. *Warmth/Closeness* is a positive dimension and refers to siblings' provided support and affection for each other and also refers to the feeling

close and accepting of each other. Closeness is concerning intimacy, companionship, admiration, and affection between siblings. *Rivalry* measures parental partiality in the family such that a high score indicates the respondent perceives he or she is favored, and a low score, siblings are favored. *Conflict* is concerned with quarreling, antagonism, and competition between siblings. *Relative status-power* dimension refers to the extent to which one sibling has more power or status than the other sibling. The quality of power is defined as the difference between respondents' perceptions of how many their siblings direct and help them and the direction and guidance they extend to their siblings (Furman & Buhrmester, 1985).

## **CHAPTER II**

### **LITERATURE REVIEW**

In this chapter, definitions and theoretical information regarding adolescence period, loneliness among adolescence, parental acceptance-rejection theory and sibling relationship quality; and related studies will be presented.

#### **2.1 The Definition and Period of Adolescence**

World Health Organization and United Nations Educational, Scientific and Cultural Organization (WHO, 2015) identify adolescence as "The period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19. It represents one of the critical transitions in the life span and is characterized by a tremendous pace in growth and change that is second only to that of infancy.". This life stage covers the intersection of child (until 18) and youth (ages between 10 and 24). In the present study, assessing the 14-19 age cohort served fairly its statistical aims to gather enough data regarding adolescents' development.

As a result of the trends in staying on in education, leaving home later and delayed financial independence, there has been much written about the elongation of transition to adulthood, and many have noted the emergence of multiple, nonlinear pathways to adult living (Coleman, 2011; Furlong & Cartmel, 2007). Individuals experiencing adolescence period, work to gain their independence and social productivity but this is completed in an undetermined time. Beginning, duration and outcome of this process related to social-cultural factors and individuals' level of maturation. Period of preparation for adulthood is different from being a young child or an adult. WHO (2015) reports about adolescents as not fully capable of understanding complex

concepts or the relationship between behavior and its consequences or the degree of control they can have or cannot have.

Erikson's (1969) psychosocial development theory expects adolescence identity gaining and accepting himself or herself as individuals; Piaget's cognitive developmental theory expects abstract thinking, formal transactions, hypothetical reasoning and thinking on theoretical conditions on cognitive level (Steinberg, 1999); Freud's psychosexual development theory expects adolescent to routing sexual energy to socially approved activities; Super's career development theory expects determine professional priorities and appropriate professional field, making temporary choices and passing through general preferences to more specific occupations; in interpersonal relationship domain Sullivan expects building and maintaining satisfying relationship with same and opposite sex friends. As can be seen from developmental theorists, adolescents have different developmental task in different domains therefore they need to have certain competencies in academic, social and cultural areas. Yet, success or failure in completing these tasks will affect adolescence adaptation to adulthood to a certain extend (Koç, 2003). Expectancies an adolescent facing with are strongly related to their development of autonomy (Haworth & Conrad, 1995). Therefore, adolescents concentrate their efforts on independence and autonomy then their probability of risk taking increases to create an identity (Curtis, 1992).

During this period, previously established balances between parent and child start to change. The family has an important function to fulfill the developmental tasks of adolescent such as gaining independence and individuality (Minuchin, 1974). Efforts of being independent from family increase conflicting feeling in adolescents. They are in the dilemma of needing support and love of their parents while requesting independence; therefore they try to counter this need. Young wants to see himself changed, be more autonomous, to make their own choices and to have their own set of values. While questioning for new roles, adolescent may vacillate between the rules that s/he had learnt in childhood and newly occurring value judgments. Parents' failure to realize their child's beginning of growing up or failure to accept this situation may increase the distress. In addition, adolescents' requests and being in new searches lead

to shake the balance of power in the family. In this case, parents resist the requests and endeavor to maintain the old balances due to being against the changes in the family system.

Family behaviors and evaluation toward their adolescent child have important role in children's self-evaluation and attitudes toward themselves (Kulaksızıođlu, 2002). Each social behavior of parents sends either positive or negative messages to the child. The adolescent needs mother and father who give him or her confidence and trust. Parents should listen and give adolescent the opportunity to express himself or herself without criticizing what s/he said themselves, for a psychological well-being of the adolescent (Kulaksızıođlu, 2002). Steinberg (2005), in her book *Adolescence*, mentions that checking a book store for the books about parents and adolescence, gives the idea of prevalence of conflict and tension in their relations. Written books have a tendency to focus on issues and how to solve them and this makes people think that stress and strain between teenagers and their parents is common.

Beside parents, in socialization of adolescence peers have also an important function. Young in his relationship with peers learn to establish egalitarian relations, to express their thoughts safely and to meet the ideas with tolerance. Acceptance by the group reinforces the self-esteem of the adolescence and contributes to voice their thoughts and feelings comfortably between friends. Furman and Buhrmester (1992) reported that fourth graders receive most of the support from their parents and it is parents and same-sex friends for seventh graders. When it comes to tenth graders, they most frequently report to their friends who they get support from. Peer group and friendship gains extraordinary importance because young people who have been more or less able to oppose interferences of parents in their values and lives, yearn to belong to someone in the community. Values and worldviews of friends in an adolescent's circle start to become primarily important (Kulaksızıođlu, 2002).

The present study identified the period of adolescence and loneliness phenomenon among adolescents by addressing their relationship with parents and siblings under the light of above information regarding changes in their social roles, choices,

relationships, identities, social expectations and their movement from existing social network to new ones.

## **2.2 Loneliness**

Gierveld, Tilburg and Dykstra (2006) declare that the oldest publication regarding loneliness was in the years of 1785 and 1786 by Zimmermann and then Fromm Reichman first started to conceptualize loneliness in the late 1950s. Empirical research of the loneliness was maintained by studies of Perlman and Peplau in 1980s.

One of the common definitions of loneliness other than Perlman and Peplau's definition is as in the following:

*“Loneliness is a situation experienced by the individual as one where there is unpleasant or inadmissible lack of quality of certain relationships. This includes situations, in which the number of existing relationships is smaller than is considered desirable or admissible, as well as situations where the intimacy one wishes for has not been realized.”* (De Jong Gierveld in Gierveld et al., 2006, p.120).

Rook's (1984) definition is proper to explain adolescents' experienced form of loneliness, which mainly stems from the lack of sense of social integration and intimacy by a group. Rook's definition of loneliness is,

*“An enduring condition of emotional distress that arises when a person feels estranged from, misunderstood or rejected by others and/or lack of appropriate social partners for desired activities, particularly activities that provide a sense of social integration and opportunities for emotional intimacy.”* (Rook, 1984, p.1391).

When theoretical evolution of loneliness is examined, the earliest explanations to loneliness come from psychodynamic perspectives and are related to child's need for contact and human intimacy. Source of loneliness in adolescence and adulthood stem from childhood years which are deprived from satisfaction of social needs (Sullivan, 1953). Then, Rogers (as cited in Peplau & Perlman, 1982) explained loneliness with more phenomenological perspectives and claimed that loneliness is related to self-concept problems, poor adjustments and people's fear of being rejected due to

exposing their true selves. According to cognitive approaches, loneliness occurs when individual detects the difference or discrepancy between requested and experienced social relations resulting from their subjective evaluations (Peplau & Perlman, 1982). Existentialist approach explains loneliness as a sense of emptiness and a problem within each person, not primarily due to a lack of meaningful relationships; it is more discovering one's own questions and answers regarding human existence, death and changes resulting from real life experiences (Moustakas as cited in Peplau & Perlman, 1982, 1961). In the present study, mostly interactionist explanation of loneliness was utilized. This explanation was asserted by Weiss (1973) by emphasizing both personality and situational factors.

Social contact is not sufficient enough to deal with loneliness, how people perceive quality and quantity of their relationships are essential to consider such as perceived social acceptance in that relationship. Individuals' satisfaction with their social relationship and their subjective view of it are important determinants. Unless the amount of emotional and social support exchanges increases, the intensity of loneliness decreases (Van Tilburg, 1988). Increased diversity among the types of relationships also serve to defend people from loneliness; people whose relationships consists of both strong and weak ties are less vulnerable to be lonely than people who have solely strong ties (Van Tilburg, 1990). Dykstra (1990) also supports this idea by saying that people with heterogeneous networks are less prone to loneliness than people with only kin ties networks or people who dependent on their family for social contacts. Having more alternative types of networks seems better for lower level of loneliness. In addition to all these, number of friends is not a good predictor of loneliness for instance not all people having small social networks are lonely (Fischer & Phillips, 1982), their satisfaction with the relationship is the distinguishing factor.

According to Rogers (1994), loneliness is a condition that occurs when an individual feels that s/he has no real relationship with others. Loneliness, because of the interpersonal obstacles and communication barriers, occurs as getting away from the people due to seeing people around the individual as a means of threat and high level of anxiety (Yalom, 1980).

While explaining the experience of loneliness, Peplau and Perlman (1982) discuss manifestation of loneliness in different domains, mainly affective, motivational, cognitive and behavioral factors. Being less happy, less satisfied, more pessimistic, depressed and feeling empty are high correlates of loneliness in affective experience of it. In terms of motivational manifestations, lonely people may show fluctuating moods between periods of high and low motivational state. Loneliness can either be a driving force to initiate social relationships or to diminish motivation for interpersonal contact. It is also asserted that lonely people are not able to concentrate on a certain task or focus their attention effectively in cognitive domain. They have negative attitude towards the self and others. They start to dig their life to bring out all other negatives to the daylight. Therefore, it can trigger other mental health problems such as anxiety and depression. Type of attribution to loneliness may influence the impact on loneliness in people. Peplau and Perlman (1982) mention behavioral manifestations of loneliness as showing different patterns of self-disclosure than non-lonely people, either keeping excessively private or pouring out totally, and being less assertive in their social interactions. They may have socially ineffective manner towards others due to their cognitive styles.

According to social needs model (Sullivan, 1953; Fromm-Reichman, 1959; Bowlby, 1977; Weiss, 1973), humans have a universal, basic need for social contact such as affiliation, companionship, intimacy and attachment and if these needs are not met individuals experience loneliness. On the other hand, the cognitive discrepancy model (Peplau, Bikson, Rook & Goodshilds, 1982) distinguishes actual and desired level of social contact and individuals experience loneliness unless their actual degree of interpersonal contact gets close to their desired degree of contact. The discrepancy shows the degree of loneliness.

Belongingness is important concept for developmental theories and according to Gierveld, Tilburg and Dykstra (2006) the opposite of loneliness is belongingness and embeddedness. In Erikson's (1969) psychosocial development theory, social relationships are central and fundamental for human development. In Erikson's eight

developmental stage, person should resolve particular social relationship conflict. Trust and security feelings and capacity to establish relationship are key for the development. According Maslow's Hierarchy of Needs, humans have five essential needs and as one ascends through the hierarchy, the needs become more difficult to meet. Third level is the belongingness need and it includes love and attention. Bowlby's (1977) attachment theory also emphasizes the importance of the positive relationship for social, emotional and cognitive development. Researchers reported the human's life span needs to belong and has the fear of loneliness (Mijuskovic, 1986; Rokach, 1989; Baumeister and Leary, 1995). Mijuskovic (1986) also argued that the fear of loneliness and need to avoid it is a universal principle of motivation but that is acute during adolescence period and it may provide counselor a baseline to understand adolescent's behaviors. This need to belong results in showing persistent inclination to begin and preserve positive, significant relationships. Parent-child bond has undeniable impact on individuals' each life phase for both child and parent side because nature of human beings is social.

Hagestad (1998) supports socially integrative role of the family and communication across generations to strengthen the sense of belonging and help maintain it during life span. In addition to parents, siblings also have a special place in an individual life and having a common blood tie, same background and shared history of growing up serve for the compensating lack of intimate attachment (Cicirelli, 1995). Experiencing difficulties in forming and maintaining satisfying relationship and thus difficulty in satisfying belongingness needs are likely to experience feelings of deprivation and loneliness (Heinrich & Gullone, 2006).

Fromm-Reichmann (1959) also mentioned about positive form of loneliness, which can be used constructively and produce creative outcomes but it is more voluntary and temporary form. Loneliness is when you are unhappy to be alone but solitude or aloneness is when you are happy to be alone with your own decision and this period may be an opportunity for positive experiences like creating, concentrating, facilitating self-reflection and regulation, day dreaming, learning (Fromm-Reichmann, 1959; Geçtan, 1998; Larson, 1999 in Heinrich & Gullone, 2006). Spending time alone is not

necessarily linked to negative experiences. Especially adolescents appreciate solitude due to the cognitive gains, while escaping from loneliness.

### **2.2.1 Research on Loneliness**

Earliest studies regarding loneliness figured out that loneliness stemmed from childhood experiences due to not meeting needs for contact and intimacy (Sullivan, 1953). Loneliness can make one feel like anything wrong with that person and think persistently about loneliness feeling. Loneliness is a situational and short term lived feeling however some people experience loneliness frequently and in different formations which leads loneliness to become a feature of those people's personality. Variables related to loneliness are differentiated under four main category: Personality traits, depression, cultural and social environment and family relationships (İmamoğlu, 2008).

Rokach (2004), while describing loneliness as a universally experienced, subjective, painful and distressing feeling and gives the general impacts of it on people. Loneliness has detrimental effects on love, intimacy and quality of life; loneliness direct attention to other aspects that prohibits positive energy and creativity and in case of not dealing and confronting effectively with loneliness, it creates solid and sensitive humans; they dwell on their own actions and become self-focused (Rokach, 2004).

Loneliness can find anyone now and then. Loneliness does not respect to gender, age, marital status, socioeconomic status, race or health status (Neto & Barros, 2000). Generally the term loneliness tends to evoke thoughts about elderly, isolated, alone people but the experience of loneliness exceeds the whole spectrum of human life and is felt by both the young and the old. It is not surprising to find loneliness as a problem in adolescences, which is one of the major transition period of life. Adolescents and young adults appear to be particularly vulnerable (Brennan 1982; Rubenstein & Shaver, 1980) and loneliness is intense during adolescence (Peplau, Bikson, Rook & Goodchilds, 1982). Parlee (1979) found the highest loneliness percentage among participants are at age 18 where 79% reports they feel lonely sometimes or often, as

opposed to 37% with 55 years old participants. Schultz and Moore (1988) also found high school students lonelier than college students.

In Turkey, the most comprehensive study about loneliness is done by Demir (1990). The sample of the study was university students and results indicated that male students from female students, unsuccessful students from successful students, students who spend leisure time alone from who spend with others experience more feeling of loneliness. Also, students who do not have the financial source for social activities experience more loneliness than those who do have the financial source does. The same result is also valid for students who do not receive social support than who does. Students experience more loneliness with less close friends in comparison to those who have more. Students who are more reluctant to have new social relationships experience more loneliness than students who are more willing to. Students who find their social competence level not adequate, experience more loneliness than students who find it adequate. Students who are not satisfied with their relationship with his/her mother, father and same-sex and opposite sex siblings experience more loneliness than those who are satisfied.

Çapan and Körler (2011) studied loneliness level of the students according to number of siblings and concluded that loneliness in students having 3 or more siblings is higher than that of the students who do not have a sibling or the students who have 1 or 2 siblings, thus there is a positive correlation between increased number of siblings and loneliness. Consistently, the findings of Demirtaş (2007) and Duyan, Çamur-Duyan, Gökçearsan-Çiftçi, Sevin, Erbya and İkizoğlu (2008) indicated the positive correlation. On the other hand, Eren (1994) and Kozaklı (2006) resulted that increased number of siblings can result in increased level of loneliness in children.

According to Duyan et al.'s (2008) study, as to gender males are lonelier than females; as to education level of mother, students who have university graduated mothers have less level of loneliness than others; as to education level of father, students who have university graduated fathers have less level of loneliness than others; as to number of siblings, the more number of siblings the more state of loneliness, the more income

the more state of loneliness, students who fail in a class feel more loneliness than others. Besides, students who have been living a long time in urban places have less level of loneliness than others.

It should be noted that most studies have not found sex differences in loneliness using the UCLA Loneliness Scale (Andersson, 1982; Borys & Perlman, 1985; Peplau et al., 1982; Qureshi & Walker, 1989; Russell, Cutrano, McRae, & Gomez, 2012). Loneliness did not significantly differ by gender in university students (Duru, 2008; Eker, Arkar & Yaldız, 2001). Duru (2008) also did not find significant difference among the ages of university students. Çeçen (2008) reported that gender main effect indicated that both female and male students' experience of loneliness and perceived social support are more or less at the same level. About gender and loneliness, there is no consensus in the literature. As another demographic variable, age has also been associated with loneliness and Pinqart and Sörensen (2003) asserts that it is most prevalent in adolescence and young adulthood.

Although the use of Internet and social networking sites are not included in the present study, current studies of loneliness have started to scrutinize the Facebook and Twitter use and its relation to loneliness. There is no consensus about what causes what and whether Internet use is beneficial to loneliness or not. While some studies concluded that computer-mediated interaction decreased loneliness (Baker & Oswald, 2010; Carpenter & Buday, 2007; Skues, Williams & Wise, 2012) and some studies found that Internet use increased loneliness and depression (Pena & Sandlin, 2010; Spraggins, 2009).

### **2.3 Overview of Parental Acceptance-Rejection Theory**

The work of Bowlby (1977) and Horney (1950) who studied parent-child relations in clinical settings are the derivation of parental acceptance-rejection theory. The present study is based on parental acceptance-rejection theory (hereafter referred to as PARTheory). First Symonds (1939; 1949 as cited in Walker, 1990) searched the relevant literature and came up with a view on parental control and acceptance-rejection. Siegelman (1966) also searched about the effects of parental acceptance-

rejection but used another instrument. Theory was first developed by an anthropologist, Ronald Rohner in 1960 and intended to demonstrate and predict causes and outcomes of parental acceptance-rejection for development of children and personality of adults (Serbest, 2010).

Main assumption of the theory is people all around the world need to receive warm feelings from parents. Theory also predicts that withdrawal of acceptance will result in negative consequences for development of individuals (Rohner, 2004). Rohner and Rohner (1980) assumed in PART "that all of us tend to view ourselves as we imagine 'significant others' view us, and if our parents as the most significant of 'others' rejected us as children, we are likely to define ourselves as unworthy of love, and therefore as unworthy and inadequate human beings" (p. 3). As can be seen in Figure 1 below, acceptance and rejection are opposite sides of one dimension called "warmth dimension" by Rohner. Parents or caregivers differ between on the line and are close to either acceptance size or rejection side. In each side, there are expected behaviors as it is shown in the figure.

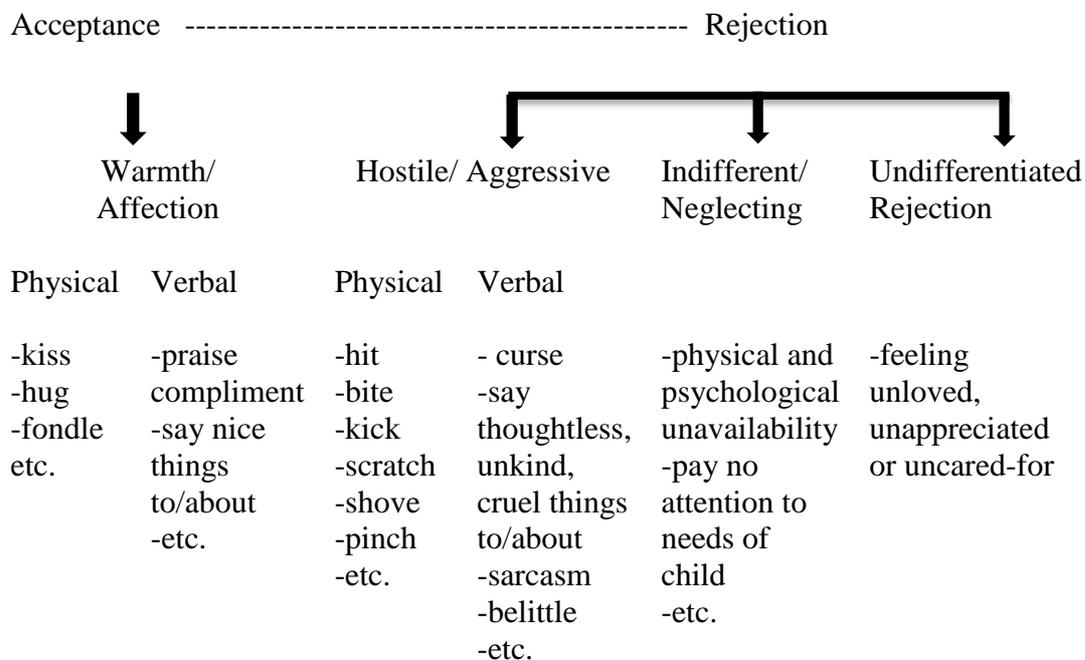


Figure 2.1 *Conceptual Model of Principal Parenting Concepts in Parental Acceptance-Rejection Theory* (Rohner, 1989)

In the figure 1, sample behaviors of the accepting parents and the rejecting parents are showed. Physical and verbal accepting behaviors, called as parental acceptance, result in children's feelings of being loved and accepted by parents. Parental rejection can be expressed through hostility/aggression or indifference/neglect in two ways and these rejecting behaviors indicate dislike or disapproval of the child. In hostility, there is a feeling of anger or hatred but in neglecting, lack of feeling or care is seen. Aggression and neglect are observable characteristics motivated by the internal states of hostility and indifference (Walker, 1990). Not meeting child's physical or emotional needs and not responding to child in a caring manner is manifestation of neglecting behavior while hitting or verbally abusing a child are forms of aggression behaviors (Rohner, 1990).

Parental acceptance-rejection can be determined by both subjective experiences and researchers' objective observations. As stated by Rohner (1986), self-report and observation approaches frequently result in similar data but not always. Direct observations can be misleading due to external indicators which can create opposite behaviors in parents. Also, an observer can come across with a perfect family environment but the child can still feel coldness and rejection. As Kagan stated, "Evaluation of a parent as hostile or accepting cannot be answered by observing the parent's behavior... Parental love is a belief held by the child, not a set of actions by the parent.", (p.57, 1978). Rather than evaluating the picture of the parent-child relation, understanding the reality from child's perspective and his or her experience of it, is a better way to see child's perception regarding parental coldness or warmth.

PART claims that influence of the parental acceptance-rejection depends on the life stages of the individuals (Rohner, 1986). Other theories mainly focus on early childhood stages and infancy, even early months, as a vulnerable to maternal deprivation or separation, Rohner differentiates level of susceptibility to feel rejection according to developmental changes of individuals: infancy, childhood and adolescence. In this study, mainly the adolescents are the issue and subjects and according to Rohner, "In adolescence the individual has more cognitive, social and physical sources available to compensate the effects of rejection but these effects, if

extending from childhood into adolescence and even through adulthood, can continue to have painful consequences. And, perhaps most importantly, adults who experienced rejection as children carry the effects into adulthood and have a tendency to carry on the rejection cycle onto the next generation" (p. 122).

### **2.3.1 Research on Parental Acceptance-Rejection**

In the literature, studies mostly examined the consequences of parental rejection on children at various ages. Rejection has been implicated in adjustment problems such as drug use and conduct disorders, disturbed body image, poor academic and intellectual performance, interpersonal relationship problems, and a wide variety of other physical and mental health issues (Walker, 1990).

Rohner and Khaleque conducted 43 studies between the years of 1997 and 2000 and a total of 7563 individuals participated in these studies and results supported correlation between parental acceptance-rejection and psychological adjustment (Khaleque & Rohner, 2002). This evidence of negative psychological effect of parental rejection on psychological adjustment drove Rohner to define a new term called 'parental acceptance-rejection syndrome' and he associated parental rejection with different types of psychopathology (Rohner, 2004).

In Turkey, Polat (1988) conducted the first study about parental acceptance-rejection. 120 participants are included in the study assessing ten to eleven year old children. Her results showed that psychological adjustment significantly correlated with parental rejection for the .001 level and consistent with the findings of Rohner and Khaleque (2002). In 2003, Erkman also carried on the same study with 1821 children and youths as Polat did and reached the same conclusion. The study indicated that both perception of maternal and paternal rejection correlated significantly with negative psychological adjustment (Erkman, 2003).

Erkan and Toran (2004) examined the acceptance and rejection behavior of 123 mothers who have had five-year-old children and are from the lower socio-economic

status in Diyarbakır. Since mothers have filled the form, the results may not be objective but there was no significant correlation between gender of the child and acceptance-rejection level of mothers. The study revealed that in comparison to high-school graduates, non-literate and literate non-graduate mothers had higher rejection scores. As the age of mothers increased, their level of acceptance decreased. Also, as the number of members in the family increased, the mother's rejection level increased. Similar to findings of Erkan and Toran, in the study of Erkman and Rohner (2006), gender did not make any statistical difference in acceptance rejection results of ten to eighteen years old youths.

Dwairy (2009) conducted a cross-cultural research on adolescents' parental acceptance-rejection in nine countries and admitted that fathers were more rejecting than mothers. Effect of gender of the parent can be observed in this study. In addition, male adolescents were more likely to be rejected and less likely to be accepted than female adolescents (Dwairy, 2009).

Ekmekci also (2008) explored the possible contributions of gender to perceived parental acceptance and rejection; youths' gender did not contribute to variations in their psychological adjustment and parental acceptance.

Adolescents' perceptions of parental acceptance and involvement are correlated positively with self-confidence, identity exploration and empathic behavior (Jackson, Dunham, & Kidwell, 1990). Parents who encourage their adolescent child to express their point of view grow up children with higher level of identity exploration (Grotevant & Cooper, 1985). Parental warmth predicts significant decrease in adolescent externalizing behaviors; while psychological control increases internalizing behaviors (Doyle & Markiewicz, 2005). In Aydın and Öztütüncü's (2001) study parental control was not significantly associated with adolescents' negative thoughts and maybe this conclusion is due to the fact that control is the norm in Turkish culture and is perceived as expression of protection and love (Kağıtçıbaşı, 1982).

## **2.4 Sibling Relations in Adolescence Period**

Family as a small unit of society includes sibling relationships and they have important place in the overall functioning of the family. Meaning of siblings differs in various cultures. Identification of an individual as a sibling can be provided by genealogical or biological criteria (full siblings and half siblings), legal criteria (step or adoptive siblings) or behavioral and affectional criteria (fictive siblings) and this can change according to that particular society. Whether to make distinctions among type of sibling or accepting each type as a full member in the sibling network seems to be a choice of the particular family (Cicirelli, 1994). Definition of sibling and expectations of being a sibling in that particular culture is important to be aware of. Due to a shared family history and environments, most sibling relations are described as being intense and favorably affective interactions.

Despite the interaction of parents-child relationships and sibling relationships, laterally along the horizontal axis siblinghood relations and vertical axis of the parent-child relationship are claimed as different (Mitchell, 2013). The family member involved in the interaction affects the child's behavior. Thus, which duration of the life span is considered while studying sibling relationships is important. Sibling relationships start in early childhood and go throughout adolescence and adulthood. During this maintenance, some formations occur in the relationship. A sibling relationship begins when one sibling becomes aware of the existence of the other (Cicirelli, 1995). The older sibling generally experiences this awareness when the younger one joined to the family. Parents start to prepare the older siblings to this idea sometime after the pregnancy was learned.

During the life span, the most important function of the siblinghood may be to provide friendship, companionship and affinity. In adolescence and childhood, the siblinghood has an important mission which is to provide physical and psychological security feelings. According to Lamb (1982), to talk with siblings is easier than to talk with parents for an adolescence; they talk with their siblings about self-care, education plans and personal issues and they seek advice from their siblings, although they feel

conflictual feelings toward their siblings. Talking with siblings can be a testing ground of reactions before moving issues to the parents. They also share secret information regarding their flirts, sexual interests and curiosities.

Dunn and Kendrick (1982) reported that older siblings take initiative to communicate with younger and after a while younger siblings also began to talk and the older sibling start to make inferences from his or her talk to understand what the infant's feelings and desires are. Older sibling's simplified speech to younger, repetition of the words, using appropriate, basic language made contribution to language development of younger sibling (Dunn & Kendrick, 1982). Older siblings may also be care-taker for the younger. Cicirelli (1995) utters that during care-taking interactions between siblings, younger siblings learn various values, knowledge and skills from their sibling therefore their cognitive, emotional and social aspects of personality have been affected. There is informal teaching and learning experiences between siblings in terms of transition of family taboos and confidential topics and older siblings may become the role model. During middle and early childhood, amount of nurturance older sibling giving is high and as mentioned above older sibling help younger by caregiving and school related tasks. As soon as older sibling reach to adolescence, the amount of nurturance provided to younger decrease while help of younger siblings provided to the older, adolescence sibling increase (Buhrmester, 1992) Sibling relationships teach loving and supporting, sharing, cooperation, feeling loyalty, tolerance, struggling, rivalry, dealing with jealousy and frustration.

The strengths and tasks of sibling relationship do not remain the same throughout life cycle. Siblings' positive and negative behaviors and feelings go through the changes and it may be due to the age characteristics, living conditions, family culture and gender of the siblings. Buhrmester' (1992) findings concluded that siblings' childhood behaviors and feelings about each other are strongly related with the quality of sibling relationships later in early adolescence but a good sibling relationship in childhood does not ensure the same quality of sibling relationship later in adolescence. Along with the biological, cognitive, and social changes of adolescence, its nature may change during adolescence (Buhrmester, 1992).

Across adolescence, sibling intimacy or the warmth and closeness of the relationship seems to decline (Lerner & Steinberg, 2009). Intimacy is high in middle childhood, from 2<sup>nd</sup> to 4<sup>th</sup> graders; by the beginning of adolescence in 7<sup>th</sup> grade, intimacy regresses to moderate levels and remains same until ages 19 (Buhrmester, 1992). Despite to this decline, adolescent state more emotional support and intimacy than they receive from their parents (Furman & Buhrmester, 1992). Sibling bonds remain close during the adolescence. When the amount of time they have shared together was considered, they spend less time in their leisure activities in adolescence. During pre-school and elementary school years siblings spend majority of their time together, in direct interaction (Larson & Verma, 1999) and Buhrmester and Furman (1987) show evidence of decreased companionship during adolescence.

During early and middle childhood, older sibling is the dominant and holds the power and status over other siblings but the beginning of early adolescence around at the ages of 12, power differential between younger and older declines (Furman & Buhrmester, 1992). As the ages increase, there is a developmental change in power relations then dominance of older sibling declines and rather than differences in power status, they start to adapt more egalitarian relationship.

In addition to all these, coherence of sibling relationship is shaped by attitudes of parents toward their children when they are in childhood and adolescence period. In the literature there is a consensus that warmth and affectionate parent-child relations associated with positive and prosocial sibling bonds in contrast negative parent-child relations are associated with aggressive sibling relations (Bank, Patterson & Reid, 1996; Brody, Stoneman & Gauger, 1996; Brody, Stoneman & McCoy, 1994; Lerner & Steinberg, 2006). According to Jodi, Bridges, Kim, Mitchell & Chan (1999) while cohesion and harmony in parent-adolescent interactions has a more positive influence on sibling-sibling interaction, perception of parental rejection leads to more aggressive behavior towards siblings and peers. This result may stem from members of cohesive families who are more sensitive to each other's' psychological needs since they share problems with each other and communicate empathically toward each other (Aydın & Öztütüncü, 2001).

Furthermore parents' unfair treatments towards their children are negatively correlated with the development of intimate inter-sibling bonding and associates with a higher level of inter-sibling conflict (Sutton, 1996). Stocker and McHale (1992) also found children who had warmer and mother-child and father-child relationships during elementary school age, had the least hostile and affectionate sibling bonds during adolescence. In addition, the same is true for sibling relationship. Experienced serious problems and unrest between the siblings reflect on the parent-child relationship, even on the marital relationship of the spouses (Furman & Giberson, 1995).

When it comes to adult siblings, since they generally do live independently from each other, they start to see each other from time to time depending on their closeness of the relationship, proximity, commitments and responsibilities. Cicirelli (1995) expressed that sister-sister relationships are particularly close, with cross-sex siblings intermediate in closeness and brother-brother relationships least close.

Woodward and Frank's (1988) research on loneliness and adolescents' coping strategies revealed that 75% of the participants in their study consulted a sibling when experiencing loneliness. This study points to the sibling relationship as potentially significant.

#### **2.4.1 Research on Sibling Relationship Quality**

The sibling relationship is the longest lasting relationship most individuals will experience in their lives in comparison to relations with spouses, parents and children (Bank & Kahn, 1997) and has some unique qualities different from other peer relations due to the commonality in genes and family life experiences. Sibling relationship has different characteristics from close friends and parents relations. Sibling relations resemble to parent relationship in terms of intimacy and significance, but resemble to close peer relations in terms of power status, help and satisfaction (Furman & Buhrmester, 1985).

It is easier to find literature regarding age spacing between sibling, number of siblings and birth order but sibling relationship quality studies do not have a large literature background. Close relationships such as parent-child and romantic relationships are mostly studied framework for attachment theories. Sibling relationships are more recent research topic focus. In the beginning of the 1990s, family studies started to include sibling relations and its impact on adolescence development (Clingempeel, Colyar, Brand, & Hetherington 1992; Furman, Jones, Buhrmester & Adler, 1989; Spieker & Bensley, 1994).

The number of siblings born into a family is declining over years. According to Turkish Statistical Institute (TURKSTAT) (2014) mother birth statistics, total fertility rate is 2.17 children and this means a fertile woman giving average 2.17 birth. Medora and Woodward (1986) found the number of siblings was not significantly related to loneliness.

Lempers and Clark Lempers (1991) have conducted a study to compare adolescents' given functional importance to their mother, their father, their most important sibling, their best same-sex friend and their most important teacher. Affection, being instrumental aid and reliable alliance perceived from mothers and fathers by all adolescents; conflict was also highly rated in parent-adolescence relations. Intimacy and companionship perceived from same-sex friends mostly; siblings were also important sources of intimacy and companionship while being as a source of nurturance and conflict.

Dunn, Beardsall, Slomkowski and Rende, (1994) claimed that warm and supportive relationship with siblings has significant positive correlation with perceived self-competence and better adjustment in younger sibling and negative behavior result in vice versa. When they conducted an 8 year longitudinal analysis of the same study, consistent findings were obtained. Similarly, older adolescent who are supported by their little siblings reported higher self-esteem, greater perceived social skill competence and abilities with their peers (Volling & Blandon, 2003).

Parental attitudes have impact on sibling relationships. Positively perceived parental attitude, which consist of cohesion, harmony and affection is also correlated with more warm and affirmative sibling relationship. Correspondingly, perception of rejection, neglect and aggressiveness associates with more aggressive and conflictive interaction within siblinghood. It is also useful to remember that the forms of interaction of parents can be role models for the kids (Furman & Giberson, 1995). Unfair and unequal treatments towards children is also affecting the inter-sibling bonding negatively and leads to higher level of conflict among the siblings (Oliva & Arranz, 2005). Increased independence, encouragement and acceptance by parents, decreased maternal rivalry and greater frequency of contact between siblings were related to greater quality of attachment to sibling (Brussoni, 2000).

Furman and Giberson (1995) examined the parents' main impact on sibling relationship quality under five headings: the general characteristics of parents' relationship with each child separately; the differences in relationship of each child with parents; the discipline methods used by the parents and their responses to the problems of sibling relations; their efforts to develop positive sibling relationships and to reduce the negative and their marital relationship with the spouse. These factors may have an indirect impact on sibling relationship but are important to consider.

James and Ponzetti (1997) conducted a comparable study to the present study and searched the impact of sibling relationship quality on loneliness level. They concluded a significant negative correlation between loneliness and both closeness and rivalry dimensions while conflict was positively correlated with loneliness. There was no significant relationship noted for power. Closeness was the most significant predictor of loneliness (Ponzetti & James, 1997).

Ratings of sibling relations include both hate and love; children rate their siblings as supportive and loving but also as aggressive and antagonistic (Lerner & Steinberg, 2009). When it moves from childhood to adolescence, developmental changes occur in sibling relations and sibling ties become less conflictual and more egalitarian (Buhrmester & Furman, 1990). Stocker and his colleagues described the sibling

relationship of a college student as warm and close but also as conflictual and competitive (Stocker, Lanthier, & Furman, 1997). Seginer (1998) found that the more warmth in adolescents' sibling relationships, the more support they can receive from their peers and school friends. Even, older adolescents who had warming and supporting sibling relationship in their childhood reported higher self-esteem and social competence with peers in comparison to adolescents who experienced little or no sibling support in childhood (Caya & Liem, 1998).

Scharf, Shulman and Avigad-Spitz (2005) found that from middle adolescence to adulthood, there is decrease in sibling conflict since siblings start to share less time together, intensity of the relationship declines and they spend more time with friends. Cole and Kearns (2001) also reported a change in the intensity of sibling relationships from middle childhood to older adolescence and older adolescents experience less warmth and conflict with their siblings in comparison to middle school children.

Youth who have warm and intimate sibling relationships also have close friendships and are socially competent with peers (Brody & Murry, 2001). Findings of Howe and her colleagues (2001) proved this idea and claimed that some social skills are learnt in sibling relationships such as self-disclosure, sharing intimate feelings, being emotionally empathic, showing empathy toward others. Therefore they develop their capacity to make close ties by their empathy skills. Tucker, Barber and Eccles (1997) also agree with the idea that more positive sibling relations correlate significantly with being more sensitive to others' feelings. Socioemotional skills including intimacy and empathy are mostly learned from siblings and then these skills and additionally learnt trust and attachment are used to promote positive, close relations with others. Lerner and Steinberg (2009) also articulate in their book that siblings provide adolescents a context for learning communication skills, behavior norms and how to be emotionally intimate and this may help with their friendships. Although there are evidences that siblings contribute to develop social competence in each sibling's peer relations or vice versa may apply. Sibling relationships can result in development of peer aggression or rejection (Volling & Blandon, 2003). Conflicting or aggressive sibling relations may train children to be aggressive in other social relationship settings. There

are several studies concluded with the significant relationship between aggressive and hostile relations with siblings and child's use of aggression with their peers (MacKinnon-Lewis, Starnes, Volling, & Johnson, 1997).

Siblings can offer one another mutual aid, companionship and emotional support that can last throughout the life cycle (Goetting, 1986). Thirteen percent indicated a sibling was one of their best friends (Cummins & Schneider, 1961). College women reported their sibling relationships to be as significant as their relationship with their mother when considering feelings of closeness, being understood, and holding similar views (Cicirelli, 1980). The sibling relationship provides emotional resources. Almost two-thirds of respondents in two large, nationwide surveys reported feeling close to their siblings (White & Riedmann, 1992).

## **2.5 Studies Regarding Family and Loneliness**

Adolescence is a long and difficult stage of human life. This period is a process in which inconsistent, ambivalent and confused feelings are experienced (Yavuzer, 2002) and family is accepted as a significant contributing factor to loneliness in adolescents. The influence of the family support on loneliness was supported by many studies (Duru, 2008; Eker & Arkar, 1995; Eker, Arkar & Yaldız, 2001). Young people's quality of family relationship is highly related to their psychological well-being (Roberts & Bengston, 1993). Parent's love and support levels in their relationship with children and involvement in their children's daily life issues affect young people's psychological adjustment (Tubman & Lerner, 1994) and also adolescents' self-evaluations and psychological health (Aydın & Öztütüncü, 2001).

Children and adolescents, who are feeling their family members mainly parents and the siblings as distant and not providing intimacy and support, stated that they were experiencing alienation in their homes. When they sensed that nobody in their home was listening to them or had a true interest in their day-to-day happening, they experienced social isolation in their families, and often reduced their emotional communication (Margalit, 2010).

In a nationwide survey of 30,000 people, Shaver and Rubenstein (1980) noted that respondents who perceived their parents to be caring and supportive were less lonely as adults. Uruk and Demir (2003) searched the role of peers and families in predicting the loneliness level and concluded that 14% variance in loneliness is explained by family structure although only communication dimension was significant and cohesion, emotional bonding and power were not significant. In Cutrano's findings (1982), in early adults the strongest predictors of loneliness are flirting and dissatisfaction of social relationships with friends, rather than family relations.

Lobdell and Perlman (1986) found significant correlation between parents' child-rearing practices and loneliness in their child; a lack of positive involvement with one's children were significant predictors of loneliness in daughters and daughters were impacted more from the negative child rearing practices than sons. It was observed that adolescents having negative attitude towards their fathers feel more lonesome (Le Roux, 2009) while those who have close relations with their parents feel less lonely (Rotenberg & Hymel, 1999).

Uruk (2001) compared the effect of peers and families on adolescents' loneliness and based on the results while family structure explained 14% of loneliness, peer relations explained 35% of variance in loneliness. In Cutrano's findings (1982), in early adults the strongest predictors of loneliness are flirting and dissatisfaction of social relationships with friends, rather than family relations.

Duru (2008) conducted a study to predict loneliness from support by a significant other, family support and social connectedness and the results revealed that although support by a significant other and social connectedness predict loneliness in negative direction, family support did not predict loneliness significantly.

Sibling support was correlated with lower loneliness scores and with higher self-esteem and life satisfaction and sibling support compensated for low support from

mothers for depression and self-esteem (Milevsky, 2005). Sibling support has compensating impact on lack of parental and peer support.

As a result of the study of Özatça (2009), the main predictors of the family subscale of emotional loneliness on adolescents are found as general functions, affective responsiveness and problem solving subscales. On the other hand, the predictors of romantic loneliness subscale are only general functions. Similar to emotional loneliness, the predictors of the social loneliness subscale are reported as general functions and affective involvement of the family members. Communication and roles and behavior control subscales of family functions did not predict social and emotional loneliness significantly.

Çeçen's (2008) findings indicated that there was no significant difference on loneliness and social support with regard to gender but perceived parents attitudes made significant difference in loneliness levels. Democratic parents' children felt less lonely and they perceived more social support from friends and their family. Authoritarian parenting style which is involving parental power assertion without warmth, nurturance, or two-way communication and punitive discipline styles in order to control the behavior of their children was related to children's low self-esteem, since often children fail to achieve the exact standards that parents expect from them. Authoritarian parenting styles were generally associated with poorer self-perceptions among school aged children and adolescents and increased loneliness (Margalit, 2010).

Adolescent maturation threatens parental dominance, resulting in heightened conflict with and diminished closeness to parents (Lerner & Steinberg, 2009). This prompts youth to turn away from their family to be comforted by peers who are experiencing similar relationship disruption. It does not mean that peers gained most effective place in adolescents' lives. Current researches differentiated the influence domain of parent and peers. Issues relating to future including career and school are mostly influenced by parent, while issues concerning life style like leisure activities is mostly under peer influence (Collins & Steinberg, 2006).

All in all, loneliness is the feeling of lacking a social relationship network (Peplau & Perlman, 1982) and is a subjective experience related to an individual's relationship with family members and others (Rubenstein & Shaver, 1982). It seems that family interaction plays the important role in loneliness in today's literature and in its definitions. Although in the adolescence period, young establishes new relations with peers and modifies his or her relations with parents, parent-child relations and the quality of contact with family members are still important. Although importance of parent-child relationship to loneliness were displayed in many studies, sibling relationship which has a potential to affect individual's experience of loneliness are limited in the literature. Sibling interaction which includes extensive contact, intimacy and familiarity provides opportunity for both social learning and learning about self. They may imitate their behavior patterns, which derive from parent and sibling interactions, in their other social relations and quality of these interactions have an direct or indirect impact on their experience of loneliness. Therefore, in this study both role of parental behaviors and role of sibling relationship quality in loneliness were emphasized after controlling for some demographics.

## **CHAPTER III**

### **METHOD**

In this chapter, overall design of the study, participants involved and description of population and sample; then instruments used for collecting data, data collection procedure and statistical method for data analysis are introduced in details as five sections.

#### **3.1 Overall Design of the Study**

Design of the present study can be identified as a correlational prediction design, as one of the quantitative research methods to investigate whether relationship of sufficient magnitude exists between variables (Frankel, Wallen, & Hyun, 2012), to indicate the types of relationship between variables and direct-indirect effect of independent variables on dependent variable. The relationship among variables was investigated without manipulating them. In the current study, outcome or criterion variable was loneliness score and predictor variables are perceived maternal and paternal acceptance-rejection score and sibling relationship quality scores. Loneliness scores were predicted from mother and father acceptance-rejection score and sibling relationship quality. Since these variables cannot be manipulated, quantitative research tradition was appropriate method and by this method, it is possible to make inferences from the findings and generalize findings to larger population.

Demographic variables such as age, sex, grade, school type, field of study, marital status of parents, birth order, education level of parents, parents living or not, number of siblings, sex of siblings, age difference between participant and sibling were asked and collected in demographic information form and those variables were also represented in the study. Among these demographic variables, age, gender, field of study, number of siblings and birth order were added to main analysis. There are already existing differences between the groups therefore causation cannot be claimed.

### **3.2 Research Question**

This study was conducted to address the following research question:

- How well do perceived level of maternal and paternal acceptance-rejection scores and sibling relationship quality predict the loneliness level of high school students? Does this correlation change according to gender, age, grade, school type, birth order and number of siblings?

### **3.3 Participants**

Two-stage cluster sampling is used as a selection method as it is suggested by many other researchers. According to Ministry of National Education statistics, there are approximately 353 high schools in Ankara with different types (MoNE, 2014). It was not feasible to make simple random sampling with such a big sample then cluster random sampling was used in the study and the schools became clusters of the study. Fraenkel and Wallen (2006) also suggest cluster sampling since random sampling is difficult to employ.

Target population of this study was all public high school students in the ten central school districts in the city of Ankara. Within the selected schools, the researcher could not reach all the students but could reach only 1723 of them. The participants of the study were volunteering, public high school students in Ankara. From each school, approximately equally representative proportion of males and females were chosen. This means two-stage cluster random sampling was used. Data were collected in the last two months of spring semester in 2014.

Due to the utilizing cluster sampling as the method of sample selection, firstly ten central districts (Altındağ, Bala, Çankaya, Etimesgut, Gölbaşı, Keçiören, Mamak, Pursaklar, Sincan and Yenimahalle) were randomly chosen in Ankara. Among all of the public high schools in these ten central districts, 50 schools were randomly selected through SPSS program. In these schools, approximately three classes were chosen and questionnaires were distributed. Since data were collected in spring semester, accessing to 12<sup>th</sup> graders and applying questionnaires to them was difficult, they did

not want to spend time with questionnaires. The students of these schools constituted the accessible population of this study. 2000 questionnaires were distributed for this study but 1723 of them were turned back by the participants. As 267 of surveys were incomplete or inaccurately filled, they were eliminated due to the missing items and extreme scores and in the final, 1451 participants were included in the study. Sample size ( $N = 1451$ ) is quite good enough by providing the formula of ' $N > 50 + 8 \text{ IVs}$ ' (Green, 1991) in order to run hierarchical multiple regression.

When the schools grouped according to their types, the results indicated that majority of the data were gathered from the Anatolian high schools which constituted the 73.8% of the sample. Vocational high schools followed them with 25.1% and 1.1% were science and social sciences high school students.

### **3.3.1 Demographic Characteristic of the Participants**

In order to investigate the relationship between loneliness, maternal acceptance, paternal acceptance and sibling relationship quality, data were collected from 1451 students from public high schools in Ankara. In the study, the majority of the participants were female. Male participants composed of 46.3% of the sample and 53.7% of the sample were females. In the beginning, age range of the sample changed between 14 and 21 but since the age 20 and 21 occurred rarely in the sample, they were deleted and were not used in the analysis. At the end, of the sample, age varied between 14 and 19. Most of the participants' ages accumulated within 15 ( $n = 424$ ), 16 ( $n = 386$ ) and 17 ( $n = 457$ ) age groups. However, only 8.3% of the sample were 18 ( $n = 120$ ), 3.0% were 14 ( $n = 44$ ) and 1.4% of them were 19 ( $n = 20$ ) years old. The mean age of the participants is 16.17 with the standard deviation of 1.08.

When students grouped according to their grades, 499 of the students were 9<sup>th</sup> graders (34.4%), 376 of them were 10<sup>th</sup> grade students (25.9 %) and 493 students were 11<sup>th</sup> graders (34.0%). 12<sup>th</sup> graders were only 83 students and constituted 5.7% of the sample because they either were not found in the school or did not want to participate in the study due to the university entrance examination and length of data collection time.

Among the field of study of participants, 38% ( $n = 552$ ) were from math-science department, 25% of them ( $n = 363$ ) were Turkish-Math and 6.8% ( $n = 99$ ) were social sciences or language departments. 30.1% of them ( $n = 437$ ) have not selected their departments yet.

When the participants were grouped according to their parents' marital status, 41 of the students had divorced parents, 7 of them had parents living separately and rest of the students were living with both parents, meaning they are intact families.

Of the sample, father and mother education level are grouped as it is in the following. In terms of mother education level, 1,3% were illiterate ( $n = 19$ ), 3% were literate ( $n = 4$ ) but do not have any degree, 30.3% were primary school graduates ( $n = 440$ ), 20.1% were middle school graduates ( $n = 291$ ), 29.5% were high school graduates ( $n = 428$ ), 2.6% were two-year college graduates ( $n = 25$ ), 10.6% were university graduates ( $n = 154$ ), 2% were master or doctorate graduates ( $n = 29$ ). There were 8 students who reported that they do not know the education level of their mothers. In terms of father education level, 0.3% were illiterate ( $n = 5$ ), 1.6% were literate ( $n = 23$ ) but do not have any degree or graduation, 14.5% were primary school graduates ( $n = 211$ ), 18.8% were middle school graduates ( $n = 273$ ), 30.5% were high school graduates ( $n = 443$ ), 6.1% were two-year college graduates ( $n = 89$ ), 22.7% were university graduates ( $n = 330$ ), 4.7% were master or doctorate graduates ( $n = 68$ ). There were 9 students who reported that they do not know the education level of their fathers.

Key demographics are the sex and age. Different grades will be included in order to control the age variable as well. School type in terms of academic studies is also an important variable to control.

### **3.4 Data Collection Instruments**

Data were collected by using UCLA Loneliness Scale which is adapted by Demir in 1989 (see Appendix C), Child Mother and Father Acceptance-Rejection Questionnaires Turkish-Short form (Child PARQ-Turkish Short Form) which is adapted by Yılmaz and Erkman in 2008 (see Appendix D and Appendix E), Sibling

Relationship Quality Questionnaire (Apalaci, 1995) (see Appendix F) and a Demographic Information Form (Kişisel Bilgi Formu) (see Appendix G) to collect demographic information (age, sex, grade level, school type, field of study, marital status of parents, birth order, education level of parents, parents living or not, number of siblings and sex of siblings).

### **3.4.1 The University of California Los Angeles (UCLA) Loneliness Scale**

The UCLA Loneliness Scale has been widely used, a 20 items, self-report, 4-point Likert type instrument. The scale consists of 10 direct, 10 reversely coded items. Items 1, 4, 5, 6, 8, 10, 15, 16, 19, 20 include positively worded statements reflecting satisfaction with social relationships and items 2, 3, 7, 9, 11, 12, 13, 14, 17, 18 are negatively worded statements and reflecting dissatisfaction with social relationships. Higher score are accepted as a sign of loneliness that is met very occasionally. The lowest score to be received from the scale is 20 and the highest is 80. In the present study, Turkish version of the UCLA (Demir, 1989) was used.

Reported alpha for the UCLA was .94; test-retest reliability over two months was .73; concurrent validity in the form of correlations with the Beck Depression Inventory ( $r = .62$ ) with the Costello-Comrey Anxiety ( $r = .32$ ) and Depression ( $r = .55$ ) (Russell, Peplau & Cutrano, 1980). Concurrent validity was demonstrated with a lonely versus non-lonely person's self-report of behavior and feelings. Correlation between the UCLA Loneliness Scale and the Beck Depression Inventory was found to be .77. The UCLA Loneliness Scale and Social Introversion sub-scale of the Multiscore Depression Inventory were highly correlated .82.

In Turkey, the validity and reliability study of the UCLA Loneliness Scale was completed by Demir (1989), who found the internal consistency coefficient as .96; and the correlation coefficient as .94 by the test-retest method, over 5 weeks. In each item of the scale, a circumstance that states a sense or a thought about the social relation is presented and the individuals are asked to state how often they meet this circumstance, on a four point Likert scale. In the present study, the Cronbach's alpha coefficient was calculated as .85 which is satisfactory and over than .70 as it is suggested by Hair,

Black, Babin and Anderson (2010).

### **3.4.2 Parental Acceptance-Rejection Questionnaires Turkish-Short form (Child PARQ/Short Form)**

Child-PARQ Turkish Short Form is a questionnaire type, self-report, pre-existing instrument. First version of Parental Acceptance Rejection Questionnaire was developed by Rohner, Saavedra and Granum in 1971, revised in 1980 and measures perceptions of individual's parental acceptance and rejection (Yılmaz & Erkman, 2008). It has three versions including adult, parent and child PARQ. In this study, Child PARQ version, short form was used. Items ask for how the mother and father's treatment affect the feelings of children at the present (Rohner, 2004).

The Child PARQ-short form consists of 24 items with four item Likert type scale ranging from 4 = almost always true to 1 = almost never true at all. There is one reverse scored item, which is 13<sup>th</sup> item. The higher the score, the more rejection children experience. Scores range from a low of 24, showing maximum perceived love and acceptance, to a high of 96, showing maximum perceived rejection. Scores equal to or above 60 reveal the perception of rejection more than acceptance (Serbest, 2012). Warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection scale scores are summed with the entire warmth scale reverse scored to compute the total PARQ score.

Child PARQ is used for both children and adolescents and assesses how an individual feels about treatment of their mother and father. In this sense, this instrument will be appropriate for this present study. The Child PARQ has four subscales which are warmth and affection, aggression and hostility, parental neglect and indifference and undifferentiated parental rejection subscales. Reliability and validity studies of Child PARQ were conducted in 1975 by Rohner and internal-consistency was measured between Cronbach alpha coefficients of .72 and .90. The correlations between PARQ-Child Form and Schaefer's Child Report of Parental Behavior Inventory and Physical Punishment Scale of Bronfenbrenner's Parental Behavior Questionnaire as validation scales ranged from .55 to .83 (Khaleque, Rohner & Cournoyer, 2005).

The reliability study of the Child PARQ-Short Turkish form was carried on by Yılmaz and Erkman (2008) with a sample of eighth, ninth, tenth and eleventh grade students in Istanbul. The reliability in terms of the internal consistency, the item-total correlations for PARQ Child Short Form Mother Version ranged between .20 and .72 and the Cronbach alpha coefficient was .89 (Yılmaz & Erkman, 2008). For father version, the Cronbach Alpha coefficients for the warmth/affection, hostility/aggression, indifference/neglect and the undifferentiated rejection subscales were .88, .66, .70, and .65. Also, item-total correlations were ranging from .24 to .71 and the Cronbach Alpha coefficient of the scale was .90. As a consequence of the study of Yılmaz and Erkman (2008), it can be asserted that Child PARQ-Short Form, both mother and father versions have sufficient internal consistency. Since short version is developed currently, there is not enough information about its validity. Only because it consists of items from each subscale, its psychometric validity is suspected to be good enough (Rohner, 2005).

In the present study, Cronbach Alpha coefficients were calculated for each subscale of both Paternal Acceptance-Rejection Questionnaire and Maternal Acceptance-Rejection Questionnaire then the results were displayed in Table 3.1 in the below. Cronbach's Alpha .70 was taken as the lower limit for internal consistency coefficient (Hair et al., 2010) and reliability of each dimension has been shown to have satisfactory values. Reliability results for the current study were higher than the Cronbach alpha values of previous studies.

Table 3.1

*Dimensions and Cronbach Alpha Values of PARQ-Child Short Turkish Form in Turkey*

PARQ	Yılmaz and Erkman's Study Results (2008)		Serbest's Study Results (2010)		Present Study Results	
	Mother	Father	Mother	Father	Mother	Father
Warmth	.88	.88	.83	.89	.87	.90
Hostility	.69	.66	.64	.74	.74	.81
Ind-Neg	.66	.70	.65	.74	.77	.81
Undif-Rej	.53	.65	.51	.65	.76	.79
PARQ Total	.89	.90	.87	.91	.93	.94

Factor analysis was performed for the construct validity and the results concluded two factors namely warmth and rejection both in the original PARQ Child form and Turkish Child form (Rohner, 1980; Erdem & Erkman, 1990). In the present study, Confirmatory Factor Analysis was conducted for both mother and father forms and results were reported.

#### ***3.4.2.1 Confirmatory Factor Analysis of Maternal Acceptance-Rejection Questionnaire***

A confirmatory factor analysis (CFA) which is a kind of Structural Equation Modeling (SEM) was conducted to test the measurement tool's validity for the current study and to look for the relationship between observed variables and latent variables. In other words, a confirmatory factor analysis was conducted to ensure the construct validity and to examine how well the measurement tool measures what the study aims to find out with this questionnaire. In the previous studies, maternal acceptance-rejection questionnaire short form was suggested to be two factor structure as warmth and rejection. This two factor structure was tested. Before starting with CFA, general assumptions (sample size, missing data, linearity, normality and absence of outliers) of it were checked as it was suggested by Tabachnick and Fidell (2013).

Confirmatory factor analysis was estimated in Analysis Moments of Structures (AMOS) 18.0 by using Maximum Likelihood (ML) estimation method to generate parameter estimates. Model fit was assessed by goodness-of-fit statistics. Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI) or sometimes called non-normed fit index, Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI) were used.

CFA results indicated significant chi-square value ( $\chi^2 = 1481.9$ ,  $df = 251$ ,  $p = .00$ ) with the GFI value of .92, CFI value of .91, RMSEA value of .05. and TLI value of .91. Since the sample size is quite large, significant chi-square does not lead to rejection of the model (Tanaka, 1987). Haynes, Miles and Clements (2000) suggested that value for TLI as .90 or above up to .95 showed adequate fit and a value of .95 or above showed an excellent fit. Similarly, Browne and Cudeck (1993) argued RMSEA below

0.08 showed an adequate fit and values below 0.05 indicated a good fit. In summary in this study, for NFI, CFI, GFI and TLI, the value of bigger than .90; for RMSEA, the value of smaller than .05 was taken as the criterion (Hu & Bentler, 1999). Despite GFI, CFI, TLI and RMSEA values indicated good fit, chi square value indicated significant results ( $\chi^2 = 1481,9, p = .00$ ). According to Tabachnick & Fidell (2013), significant chi square value can be sign of poor fit. However, chi square is sensitive to sample size and this study has a large sample ( $N = 1451$ ) therefore significant chi square value was obtained. Hence, RMSEA, CFI, GFI and TLI were also considered. Standardized estimates and factor loadings of items are given in the AMOS Graphic.

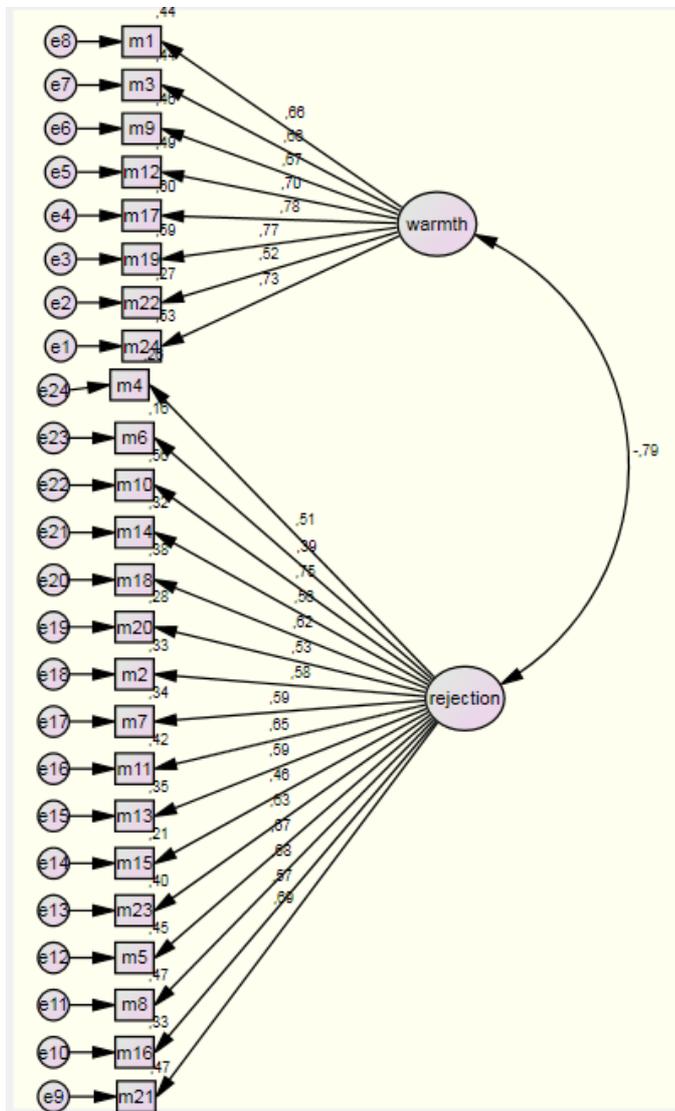


Figure 3.1 Two factor CFA model of MARQ with standardized estimates

### 3.4.2.2 Confirmatory Factor Analysis of Paternal Acceptance-Rejection Questionnaire

In order to test two factor structure of paternal acceptance-rejection questionnaire, confirmatory factor analysis was conducted for this study.

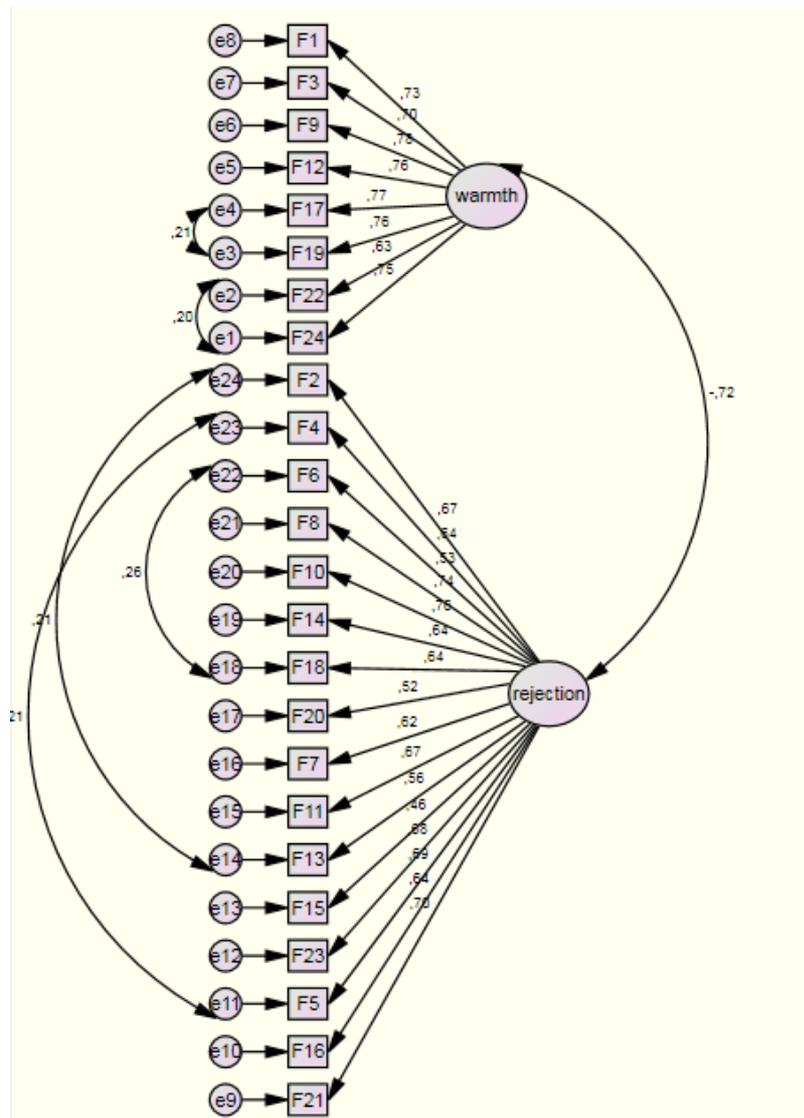


Figure 3.2 Two factor CFA model of PARQ with standardized estimates

CFA results indicated significant chi-square value ( $\chi^2 = 2158.94, df = 251, p = .00$ ) with the comparative fit index (CFI) value of .89, GFI value of .87, RMSEA value of .072 and TLI value of .88. According to Maruyama (1998), CFI and TLI values were smaller than acceptable value limit (bigger than .90), RMSEA is also showing

mediocre fit (Browne & Cudeck, 1993). Due to concluding poor fit, modification indices of errors were checked and the highest error variance were selected (Arbuckle, 1999). e18-e22, e14-e24, e11-e23, e1-e2 were the error variances with highest scores. The item pairs were controlled and they all belonged to the same factor. As displayed in figure below, related items were connected and CFA was conducted once more.

### **3.4.3 The Sibling Relationship Quality Questionnaire (SRQ)**

Perceptions of sibling relationships were measured by using the Sibling Relationship Quality Questionnaire (SRQ) which was developed by Furman and Buhrmester (1985). The SRQ assesses both participants' perceptions of their own behavior and feelings towards their sisters and brothers and at the same time the perceptions of their sibling's feelings and behaviors toward themselves. The SRQ is a 48 item, 5 point Likert type subjective self-report measure which assesses 16 qualitative features of sibling relationships which are prosocial behavior, maternal partiality, nurturance of sibling, nurturance by sibling, dominance of sibling, dominance by sibling, paternal partiality, affection, companionship, antagonism, similarity, intimacy, competition, admiration of sibling, admiration by sibling and quarreling.

Furman and Buhrmester (1985) developed the questionnaire by interviewing with fifth and sixth grade children about their sibling relationship and then formed the questionnaire. Each item asks the child about characteristic of their sibling relationships. Answers are given in five-point Likert-type format: 1 = hardly at all, 2 = not too much, 3 = somewhat, 4 = very much, 5 = extremely much. The Maternal and Paternal Partiality scales' responses are given in a different format, starting from 1 = almost always him/her (favored) to 5 = almost always me (favored) and midpoint is 3 = about the same.

The Sibling Relationship Questionnaire measures four sibling relationship qualities: closeness, power, conflict, and rivalry. The Warmth/Closeness factor consists of the average of the scale scores for intimacy, prosocial behavior, companionship, similarity, admiration by sibling, admiration of sibling, and affection. Factor scores for Relative Status/Power consist of nurturance of sibling, dominance of sibling, minus the scale scores of nurturance by sibling and dominance by sibling. Conflict scores

consist of the average of the quarreling, antagonism, and competition. The Rivalry score consists of the average of maternal and paternal partiality (Furman & Buhrmester, 1985). Total four factors of questionnaire explained 71% of the variance in sibling relationship quality (warmth 38%, conflict 27 %, relative status/power 24% and rivalry 10%). Among the factors (except rivalry and conflict,  $r=.35$ ), correlations between factors were low and changing between .08 and -.16 (Furman and Buhrmester, 1985). Same researchers implemented the questionnaire to the 3<sup>rd</sup>, 6<sup>th</sup>, 9<sup>th</sup> and 12<sup>th</sup> graders and internal consistency values are calculated respectively .71, .79, .77 and .91 (Buhrmester and Furman, 1990). Original SRQ has .70 internal consistency coefficients and .71 test-retest reliability.

Virna Apalaçi (1995) adapted the questionnaire into Turkish. The internal consistency coefficients for the 16 subscales were: .35, .62, .68, .69, .16, .12, .79, .44, .53, .69, .68, .60, .74, .70, .60, and .90 for prosocial behavior, maternal partiality, nurturance of sibling, nurturance by sibling, dominance of sibling, dominance by sibling, paternal partiality, affection, companionship, antagonism, similarity, intimacy, competition, admiration of sibling, admiration by sibling, and quarreling.

Cronbach Alpha coefficients were calculated for each dimension and subscale of Sibling Relationship Quality Questionnaire for the present study then the results were displayed in Table 3.2. Although, Cronbach's Alpha .70 was suggested as the lower limit for internal consistency coefficient (Hair et al., 2010), it is proposed that it may decrease to .60 for exploratory research (Hair et al., 2010). In Table 3.1., reliability values of each subscale were displayed and it can be concluded that these values were higher than the previous studies, although there are still small reliability values smaller than .60. For the subscales dominance of sibling (.54) and dominance by sibling (.52) have slightly lower reliability than proposed values while other subscales have satisfactory reliability values. Cronbach alpha values have similar values with Bozbey Akalın's findings (2005) which are collected from 7<sup>th</sup> graders. Similarly, in her study, except dominance of sibling and dominance by sibling subscales, the other values are over .60. Both Bozbey Akalın (2005) and present study reached similar findings with Apalaçi's adaptation study (1996).

Reliability of four dimensions have been shown to have satisfactory values ranges between .77 and .95. Cronbach's alpha for warmth dimension was .95, for conflict dimension .85, for rivalry dimension .77 and for relative status/power dimension .78. Each dimension has satisfactory reliability values.

Table 3.2

*Subscales with Included Items and Cronbach Alpha Coefficients*

Name of Subscale	Included Items			Cronbach Alpha
Prosocial	1	17	33	.76
Maternal Partiality	2	18	34	.83
Nurturance of Sibling	3	19	35	.81
Nurturance by Sibling	4	20	36	.82
Dominance of Sibling	5	21	37	.54
Dominance by Sibling	6	22	38	.52
Paternal Partiality	7	23	39	.78
Affection	8	24	40	.84
Companionship	9	25	41	.82
Antagonism	10	26	42	.76
Similarity	11	27	43	.77
Intimacy	12	28	44	.92
Competition	13	29	45	.78
Admiration of Sibling	14	30	46	.79
Admiration by Sibling	15	31	47	.76
Quarreling	16	32	48	.84

### *3.4.3.1 Confirmatory Factor Analysis of Sibling Relationship*

#### *Questionnaire*

CFA was conducted to test four factor structure of Sibling Relationship Quality Questionnaire. Before starting CFA, item parceling method was applied to the items. Since there are 48 items, it was difficult to manage in AMOS program. The technique of parceling in structural equation modeling (SEM) and CFA is part of SEM; applications have recently received considerable attention within the SEM community (Bandalos, 2002; Nasser & Takahashi, 2003). Normality assumption was better provided with parceling method. In the parceling method, item scores from two or more items are either summed or averaged. Then these parcel scores are used in place of the item scores in an SEM of CFA analysis.

In the present study, each parcel has three items. Parcels are determined according to mean value of each item. For warmth dimension there are 7 parcels called WP2, WP2,..., WP7; for conflict dimension there are three parcels called CP1, CP2 and CP3; for Rivalry there are two parcels called RP1 and RP2; for Power dimension there are four parcels called PP1, PP2, PP3 and PP4.

After determining the parcel, analysis was run and first results have high RMSEA value of .08 and significant Chi Square value ( $\chi^2 = 963.44$ ,  $p = .00$ ). Due to concluding poor fit, modification indices of errors were checked and the highest error variance were selected (Arbuckle, 1999). E13-e14, e6-e7, e1-e3 were selected as the error variances with highest scores. The item pairs were checked and each pair was under the same factor. As displayed in figure below, related items were connected and CFA was conducted again.

CFA results indicated significant chi-square value ( $\chi^2 = 582.02$ ,  $df = 95$ ,  $p = .00$ ) with the GFI value of .95, CFI value of .96, RMSEA value of .07, TLI value of .97 and all results were between acceptable limits and results ensured good fit.

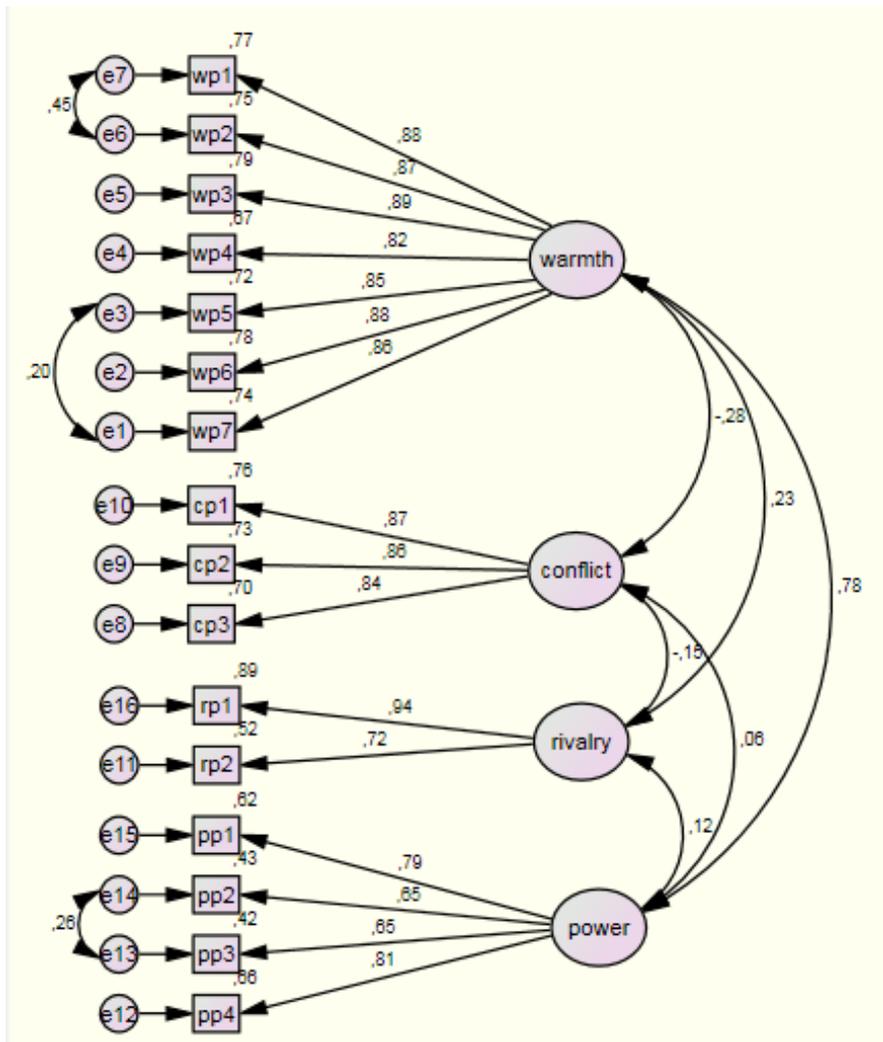


Figure 3.3 Four factor CFA model of SRQQ with standardized estimates

### 3.5 Data Collection Procedure

In this study, the data were collected via surveys administered to high school students in Ankara, during the 2014 spring semester. Before starting to collect data, necessary permission from the Middle East Technical University Human Subjects Ethics Committee (see Appendix A) was secured. In addition, permission was taken from The Ministry of National Education (MoNE) (see Appendix B) to conduct research in state high schools.

After the ethical commission permissions at METU, subsequent permission was received from the Directorate of Ministry of Education to collect data from public

schools. The directorates of Ministry of Education sent the permission to all schools and e-mails were sent to each school or they are phoned or visited by the researcher and the volunteer schools were reached to participate in the study. The study was not conducted only in schools in Çankaya since many central schools' unwillingness to participate in the study could limit the number of participants.

Data were collected during March and April in two months from the volunteer schools. The appropriate time and classes were arranged with the principal and school counselors to administer the questionnaires. The administration of the instruments took approximately one class hour. The school counselors and course teachers could administer all questionnaires and demographic information sheet during a class session and they helped the researcher while distributing and applying questionnaires to the classes. At the beginning, there were explanations about the purpose of the study and how to fill out the questionnaires. Specifically, students were asked to be honest while responding to the items and informed about the confidentiality. The participants were also informed about their refusal right to complete the questionnaires. The school counselors and the researcher collected all the sheets. Since names of the participants are not needed, anonymity was protected and there was no ethical concern about confidentiality.

Participants were administered questionnaires packages consisting of a personal information form, UCLA Loneliness Scale, Parental Acceptance Rejection Questionnaires, both Maternal and Paternal Acceptance Rejection Questionnaires (Child Turkish Short Form) and Sibling Relationship Quality Questionnaire (SRQ). The orders of the questionnaires were randomized.

### **3.6 Description of Variables**

In this section, the variables investigated in the study were described and operationalized. Loneliness was the outcome variable and demographic variables (gender, age, grade, school type, field of study, birth order and number of siblings), maternal and paternal acceptance scores and sibling relationship quality scores were

predictor variables.

*Gender* was a dichotomous variable and has two levels.

*Age* was a continuous variable but only students whose ages differ between 14 and 19 participated in this study therefore dummy coding was used for age.

*Grade* had four levels, which were 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> graders and dummy coded.

*School type* was also categorical variable and in this study three levels were used therefore dummy coded. They were Anatolian high school student, vocational high school and others including science and social science high schools.

*Field of study* had four levels, which were Math and Science, Turkish and Math, Turkish and Social Sciences or language courses and were dummy coded.

*Birth order* was a categorical variable and it has three levels in this study: first born child, middle child and last-born. Dummy coding was used.

*Number of siblings* was a five level categorical variable and dummy coded. They were, ones who have one sibling, two siblings, three siblings, four siblings or five or more siblings.

*Loneliness* was a continuous variable and measure by 20 items, a four point likert type scale. Minimum and maximum score that could be obtained from the scale were 20 and 80.

*Maternal acceptance* was continuous variable and measured by 24 items with Maternal Acceptance-Rejection Questionnaire, which was four point likert type scale. Scores ranged between 24 and 96. As the score obtained from the questionnaire increase, it means more rejection. 60 is the midpoint between acceptance and rejection.

*Paternal acceptance* was continuous variable and measured by 24 items with Paternal Acceptance-Rejection Questionnaire with four point likert type scale. Scores ranged between 24 and 96. As the score obtained from the questionnaire increase, it means more rejection. 60 is the midpoint between acceptance and rejection.

*Sibling Relationship Quality* included warmth, conflict, rivalry and relative status-power dimensions and each of the dimensions was the continuous variable. Warmth factor consisted of the scales for intimacy, prosocial behavior, companionship, similarity, admiration by sibling, admiration of sibling and affection, meaning 21 items. Minimum 21 and the maximum 105 warmth score could be obtained from the scale. Relative Status/power measured by 12 items consist of nurturance of sibling, dominance of sibling, minus the scale scores of nurturance by sibling and dominance by sibling. For negative scores, absolute values were used and minimum and maksimum scores were 0 and 24 respectively. Conflict was measured by 9 items consists of factor scores of quarrelling, antagonism, and competition and minimum 9, maksimum 45 could be obtained from the scale. Rivalry was masured by 6 items consist of factor scores of maternal and paternal partiality. An exception is maternal and paternal partiality in which case the deviations of the individual items from the midpoint are averaged.

### **3.7 Data Analysis**

Both descriptive and inferential statistics methods were utilized in the study and the analysis was done through IBM Statistical Packages of Social Sciences 22 (SPSS) and AMOS 20.0 computer program. Before starting to main analysis, first the data were explored. For data to be parametric there are certain assumptions to be satisfied.

For the demographic characteristics of students, gender, age, school type, field of study, grade level, parent marital status, parents living or not, number of siblings, birth order and education level of parents were obtained and the frequency, mean, range and standard deviations were calculated for these variables as descriptive statistics to give the general conclusions of the characteristics of the sample. Mean differences of gender were analyzed by t-test. Frequency distribution was used to indicate ratio of demographic variables

Due to the one variable is sibling relationship quality, the cases who do not have sibling were eliminated from the sample. For loneliness score, mother and father acceptance-

rejection score and sibling relationship quality scores pairwise deletion method was used for data set. Cases including missing data more than 10% were eliminated and in this case 272 cases were deleted.

In order to measure dependent variables, questionnaire with a Likert type scale was utilized in the study. Independent variables are also continuous data, measured by ratio scale and there will be three groups of scores. One is for mother score and the other is father score and the third one is sibling scores. Dependent variable is loneliness score.

There was one research question in the study which is ‘how well do the perceived maternal and paternal rejection score and sibling relationship quality predict the loneliness score in high school students after controlling for gender, age, grade, field of study, school type and birth order?’

This study explored the relationship of sibling relationship quality and perceived paternal and maternal acceptance score on loneliness. Hence, inferential statistics were used. In the first place, before running main analysis, assumptions was checked and validated then multiple hierarchical regression analysis was utilized to analyze the relationship between variable. Since there was one continuous dependent variable and more than two continuous independent variable in this study multiple regression is appropriate to analyze. (Tabachnick and Fidell, 2013). Dependent variable of the model was loneliness and demographic variables including gender, age, grade, school type, field of study, birth order and number of siblings, sibling relationship quality and perceived paternal and maternal acceptance scores are the independent variables. Three stage hierarchical regression was run out. In the first place, demographics were controlled. Second, parental variables were added to the model since one’s sibling relationship quality might be affected from his or her relationship with parents. Sibling variables occurred in the third model. In order to control and to test the effects of predictors independent of the influence of others, hierarchical regression was used. Hierarchical regression gives opportunity to evaluate the relationship between a set of independent variables and the dependent variable and in order to take into account the

impact of different set of independent variables, they are entered into the analysis in a sequence of blocks.

Moreover, in order to test the two factor structure of MARQ and PARQ and four factor structure of SRQQ confirmatory factor analysis (CFA) was conducted as it was displayed in the instrumentation part. While analyzing the results, alpha level was set as .05 in present study. Cronbach alpha was used for reliability calculations.

According to assumptions of multiple regression predictive variables need to be continuous or categorical with only two categories (Field, 2009). The predictive variable age, grade and field of study have more than two categories so dummy coding was conducted.

### **3.8 Limitations of the Study**

There are some limitations regarding the design and the characteristics of the sample. The most probable threat of this study is related to subject characteristics biased since self-report technique was used in the study. High school student sample may especially select the score that seem most appealing to him or her rather than reflecting themselves in reality. Therefore, the results of the study can be biased by the sample or the self-report technique. In addition, as the questionnaires distributed in the classroom, independent observation assumption might not be met for the study. However during data collection, the researcher was careful to prevent students' influences on each other during implementation.

Because the subjects of the study, the students were at different school settings in different districts and under different physical conditions, location may well be related to students' feeling of loneliness. This may leads to location threat but it was not possible to hold the place constant for each participant at all school; the researcher could only hold the classes silent not to distract students' attention.

Another limitation of the current study is about the process of the sample selection.

Probably the number of students will not be equal between high schools because it will be voluntary based in terms of willingness to cooperate with the researcher and participate in the study. The results will not be generalized to all high school students in Turkey. Thus, further research is recommended to apply this questionnaire in other cities as well as private high school to increase the generalizability. The present study focused high school students and the results can only be discussed in relation to this age group. Further research is recommended to study different age groups in order to generalize the results. In addition the ratio of male and female participants will be difficult to represent in the study.

Including one sibling per respondent was limited to measure sibling relationship quality, it would be better design to take two siblings' perception on the relationship quality and to compare them. Relying on the responses of only one member of the sibling is biased. This study design did not consider the siblings' exact age and gender differences; it would be good to complement the research question. Many participants have more than one sibling and in this study only relationship with one of the siblings are taken into consideration and differences in sibling relationship quality within the family were ignored.

Another of this study's limitations was linked to the correlational nature of the associations found between the variables studied, which did not permit the researchers to establish causal relationships

In some schools, there were boarding student and their being dormitory students and dormitory conditions also may differ and affect their loneliness, perceived acceptance-rejection and sibling relations. This can be one of the extraneous variables that need to be considered.

Major threat to internal validity of present study was the possibility of sample selection bias since matching samples or homogenous subgroups was not be used. Therefore, subject characteristics resulted in differences. Since data was collected by each school's teachers or counselors and questionnaires were administered in each school's classrooms, implication and data collector characteristics can be internal validity

threats. As another threat, attitude of subjects to the topic is difficult to control.

Research results cannot be generalized to whole high school students although sample size is not small one and data were collected from different genders, age ranges and SES. It is not homogenous one but still private schools' were not included in the sample and can be different. All participants were from Ankara therefore results can only be generalized to state high schools in Ankara. Generalizable schools were the ones who have heterogeneous students from different socioeconomic status and the schools with both Anatolian and vocational high school students. This limitation was related to sample selection. Beside these, 12<sup>th</sup> graders were not fully represented in the sample and most of the participants were from Anatolian high schools.

## **CHAPTER IV**

### **RESULTS**

This chapter presents the results obtained from the statistical analysis in terms of research question. Preliminary analyses started with the assumption checks which are missing data analysis, multivariate outliers, normally distributed errors, homoscedasticity, independence of errors, linearity, no perfect multicollinearity and multivariate normality and then descriptive analysis took place. Descriptive analysis of each questionnaire was given. Following these, hierarchical multiple regression analysis was run. Finally chapter was ended with the summary of the results.

#### **4.1 Missing Data Analysis**

Before starting to main analysis, missing data profile was screened and the ones exceed 10% were eliminated since missing data is not a critical concern until it exceeds 10% (Hair, Black, Babin, & Anderson, 2010). In the beginning there were 1723 participants in the study, rather than using imputation methods since sample size was enough, all data including unanswered items have been deleted from the sample by list-wise deletion method for each questionnaire and total 272 data were eliminated from the sample.

#### **4.2 Validity and Reliability Issues**

UCLA Loneliness Scale, Maternal and Paternal Acceptance Rejection Questionnaire, Sibling Relationship Quality Questionnaire were used in the current study. UCLA Loneliness scale was used in high school sample many times and its validity and reliability evidences were confirmed. But other three scales were quite new and Confirmatory Factor Analysis (CFA) was conducted to test their factor structure and

to support their construct validity. Cronbach Alpha coefficients were also calculated for each scale's reliability. Psychometric properties of each scale were given in the instruments part of the method section.

### **4.3 Descriptive Statistics Results of Loneliness Scale**

The means and standard deviations of loneliness scores with regard to demographic variables presented in Table 4.1. As presented in Table 4.1, male participants ( $M = 37.84$ ,  $SD = 9.46$ ) reported higher mean of loneliness than female participants ( $M = 37.22$ ,  $SD = 9.72$ ). Also except age 16 ( $M = 36.87$ ,  $SD = 9.51$ ), there is a tendency to increase in loneliness score from age 14 ( $M = 35.77$ ,  $SD = 10.47$ ) to age 19 ( $M = 40.60$ ,  $SD = 6.89$ ). On the other hand, in terms of grade level loneliness is highest in 12<sup>th</sup> grade with  $M = 38.37$  ( $SD = 9.04$ ) and lowest in 10<sup>th</sup> grade with  $M = 36.81$  ( $SD = 9.12$ ). Moreover, according to field group loneliness scores are close to each other: for Math-Science group  $M = 37.40$  ( $SD = 9.92$ ), for Turkish-Math group  $M = 37.79$  ( $SD = 9.06$ ), for Social Sciences group  $M = 37.92$  ( $SD = 9.15$ ) and for language field students  $M = 37.33$  ( $SD = 9.75$ ). Anatolian high school students reported loneliness level with  $M = 37.29$  ( $SD = 9.80$ ) while vocational high school students reported loneliness with  $M = 38.37$  ( $SD = 9.08$ ).

Of the participants, first born students among their siblings reported  $M = 37.34$  ( $SD = 9.34$ ), middle child students reported  $M = 37.99$  ( $SD = 9.71$ ) and the last born students reported  $M = 37.41$  ( $SD = 9.82$ ). Loneliness scores of students living with both parents have  $M = 37.40$  ( $SD = 9.60$ ), mean of students with divorced parents is 40.44 ( $SD = 9.26$ ), mean of students who have separated parents is 42.14 ( $SD = 8.36$ ).

Loneliness score of participants with one sibling have  $M = 37.19$  ( $SD = 9.63$ ), participants with two siblings have  $M = 37.30$  ( $SD = 9.68$ ), participants with 3 siblings have  $M = 37.91$  ( $SD = 8.99$ ), participants with 4 siblings have  $M = 41.38$  ( $SD = 10.23$ ) and participants with 5 or more siblings have  $M = 40.17$  ( $SD = 8.98$ ). It seems that as the number of sibling increases, level of loneliness also increases.

Table 4.1

*Loneliness Scores with regard to Demographics*

Group		<i>n</i>	<i>M</i>	<i>SD</i>
Gender	Female	779	37.22	9.72
	Male	672	37.84	9.46
Age	14	44	35.77	10.47
	15	424	37.30	9.38
	16	386	36.87	9.51
	17	457	38.07	9.77
	18	120	38.26	9.94
	19	20	40.60	6.89
Grade	9 <sup>th</sup> grade	499	37.33	9.60
	10 <sup>th</sup> grade	376	36.81	9.12
	11 <sup>th</sup> grade	493	38.08	10.02
	12 <sup>th</sup> grade	83	38.37	9.04
Field	Math-science	552	37.40	9.92
	Turkish-math	363	37.79	9.06
	Social sci.	99	37.92	9.15
	Language	437	37.33	9.75
School Type	Anatolian	1074	37.29	9.80
	Vocational	361	38.37	9.08
	Others	16	35.06	6.64
Birth Order	First	582	37.34	9.34
	Middle	312	37.99	9.71
	Last	557	37.41	9.82
Parent marital status	Intact	1403	37.40	9.60
	Divorced	41	40.44	9.26
	Separated	7	42.14	8.36
Number of siblings	1	714	37.19	9.63
	2	488	37.30	9.68
	3	172	37.91	8.99
	4	48	41.38	10.23
	5 or more	29	40.17	8.98

Table 4.1 (cont'd)

*Loneliness Scores with regard to Demographics*

Group		<i>n</i>	<i>M</i>	<i>SD</i>	
Mother Education Level	Illiterate	19	41.05	10.95	
	Literate (not Primary sc. graduate)	44	38.98	10.38	
	Primary sc. Graduate	440	37.79	9.30	
	Secondary sc. Graduate	291	37.75	9.52	
	High sc. Graduate	428	36.68	9.45	
	2 year College Graduate	38	36.87	10.00	
	University Graduate	154	37.09	9.73	
	Master's Degree	25	38.32	12.17	
	PhD	4	50.75	2.22	
	Do not know	8	42.88	12.36	
	Father Education Level	Illiterate	5	44.80	12.40
		Literate (not Primary sc. graduate)	23	42.83	9.62
		Primary sc. Graduate	211	37.89	9.06
		Secondary sc. Graduate	273	36.89	8.47
High sc. Graduate		443	36,92	9,84	
2 year College Graduate		89	38,56	9,86	
University Graduate		330	37,01	9,82	
Master's Degree		52	40,04	10,71	
PhD		16	41,88	10,75	
Do not know		9	44,33	12,24	

Parent's education level varied from being illiterate to a doctorate degree. The most frequent level of education for fathers was high school graduate (30.5%) and the most frequent level of education for mothers was primary school graduate (30.3%).

Loneliness score is the lowest in the children of mothers who are high school graduate ( $M = 36.68$ ,  $SD = 9.45$ ). Children of mothers who have PhD degree is composed of only 4 participants but their loneliness score ( $M = 50.75$ ,  $SD = 2.22$ ) is the highest among participants and the second highest mean was children of illiterate mothers' loneliness score ( $M = 41.05$ ,  $SD = 10.95$ ). In terms of father education level, illiterate fathers 'children ( $M = 44.80$ ,  $SD = 12.40$ ) feel the most lonely among participants. On the other hand, secondary school graduate fathers' ( $M = 36.89$ ,  $SD = 8.47$ ) and high school graduate fathers' ( $M = 36.92$ ,  $SD = 9.84$ ) children reported the least loneliness score

In Table 4.2., the results of the descriptive statistics of study variables with mean, standard deviations, minimum and maximum values are presented. The results of the descriptive statistics indicated that the mean scores of loneliness scale is  $M = 37.51$  and  $SD = 9.60$ . Mother acceptance score mean is 37.31 with the  $SD$  of 12.93. Mean of father acceptance score is 39.23 ( $SD = 14.52$ ) and higher than mother refection score mean. The results of descriptive statistics indicated the mean scores of sibling dimensions as sibling warmth ( $M = 53.62$ ,  $SD = 12.99$ ), sibling rivalry ( $M = 16.99$ ,  $SD = 3.13$ ), sibling power ( $M = 4.41$ ,  $SD = 4.31$ ), sibling conflict ( $M = 15.48$ ,  $SD = 5.33$ ).

Table 4.2

*Summary of Descriptive Statistics for Study Variables*

Variable name	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max
Loneliness score	1451	37.51	9.60	20	77
<b>Parental Variables</b>					
Mother Acceptance	1451	37.31	12.93	24	93
Father Acceptance	1451	39.23	14.52	24	96
<b>Sibling Variables</b>					
Sibling warmth	1451	53.63	12.99	15	75
Sibling rivalry	1451	16.99	3.13	6	30
Sibling power	1451	4.41	4.31	0	23
Sibling conflict	1451	15.48	5.33	6	30

#### 4.4 Descriptive Analysis of UCLA Loneliness Scale

UCLA Loneliness Scale include 20 items with four Likert type starting with 1 ‘I often feel this way’ and ending with 4 ‘ I never feel this way’. Items 1, 4, 5, 6, 9, 10, 15, 16, 19, 20 are reverse coded ones. Mean value of all loneliness items rated is  $M = 1.87$  ( $SD = 0.48$ ). It can be concluded that majority of participants rated this item with 2 (I rarely feel this way).

The mean score for loneliness as measured by UCLA Loneliness Scale was 37.51 with a standard deviation value of 9.60 ( $N = 1451$ ). The range of scores was between a minimum score of 20, and a maximum score of 77, with an average of 36. The mean score for female participants was 37.22, and for male participants it was 37.84. The minimum and maximum scores of the scale for females were 20 and 73 while minimum and maximum scores of males were 21 and 77. After running independent sample t-test, the results indicated that there were no significant difference between males ( $M = 37.84$ ,  $SD = 9.46$ ) and females ( $M = 37.22$ ,  $SD = 9.72$ ) in terms of loneliness score ( $t_{1449} = 1.23$ ,  $p > .05$ ).

Table 4.3

*Means and Standard Deviations and t-test Results of Loneliness according to Gender*

Loneliness Score	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> (1449)	<i>p</i>
Female	779	37.22	9.72		
Male	672	37.84	9.46		
Total	1451	37.51	9.60	1.235	.217

#### **4.5 Descriptive Analysis of Maternal Acceptance-Rejection Questionnaire**

Although mother acceptance-rejection questionnaire has one total score, its items have two dimensions. One group of items measures acceptance feelings (warmth/affection) and the other group of items measure rejection feelings (hostility, aggression, indifference or neglect and undifferentiated rejection). Acceptance items are reversely coded and added to rejection scores. Warmth/affection items are mostly answered as almost always true or sometimes true. Majority of participants rated their mothers' acceptance scores with higher scores than the rejection scores. The results of the descriptive statistics for the warmth dimension items indicated that Warmth/affection total items (including item1, item3, item 9, item12, item 17, item 19, item 22 and item 24) mean score is 3.36 ( $SD = 0.89$ ).

When it comes to rejection dimension, participants mostly rated almost always not true or rarely true. They did not evaluate their mothers' rejection level with high scores. Rejection dimension items (including item 2, item 4, item 5, item 6, item 7, item 8, item 10, item 11, item 13, item 14, item 15, item 16, item 18, item 20, item 21 and item 23 ) mean score is 1.51 ( $SD = 0.54$ ).

The mean and standard deviation values for high school students' perception of maternal acceptance-rejection as measured by MARQ-Child Turkish Short Form was 37.31 with standard deviation of 12.93. The range of scores was between a minimum score of 24, and a maximum score of 93, with an average of 33.50. The mean score for female participants was 37.43, and for male participants it was 37.17. The minimum and maximum scores of the scale for females were 24 and 92 while minimum and maximum scores of males were 24 and 93. These results suggest that participants experience much more acceptance from their mothers than rejection since mean of the participants were below the midpoint of 60, which determines the amount of acceptance and rejection. Only 6.3% of participants perceive rejection from their mothers. 5.36% of males and 7.19% of females scored their mothers above 60.

After conducting independent sample t-test, the results indicated that there were no significant difference between males and females in terms of perceived mother acceptance scores.

Table 4.4

*Means and Standard Deviations and t-test Results of Maternal Acceptance Score According to Gender*

MARQ	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t (1449)</i>	<i>p</i>
Mother					
Female	779	37.43	13.50		
Male	672	37.17	12.24		
Total	1451	37.31	12.93	-.383	.702

#### 4.6 Descriptive Analysis of Paternal Acceptance-Rejection Questionnaire

Paternal Acceptance-Rejection Questionnaire items and Maternal Acceptance-Rejection Questionnaire items are the same and have same Likert type starting with almost always true to almost always not true. Group of father items including 8 items measuring acceptance feelings (warmth/affection) have  $M = 3.19$  with  $SD = 0.79$  and the group of items measuring rejection feelings (hostility, aggression, indifference or neglect and undifferentiated rejection) have  $M = 1.55$  with  $SD = 0.59$ .

Warmth/affection items are mostly answered as sometimes true. Majority of participants rated their fathers' acceptance scores with higher scores than the rejection scores as it was seen in mother scores. When it comes to rejection dimension, participants mostly rated almost always not true or rarely true.

When father scores are compared with mother scores, maternal warmth items mean ( $M = 3.36$ ,  $SD = 0.89$ ) is higher than paternal warmth items mean ( $M = 3.19$ ,  $SD = 0.79$ ). On the other hand, paternal rejection dimension items have slightly higher mean ( $M = 1.55$ ,  $SD = 0.59$ ) than maternal rejection item means ( $M = 1.51$ ,  $SD = 0.54$ ). It

can be concluded that there is a tendency to rate acceptance characteristics of parents with higher scores than rejection characteristics.

The mean and standard deviation values for total participants' perception of paternal acceptance-rejection as measured by PARQ-Child Turkish Short Form were  $M = 39.23$  with  $SD = 14.52$ . The mean score of perceived paternal rejection for females was 38.23 with  $SD = 14.54$  and the mean score for males was  $M = 40.38$  with  $SD = 14.41$ . The results suggested that the mean score of both males and females were below the midpoint of 60. It can be concluded that majority of the participants experience much more paternal acceptance, warmth and love than rejection and 10.48% of participants perceive rejection from their fathers. 9.6% of females and 11.5% of males in perceiving their fathers scored above 60 and experience much more rejection than acceptance.

In addition to all these, independent sample t-test statistics were calculated to examine whether there is a significant difference between male and female students in terms of perceived paternal acceptance. The results indicated significant difference between males and females with regard to paternal acceptance. Female high school students experience more warmth from their fathers than male students feel ( $t = 2.816$ ,  $df = 1449$ ,  $p = .005$ ).

Table 4.5

*Means and Standard Deviations and T-Test Results of Paternal Acceptance Score According to Gender*

PARQ Father	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> (1449)	<i>p</i>
Female	779	38.23	14.54		
Male	672	40.38	14.41		
Total	1451	39.23	14.52	2.816	.005*

\* $p < .01$

#### 4.7 Descriptive Analysis of Sibling Relationship Quality Items

As previously stated, sibling relationship quality involves four dimensions as warmth, conflict, rivalry and power. The scale asks siblings' relationship status in each dimension with 21 items for warmth-closeness, 12 items for power, 9 items for conflict and 6 items for rivalry. Majority of the participants rated the warmth items as very much or somewhat. Second dimension of sibling relationship quality is conflict and participants mostly rated items as somewhat or not too much. Item mean scores of this dimension is lower than power and warmth dimensions' item mean scores Third dimension is rivalry. This dimension's items have different likert type scale. Item 2 and item 7 starts with 'My sibling almost always get treated better.' to 'I almost always get treated better.' The number 3 in this dimension represents 'we get treated about the same.' Item 18 and item 23 start with 'My sibling almost always get more attention.' to 'I almost always get more attention.' The number 3 in this dimension represents 'we get about the same amount of attention.' Item 34 and item 39 range from 'My sibling is almost always favored to 'I am always almost favored.' The number three represent 'neither of us is favored.' In this dimension, participants mostly rated number 3 and this shows that they mostly feel equally treated by their parents. For relative status-power dimension, majority of the participants rated items as somewhat.

The mean score of sibling warmth, sibling conflict, sibling rivalry and sibling warmth for total sample were  $M_{warmth} = 75.93$  ( $SD = 17.69$ ),  $M_{conflict} = 24.30$  ( $SD = 7.79$ ),  $M_{rivalry} = 2.54$  ( $SD = 3.12$ ) and  $M_{power} = 2.32$  ( $SD = 2.53$ ). The range of scores obtained from the data for warmth dimension was between a minimum score of 21 and a maximum score of 105. The minimum and maximum scores of the total sample for conflict dimension were 9 and 45. The range of scores for rivalry dimension was between a minimum score of 0, and a maximum score of 12. The minimum and maximum scores of the total sample for power dimension were 0 and 12.

Independent sample t-tests were conducted to compare sibling relationship quality scores in terms of gender and results were displayed in table 4.6. There was significant difference only between sibling warmth scores of male students ( $M = 73.95$ ,  $SD =$

17.30) and female students ( $M = 77.63$ ,  $SD = 17.85$ ),  $t(1449) = .001$ ,  $p < .05$ . Female students have significantly warmer relationship with their siblings than male students have. The mean scores of sibling warmth dimension, conflict dimension, rivalry dimension and power dimensions for females were 77.63, 24.21, 2.61 and 2.25 respectively. The mean scores of sibling warmth dimension, conflict dimension, rivalry dimension and power dimensions for males were 73.95, 24.39, 2.45 and 2.39 respectively.

Table 4.6

*Means and Standard Deviations and T-Test Results of SRQ Scores According to Gender*

SRQQ	Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> (1449)	<i>p</i>
SRQQ Warmth	Female	779	77.63	17.85		
	Male	672	73.95	17.30		
	Total	1451	75.93	17.69	-3.298	.001*
SRQQ Conflict	Female	779	24.21	7.97		
	Male	672	24.39	7.56		
	Total	1451	24.30	7.79	1.109	.268
SRQQ Rivalry	Female	779	2.61	2.93		
	Male	672	2.45	3.30		
	Total	1451	2.54	3.12	-.991	.322
SRQQ Power	Female	779	2.25	2.42		
	Male	672	2.39	2.65		
	Total	1451	2.32	2.53	1.065	.287

\* $p < .001$

Before the structured questions of this questionnaire, three more questions were edited to the top of the sibling questionnaire which are who is your sibling (asking for older-younger brother or sister), age of sibling and the reason of selecting this sibling. These questions gave some demographic information regarding the selected sibling.

Age of selected sibling varied from age of 2 to 34. Majority of the participants selected siblings who are at closer ages to them. Mean value of the age of selected sibling was  $M = 17.05$  ( $SD = 6.37$ ). Mean of age difference between siblings was  $M = 5.32$  ( $SD =$

3.43). There were 9 twins in the study. Mean age of selected sibling for female participants was  $M = 17.17$  ( $SD = 6.46$ ) while mean age of selected sibling for male participants was  $M = 16.90$  ( $SD = 6.30$ ).

Table 4.7

*Distribution of Selected Sibling's Age Status According to Gender of Participants*

Sex	Sibling age status	<i>n</i>	%
Female	Younger	413	52.9
	Older	349	45.1
	Same age	8	1.0
	Total	779	100
Male	Younger	379	56.4
	Older	285	42.4
	Same age	8	1.2
	Total	672	100

As can be seen in table 4.7, of the female participants, 52.9% of them ( $n = 413$ ) preferred at younger age sibling while 45.1% of them ( $n = 349$ ) preferred a sibling at older age. Of the male participants, 56.4% of them ( $n = 379$ ) preferred a sibling at younger age while 42.4% of them ( $n = 285$ ) preferred a sibling at older ages. It can be concluded that majority of the participants filled sibling questionnaire by evaluating their relationship with their younger sibling.

In terms of sibling sex, 52.4% of male participants selected a male sibling and 47.6% of male participants selected a female sibling. 53% of female participants selected a female sibling while 47% of female participants selected a male sibling.

As it is displayed in Table 4.8, of the participants, 27.2% of them selected older brothers, 28.6% of them selected older sisters, 21.7% of them selected younger brothers, 21.9% of them selected younger sister and .6% of them selected their twins.

Table 4.8

*Distribution of Selected Sibling Position According to Gender of Participants*

Sex	Sibling position	<i>n</i>	%
Female	Older brother	194	24.9
	Older sister	225	28.9
	Younger brother	172	22.1
	Younger sister	184	23.6
	Twin	4	0.5
Male	Older brother	200	29.8
	Older sister	186	27.7
	Younger brother	143	21.3
	Younger sister	134	19.9
	Twin	5	0.7

#### **4.8 Multiple Hierarchical Regression Analysis for UCLA Loneliness Scale regarding PARQ and SRQQ Scores**

Dependent (criterion) variable is loneliness and predictors are paternal acceptance, maternal acceptance, sibling warmth, sibling power, sibling rivalry, sibling conflict and demographic variables. In order to include demographic variables, except gender, since age, grade, school type, field of study, birth order and number of siblings had more than two levels, dummy codes were created for them.

In order to answer the research question, multiple hierarchical regression analysis was used. Hence, parent and sibling dimensions' contribution to the model will be seen differently. Since there are multiple independent variables, multiple regression was preferred instead of more than one regression to control the Type I error.

##### **4.8.1 Assumptions**

In order to reach reliable results, assumptions of multiple hierarchical regression should be satisfied before running the main analysis. Required assumptions of the analysis including missing data, absence of outliers, multivariate normality, homoscedasticity, linearity, and multicollinearity checked out in the following section.

#### 4.8.1.1 Multivariate outliers

In order to detect multivariate outliers on DV and IVs, the current data set was examined via Mahalanobis Distance, Cook's Distance, Centered Leverage Value and Standardized DFBETA Intercepts.

Highest cook's Distance and Standardized DFBETA Intercept values were smaller than 1 and only values  $> 1$  (Field, 2009) may be cause for concern but for this sample values satisfy the assumption. In addition, critical Centered Leverage value which is calculated by the formula of  $3(k+1)/n$  (where  $k$  = number of predictors and  $n$  = number of participants) (Stevens, 2002) and there was not Leverage value over than .014 and there were no outliers in terms of this test, too. Only Mahalanobis Distance test show some outliers but other three tests were confirmed, it was concluded that it is appropriate to continue regression analysis according to results of assumption check procedures.

#### 4.8.1.2 Normally distributed errors

It is assumed that the residuals in the model are random, normally distributed and in order to examine the normally distributed errors, histogram or normal P-P plot pf residuals might be the indicators.

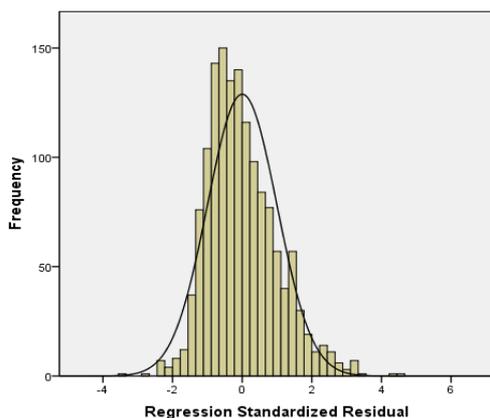


Figure 4.1. Histogram showing distribution of standardized residuals

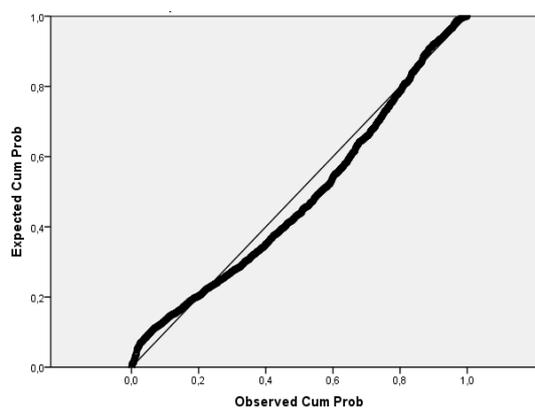
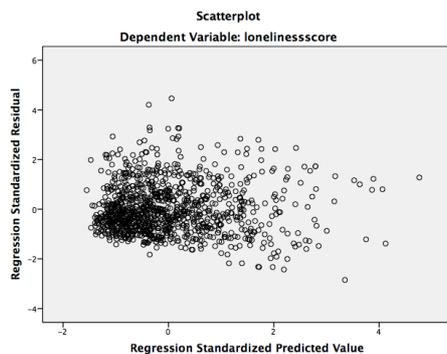


Figure 4.2. Normal P-P plot showing normality of residuals

As can be seen in Figure 1, it cannot be said that there is not a deviation from normality, it is a positively skewed distribution, not exactly normal but closer to normal distribution. In Figure 2, there are some deviations from the line but both lines seem parallel and deviations close to normal line.

#### **4.8.1.3 Homoscedasticity**

At each level of predictor variable, the variance of the residual terms should be constant in order to conclude the homoscedasticity of residuals. There should not be any systematic pattern or shape and clustering of the individual otherwise it can be concluded as model violation. Scatter plot of predicted value and residual was checked.



*Figure 4.3* Distribution of the homoscedasticity of residuals

In the Figure 3, there is no systematic pattern or great difference in spread of scatter plot but there is a clustering of residuals in a part. This shows some heterogeneous residuals. The vertical spread of the residuals is narrower on the left side of the chart and is wider on the right side of the chart. According to Berry and Feldman (1985) and Tabachnick and Fidell (2003) slight heteroscedasticity has little effect on significance tests.

#### **4.8.1.4 Independence of errors**

The value of the Durbin-Watson statistic is the criteria to decide about satisfaction of this assumption. As a general rule of thumb, the residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50. The Durbin-Watson statistic for this problem is 2.03, which falls within the acceptable

range from 1.50 to 2.50. The analysis satisfies the assumption of independence of errors.

#### **4.8.1.5. Linearity**

In order to examine the linearity of residuals, partial regression scatter plots were checked. The visual inspection of plots showed a close to linear relationship between variables of the study.

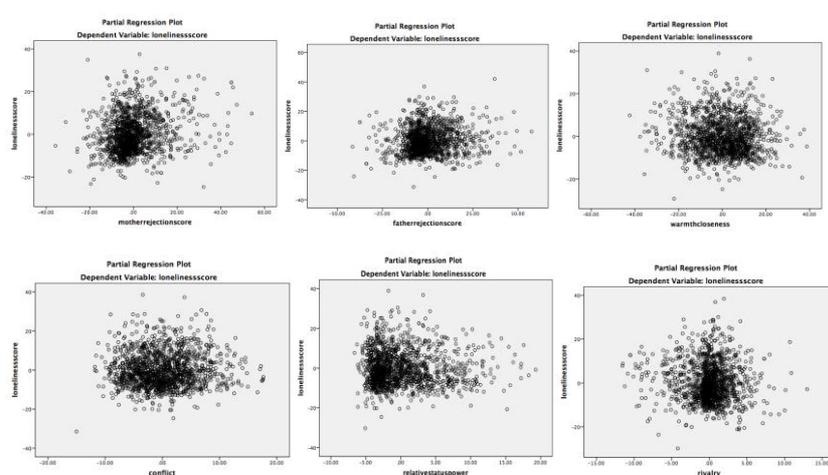


Figure 4.4 Scatter plots of residuals

#### **4.8.1.6 No perfect multicollinearity**

Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model. In order to identify multicollinearity, VIF (variance inflation factor) should be less than 4 and Tolerance should be more than .20 (Menard, 1995). When VIF and Tolerance values are screened, they have all acceptable values and this assumption was satisfied and there is no problem of multicollinearity.

In addition, bivariate correlation results indicated correlation between variables did not exceed the critical value of .90 (Field, 2009). This result also ensures the assumption of multicollinearity.

#### **4.8.1.7 Multivariate normality**

For the multivariate normality assumption of multiple linear regression, all variables

in the data set and their linear combinations should be normally distributed. Univariate normality tests were used to check the normality as histograms, Q-Q plots, skewness and kurtosis values, Kolmogorov-Smirnov and Shapiro-Wilk normality tests.

After scanning histograms visually, parental acceptance variables, loneliness scores and conflict dimension of sibling questionnaire showed positively skewed distributions. But these variables may not be expected to be normally distributed since the population should not show high loneliness score or high parental rejection score or sibling conflict. On the other hand, normal Q-Q plots did not show much deviations from the normal. Skewness and Kurtosis values are mostly between -1 and 1 but mother and father rejection score and rivalry score kurtosis values bigger than 2 therefore the cut off value was taken between -3 and 3 (Tabachnick & Fidell, 2013).

Lastly, Kolmogorov-Smirnov and Shapiro-Wilk results are checked but normality assumption is violated because the p values for normality tests for all variables should be greater than .05 but it is significant for each variable's p value. However, since the sample size is a large one (N = 1451), it can be useful in dealing with non-normal data (Hair et al., 2010).

#### **4.8.2 Results of Multiple Hierarchical Regression Analysis**

After the assumptions of multiple hierarchical regression were validated, three stage hierarchical multiple regression analysis was performed. In the analysis, loneliness score is referred as dependent variable while gender, age, grade, school type, field of study, birth order, number of sibling demographic variables and mother acceptance score, father acceptance score, sibling warmth, conflict, rivalry and power scores are regarded as independent variables.

Table 4.9

*Bivariate Correlations among Study Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Loneliness	37.51	9.60	.39(**)	.33(**)	-.24(**)	.16(**)	.23(**)	.01
1. Mother Acceptance	37.31	12.93	-	.57(**)	-.36(**)	.22(**)	-.45(**)	-.05
2. Father Acceptance	39.23	14.52	-	-	-.33(**)	.22(**)	-.41(**)	.07(**)
3. Sibling Warmth	75.93	17.69	-	-	-	-.30(**)	.20(**)	-.05(**)
4. Sibling Conflict	24.96	7.78	-	-	-	-	-.14(**)	.17(**)
5. Sibling Rivalry	2.54	3.11	-	-	-	-	-	-.12(**)
6. Sibling Power	2.32	2.53	-	-	-	-	-	-

\*\* $p < .01$  (two-tailed)

Computing correlations between loneliness and independent variables introduced significant results for each variable except sibling power dimension. There is a positive significant correlation between mother acceptance score, father acceptance score and loneliness score ( $r = .39, p < .01$ ;  $r = .33, p < .01$ ) since as the mother and father acceptance score increase, it means more rejection (midpoint is 60). Similarly, as the sibling conflict increase, loneliness score also increases significantly ( $r = .16, p < .01$ ) but there is a significant negative correlation between sibling warmth and loneliness scores ( $r = -.24, p < .01$ ) and and sibling rivalry and loneliness scores ( $r = -.23, p < .01$ ). Sibling power does not show significant correlation with loneliness ( $r = .01, p < .01$ ).

The hierarchical multiple regression was run to find out whether parental acceptance-rejection score and sibling relationship quality predicted loneliness after controlling age, grade, school type, field of study, birth order and number of siblings demographic variables in the first step.

Table 4.10

*Summary of Hierarchical Regression Analysis for Variables Predicting Loneliness  
(N = 1451)*

Variable	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	$\Delta R^2$	Adjusted $R^2$
Model 1				.017	.017	.005
Gender	-.680	.539	-.035			
Age 18 vs age 14	-3.351	2.320	-.060			
Age18 vs age15	-1.847	1.844	-.087			
Age18 vs age16	-1.113	1.436	-.051			
Age18 vs age17	-.275	1.133	-.013			
Anatolian vs vocational	1.076	.688	.048			
Anatolian vs other schools	-2.101	2.468	-.023			
Grade 9 vs grade 10	-.809	1.602	-.037			
Grade 9 vs grade 11	-.088	1.816	-.004			
Grade 9 vs grade 12	-.438	2.210	-.011			
MS vs MT	.464	.693	.021			
MS vs TS	-.201	1.143	-.005			
MS vs no field	1.285	1.416	.061			
1.child vs middle child	-.094	.794	.005			
middle child vs last child	-.027	.784	-.001			
1 sibling vs 4 or more	-3.688	1.233	-.192			
2 sibling vs 4 or more	-3.666	1.196	-.192			
3 sibling vs 4 or more	-2.991	1.323	-.101			
Model 2				.181(*)	.164	.169
Mother Acceptance Score	.213	.022	.286(*)			
Father Acceptance Score	.114	.019	.172(*)			
Model 3				.196(*)	.015	.180
Sibling warmth	-.066	.020	-.089(*)			
Sibling conflict	.077	.032	.062(*)			
Sibling rivalry	-.198	.084	-.065(*)			
Sibling power	-.056	.055	-.025			

\* $p < .001$

According to Table 4.10 above, 1.7% of the variance in loneliness was explained by model one including gender, age, grade, field of study, birth order, school type and number of siblings but the explained variance of the first model did not give significant results ( $R^2 = .017$ ,  $F_{inc(14, 1436)} = .96$ ,  $p > .05$ ). In the second step, with the addition of mother and father acceptance-rejection score,  $R^2$  resulted in a significant increment and R square change was 16.4%. Model two explained 18.1% of the variation in loneliness ( $R^2 = .181$ ,  $F_{inc(16, 1434)} = 19.17$ ,  $p < .001$ ). Mother rejection score predicted loneliness positively ( $\beta = .29$ ,  $p < .001$ ). Father rejection score also predicted loneliness positively ( $\beta = .17$ ,  $p < .001$ ). In the model 3, sibling variables were added to the model and R square change was significant. In the third step, introducing the sibling variables to the model explained an additional 1.5% of variation in loneliness and this change in  $R^2$  was significant and  $R^2$  was 19.6% ( $R^2 = .196$ ,  $F_{inc(20, 1430)} = 16.396$ ,  $p < .001$ ). The significant predictors of loneliness among sibling relationship qualities were sibling warmth score ( $\beta = -.088$ ,  $p < .001$ ), sibling conflict score ( $\beta = .062$ ,  $p < .001$ ) and sibling rivalry score ( $\beta = -.065$ ,  $p < .001$ ).

According to these results, except model 1, both model 2 and model 3 significantly predict outcome variable, but second model (with extra predictors) was better because of  $F$  ratio and the value of  $R^2$ . The most important predictor of loneliness was mother acceptance-rejection score, which uniquely explained 5.4% of the variation in loneliness. Together the six independent variables accounted for 19.3% of the variance in loneliness.

In the first model, none of the demographics predicted the loneliness score. In the second model, both mother acceptance score ( $b = .21$ ) and father acceptance score ( $b = .115$ ) predicted loneliness score significantly therefore the more the mother and the father rejection score, the students feel more loneliness. There was a significant positive relationship between parental rejection and the level of loneliness among high school students.

In the third model, when demographics and parental acceptance scores are statistically controlled, all sibling predictors contributed in different ways to the loneliness score. There was a negative relationship between loneliness and sibling warmth ( $b = -.066$ ) and sibling rivalry scores ( $b = -.198$ ). Sibling conflict ( $b = -.198$ ) predict loneliness positively. Sibling power status was not significant predictor of the outcome variable.

Unique variances explained by the predictors in the model 2 and model 3 were calculated by the square of Part values. Mother acceptance score 5.4%, father rejection score 2.4%, sibling warmth 1%, sibling conflict 0.4% and sibling rivalry 0.3% variance explained in loneliness score. Among the predictors, mother acceptance score explained the most of the variance in loneliness score of high school students.

## CHAPTER V

### DISCUSSION

In this section, findings obtained from the research and their similarities and differences to related literature were evaluated. In the consequence of the evaluation of the results, both future implications of the findings and recommendations for further research were discussed.

#### 5.1 Conclusion of the Results

Results of the present study indicated that the strongest predictor of the loneliness in adolescence was mother and father acceptance scores. When demographic variables (gender, age, grade, school type, field of study, birth order, and number of siblings) were statistically controlled, 18.1% of the variance was explained by parental acceptance. When sibling relationship quality variables are added, explained variance increased to 19.6%. Although sibling conflict, sibling warmth and sibling rivalry dimensions were significant, sibling power status dimension was not a significant predictor of loneliness. Sibling variables alone explained only 1.5% of the variance in loneliness score. Demographic variables of gender, age, grade, school type, field of study, birth order, and number of siblings were not significant predictors of loneliness. Mother acceptance score explained most of the variance in loneliness among other variables. Beside regression analysis, t-test was conducted to compare study variables with regard to gender. Results showed that, participants' gender did not make significant difference on mother acceptance score, sibling rivalry, sibling conflict and sibling power status variables. While, sons ( $M = 40.38$ ,  $SD = 14.54$ ) feel more rejected than daughters ( $M = 38.23$ ,  $SD = 14.41$ ) feel by their fathers. Female adolescent sibling has warmer relations with their sibling than male adolescent sibling.

To begin with, despite the widespread stereotypes of conflict and stress in adolescents' family life, studies suggest that teenagers report little emotional distance between parents and themselves (Collins & Laursen, 2004). Despite they have serious problems with their parents; they feel close to and being loved by their parents and respect evaluations of their parents (Steinberg, 2001). Parallel with the current findings, participants of this study also reported similar, consistent results and they had a tendency to report their mother and fathers as warm, rather than rejecting. Number of participants who reported their mother as rejecting mothers, which means total mother acceptance score was bigger than 60, were 104. Number of participants who reported their fathers as rejecting fathers, which means total father acceptance score was bigger than 60, were 161 whom are 11.1% of the participants. There is a tendency to rate their parents with high scores in more positive items.

According to study results, parent's being accepting and warm predicted a decrease in loneliness of adolescents and this conclusion was compatible with the literature. In the literature, types of parenting are studied more than, acceptance-rejection dimension of parenting. This study assumes that acceptance and rejection are the two dimensions on the same line and parents vary on these dimensions. In this manner, the authoritative parents who are warm and set standards for the child that are consistent with the developmental needs are more likely to associate with healthy adolescent development and accepting parents similar to authoritative parents, showing care, affection, warmth, support and love to their children. On the other dimension, there are rejecting parents who are perceived as cold, aggressive, indifferent and perceived by the child as being not cared or loved by them. Authoritarian parenting style which is involving parental power assertion without warmth, nurturance, or two-way communication and punitive discipline styles in order to control the behavior of their children (Margalit, 2010) and this parenting style was close to rejecting parents. Margalit (2010) related authoritarian parenting style with children's low self-esteem, poorer self-perceptions and increased loneliness in adolescents. Conclusion of the more acceptances from mother and father and the less loneliness among adolescents are compatible with this finding. Jackson (2007) has also found strong correlation between parental care and loneliness among adolescents. Jackson and colleagues (2005) also concluded that individuals who have

perceived their parents as authoritarian who provide a loving atmosphere for their child, reported lower level of loneliness.

Moreover, individuals who suffer from loneliness have poor relations with their parents (Kulaksızoğlu, 2002). Studies showed significant relations between loneliness and family structure, in-family relations with parents (Antognoli-Toland, 2000; Uruk, 2001; Çeçen, 2008). Adolescents, who are feeling their family members mainly parents and the siblings as distant and not providing intimacy and support, experience alienation in their homes. The alienation of individual from the family and home, mainly the adolescents who live other psychological and biological changes at the same time, evoke feeling of emptiness, distress and loneliness (Buchholz & Catton, 1999; Dickstein, Seifer, & Albus, 2009). When the adolescent sensed that nobody in their home is listening to them or had a true interest in them, s/he experienced social isolation in their families and may reduce their emotional communication (Margalit, 2010). Not meeting child's physical or emotional needs and not responding to child in a caring manner is manifestation of rejection and neglecting behavior.

Based on the results, paternal acceptance explained 18.1 % of the loneliness in the present study, and in Uruk's (2001) comparison of peers and families on adolescents' loneliness study concluded that 15% of loneliness was predicted by family structure and peer relations explained 35% of variance in loneliness. When it is compared, in both studies family does not explain variance more than peer relations in adolescents. Cutrano's findings (1982) supported this idea since in his study, in early adults the strongest predictors of loneliness were flirting and dissatisfaction of social relationships with friends, rather than family relations. Goswick and Jones (1982), also conducted a study with high school and university students and concluded that the most powerful reason affecting loneliness in high school students is relationship with peers and family relations has been effecting less. Lerner and Steinberg (2009) stated that adolescent maturation threatens parental dominance and resulting in heightened conflict. This prompts youth to turn away to turn away from their family to be comforted by peers who are experiencing similar relationship disruption. It may not mean that peers gained most effective place in adolescents' lives. Current studies

differentiated the influence domain of parent and peers. Issues relating to future including career and school are mostly influenced by parent, while an issue concerning life style like leisure activities is mostly under peer influence (Collins & Steinberg, 2006). When the importance of leisure activities are considered in meeting adolescents' identity needs, results show more peer influence on loneliness.

According to Noller and Callan (1991), for the development of an adolescence in a health way, parents should support autonomy and independence, clarify domestic borders between family members and care about the quality of love showed to adolescent. Concordantly, Özatça (2009) asserts that developmental tasks associated with adolescence can be completed successfully in family atmospheres where, autonomy sustained; it is a reasonable level of control over adolescents of parents, less family conflict, high levels of love and support they feel. Development of adolescent in a healthy way is not possible in rejecting family environment.

The ones who are neglected, cannot get support from the family and have not satisfactory family relations experience emotional loneliness (Özatça, 2009). Weiss (1973) emphasized in the definition of loneliness that emotional loneliness occurs due to the lack of intimate relationship, with a spouse, family, child or lover. Bullock (1993) stated that children of supportive, warm and caring families indicate low level of loneliness. In loneliness resulting from family, not being discounted, not supported and not being given a right to talk openly are significant dysfunctions of the family for adolescents. Studies supporting associations between family relations and emotional loneliness (Arkar, Sarı, & Fidaner, 2004; Çeçen, 2008; Rubenstein & Shaver, 1980; Segrin, 2003) are consistent with present findings.

There are different explanations for parents' impact on loneliness of their child. Cochran and Brassard (1979) mentioned about the parents' friendship modelling effect. Children observe their parents and imitate their behaviors and attitudes in their peer relations. The social support that parents receive from friends may directly affect their parenting abilities and thus indirectly affect their children's peer relationships. Parents who are satisfied with their friendships may believe that friendship is

important, model strong friendships for their children, initiate play-dates, or intervene when children are upset about their own friendships. In these ways, parents may facilitate good peer relationships for their children and prevent them from feeling lonely. Children cannot learn appropriate ways to negotiate and resolve conflicts, emotion regulation during conflict and maintaining strong relationship with others. Rotenberg and Hymel (1999) supported those ideas by claiming that families help develop social skills of their adolescent child by guiding them with social orientation therefore it could be easy to adapt to changes in their relations then lower level of loneliness can be experienced.

Attachment theory figured out that children first gain the understanding and representations of relationships from their primary care-takers and use this perception in later relationships. Social learning theory also claims that children imitate and generalize the behaviors that are formed in the parent-child interactions and reflect same patterns on their sibling and peer relations. Therefore, it can be concluded that positive parent-child relationships contribute to quality of sibling and peer relations. Brody (1998) found that negativity, intrusiveness, and over control in the parent-child relationship are linked with aggressive, self-protective behavior in the sibling relationship while higher positivity associated with higher affectivity and prosocial behavior in the sibling relations. These findings appear to be congruent with finding of the present study. Since paternal acceptance score explain the variance in the loneliness, this loneliness can be result from learned negative behavior and feeling patterns and its reflection to sibling and peer relations. All in all, it can be said that the nature of parent-child relationships associate with loneliness.

Marcoen and Brumagne (1985) found that middle school boys are lonelier in their parent relationships than girls and researchers explained this result with parents' missing emotional support to their male children. Parallel to this conclusion, adolescent sons perceived their fathers more rejecting than adolescent daughters perceive their fathers. Differently, there was no significant difference in perception of mothers. Sunar (2002) also presented supportive findings and her results showed that

there is a differential treatment of sons and daughters by their parents since sons are to be controlled by both parents in an authoritarian manner.

Result of present study which indicates that loneliness cannot be predicted by gender is consistent with the İlhan's (2012) findings that there was no gender difference in loneliness. Consistently, some other studies also reported no gender differences in loneliness (Andersson, 1982; Cutrano, 1982; Peplau, Bikson, Rook & Goodshilds, 1982; Qureshi & Walker, 1989; Weeks & Asher, 2012). Impact of gender on loneliness is still inconclusive and ongoing discussion, so nonsignificant result of this study is consistent with the studies reporting no gender difference. Like gender, other demographics including age, grade, school type, field of study, birth order and number of siblings were also not significant predictors. Consistently with Erözkan (2009), age, grade and school type did not make difference in loneliness among high school students. Williams (1983) also reported that birth order was not significant predictor of loneliness. In terms of number of siblings, Duyan et al. (2008) reported that the more number of siblings the more state of loneliness. In terms of each demographic variable, there are both consistent and different findings therefore it can be concluded that demographics were inconclusive discussion and results were partially consistent with the literature.

Besides, sibling dimension of the family relations were also included in the study and sibling warmth, rivalry and conflict significantly predicted loneliness, whereas sibling relative status/power did not predict loneliness significantly. Findings were compatible with the literature. Adolescents who have close and supportive sibling ties reported less loneliness in the present study and the findings are consistent with Ponzetti and James (1997), Margalit (2010) and Milevsky's (2005) findings. In Margalit's (2010) study, individuals, who received sibling support, reported lower levels of loneliness and significantly higher self-esteem and life satisfaction than those who reported low sibling-support conditions.

Consistently, research showed that participants, who had harmonious (high warmth, low conflict) relationships with siblings, had the lowest loneliness and highest self-

esteem scores, and those who reported intense affect (high warmth, high conflict) in their sibling relations had the highest loneliness and lowest self-esteem scores (Sherman, Lansford & Volling, 2006). Close, warm, and supporting siblings' relations may not only support children and adolescents' self-esteem and adjustment (Yeh & Lempers, 2004), but also help them in avoiding loneliness in the family and outside home, even compensating for parental distance. The quality of the relations with brothers and sisters predicted loneliness, regardless of age related differences between them (Sherman, Lansford, & Volling, 2006).

Having a close sibling relationship can compensate the negative effects of not having friends to some extent (East & Rook, 1992) and siblings function as sources of guidance and advice. Especially, younger siblings seem to benefit from the guidance and support offered by older siblings and tends to maintain a higher level of intimacy with them (Tucker, Barber, & Eccles, 1997). Siblings while living in proximity to each other have opportunity to have positive and negative interaction with each other. Through learning from their siblings, they form the ways they interact with friends outside the family and it was also concluded that the ways that parent interact with their children have an impact on sibling to sibling relations (Brody, Stoneman, & McCoy, 1994). Positive sibling relations, not only affects positive peer relations but also affect their general adjustment to school and society (Stocker, Burwell, & Briggs, 2002). Positive sibling relationships contribute to success in the school, independence and self-value (Steinberg, 2001).

Sibling support compensated for low support from mothers for depression and self-esteem (Milevsky, 2005). Sibling support has compensating impact lack of parental and peer support. Then, sibling warmth predicts loneliness negatively. Even, the sibling rivalry also predicts loneliness in negative way. It may mean even being in the interaction with the sibling can have positive impact on adolescent. On the other hand, sibling conflicts were found as highly correlated with loneliness, aggressive behaviors toward peers and low self-esteem (Stocker, 1994) and parallel to this finding, sibling conflict is a significant predictor of loneliness in present study.

During early and middle childhood, older sibling is the dominant and holds the power and status over other siblings but the beginning of early adolescence around at the ages of 12, power differential between younger and older declines (Furman & Buhrmester, 1992). As the ages increase, there is a developmental change in power relations then dominance of older sibling declines and rather than differences in power status, they start to adapt more egalitarian relationship. Parallel to this finding, sibling power did not make significant difference in loneliness of adolescents.

It may be difficult to interpret any comparison of cultures on certain aspects of sibling relationships unless mentioned aspects have meaning only as part of a unique cultural pattern. In other words, it is a question of whether one should compare sibling relationships on certain dimensions across cultures or to compare cultures holistically when making comparisons of sibling relationships (Schneider, 1983). Relative status/power dimension did not significant result for this study and it may be due to its irrelevance to current cultural context.

It is important to keep in mind that although the tendency in this study is to see the adolescents' loneliness experience as a result of parent behavior and sibling relationship quality; this interaction is two way, and adolescent's behaviors may also affect the parents' and siblings attitudes toward them.

## **5.2 Implications for Practices**

Educating the public, mainly the parents, is one of the current considerations of psychology workers. Newspaper articles, magazines and television programs bring attention to parent-child relations very frequently. How to be a good parents, how to communicate with adolescents, how to show respect to their life etc. are very popular topics. Even the words they use while communicating with the child are told by the experts. Awareness regarding psychological abuse or emotional neglects has been increased.

Understanding the causes of loneliness may be seen as the first step to intervene and deal with it, as the results of the present study are wealth of information for the professional and self-help books. If adolescents are helped to feel secure and positive about themselves, loneliness may be experienced to a lesser degree. Although it is not possible to avoid loneliness completely, there is possibility to manage it successfully (Rokach & Brock, 1998).

In the light of these data, it can be deduced that the quality of interaction between and within parent-children and sibling-sibling subsystems are correlated with each other. If one learns how to establish and maintain satisfying interpersonal encounters through interacting with one's siblings, then the experience of loneliness may be avoided. Siblings play key role in our emotional development. Parents should show more attention to how to help their children to develop better sibling interactions. Positive, supportive interpersonal relationships in the family seem to play a preventive role in loneliness.

Parents' assessment styles and evaluations regarding their children shapes the perceptions of their children about themselves and their relations with parents (Kulaksızoğlu, 2002). This issue requires more attention. Parents should give an opportunity to express themselves and listen to what their adolescent child says without criticism, disdain and trial, this provides healthy development. The adolescents deprived of parental support, concern about living in fear and loneliness (Kulaksızoğlu, 2002). Adolescents who suffer from unpleasant feelings as pessimism and discontent become suffocated from these feelings and needs to trust his or her parents.

Due to the sensitivity of this development period, establishing a close relationship that is important for all people, maintain greater importance for adolescents (Inderbitzin, 1994). If they fail to maintain close relationships, they meet with a lonely life. If adolescents do not feel lonely and their relationship with parents have a good quality, they do not have a need to participate some groups like ones who have a strong ideologies.

Peer groups are very critical in terms of developing good interpersonal relationships and healthy personality. Being accepted by friends will have an impact on his or her self-acceptance, self-esteem and self-respect in positive way since the adolescents experience reverse feel deep loneliness or shows its symptoms (Cheng & Furnham, 2002). Goals of loneliness intervention might include facilitation of social bonding by providing new opportunities for social contact.

Close sibling relationships are an important source of support for adolescents and such support is associated with positive psychological benefits; sibling support can mitigate the negative effects associated with life stress and lack of support in other social ties (Lerner & Steinberg, 2009). In parent training schools, attention to develop positive sibling relationships should be given and even siblings can join to these schools with their parents.

Sensitivity to needed age specific dependency is important to the issue of parenting (Bradshaw, 1988). Child's experience with his/her family is critical to the development of the child. Virginia Satir, Murray Bowen and Gregory Bateson's approaches all emphasize the communication patterns of entire family in understanding individual's mental problems. Family system thinking is based on the belief that child's social and relationship needs are first attended to by the parents.

To conclude, family of the adolescent should be specified love, compassion and tolerance between family members and in the case of family issue the adolescent also should take active role in the solution of this problem will decrease the feeling of loneliness by providing them feel valued in the family. Growing up in a comforting home, experiencing warm, stable, and secure relationships with parents and siblings is a valuable base for developing socialization, which extends far beyond the boundaries of family life itself. Counselors can develop psychoeducational groups for parents and adolescents about how to improve conflictual family relations. Adolescent can join to such psychoeducational groups with their parents. Counselors should consider about parent's acceptance or rejection behaviors and sibling relations when developing

prevention and intervention programs for reducing loneliness in individuals. In terms of guidance services, social skills training programs can help adolescents to have effective relationships with their family members and friends, which would lessen loneliness and enable them to establish relationship more easily.

### **5.3 Recommendations for Further Research**

Marcoen and Goossens (1993) mention about the importance difference between parent-related and peer related loneliness and offering to consider this difference while studying loneliness among adolescents. It can give more meaningful results to make such distinction. In order to study adolescent loneliness, their perception of their social network and friends should be taken as the other significant predictors, beside family, as it is suggested by Richaud de Minzi and Sacchi (2004). In further studies, rather than controlling demographic variables, social support can be only control variable.

Different members of the family have different views on parent-adolescent conflicts and are differentially affected by it, just as research on siblings demonstrates that two siblings can experience the same family context in very different ways (Plomin & Daniels, 1987). Larson and Richards (1994) stated it in their book *Divergent Realities*, research on parents and adolescents shows that mothers, fathers, and teenagers may experience their interactions with each other in very different ways. Therefore, studying both siblings and taking both side's perceptions regarding their sibling relationship quality in terms of loneliness will be more comprehensive study since, the quality of that sibling dyad may not be experienced similarly by two siblings. It is also important to find out whether there is differential treatment of siblings or not. The impact of differential parental treatment on sibling relationship is another variable that should be controlled.

Sibling relationships are important throughout life span and researchers should pay more attention to the influence of this life long relationship (Cicirelli, 1995). In a sibling study, sibling pairs should be analyzed according to their genders. Brother-brother pairs may show different pattern than sister-sister pair. Boys and girls may operationalize differently in sibling relations. Markers of being close may be cited

differently for brothers and sisters. For instance, for brothers doing activity together can be confirmation for closeness while for sisters, talking and showing care can be sign of closeness (Edwards, Hadfield, Lucey & Mauthner, 2006). In further studies, including sibling variables such as age-space, gender of siblings, living together or separately will give richer data. There is huge need for a more comprehensive understanding of nature and function of adolescents' sibling ties, siblings directly and indirectly influence one another's' lives through different mechanisms.

More research is necessary to better determine the causal relationship between loneliness and its correlates. Longitudinal studies of loneliness and its alleviation are very much needed.

In this study perceived paternal and maternal acceptance-rejection is measured in the present time. Further study can be conducted with adults by taking their past perceptions of parental acceptance and rejection with regard to loneliness level in their adulthood. It can give a chance to test theories which attributes loneliness to childhood experiences and its long term effects.

Moreover, in order to increase the awareness of mothers and fathers regarding parental attitudes and behaviors toward child and to prevent the further cycle of abuse and ineffective parenting of the next generation, same study can be done with the adult samples.

This research was based on the information only obtained from the adolescents and conducted in Ankara. A more representative study can be conducted in another city and by collecting data from both parents to compare their perceptions with their child. University students can also be the participants.

Another important point is loneliness, perceived parental acceptance-rejection and sibling research requires to be studied by different disciplines such as sociology and anthropology, beside counseling psychology. Using an integrated approach and to show culturally bounded nature of concepts will broaden the perspectives on these topics. There is lack of systemic studies regarding siblings and loneliness. It is

undeniable that factors influencing loneliness in the context of family variables are not restricted to the ones covered in this current study. Since the explained variance is small, other variables such as social support, peer relations or personality characteristics of the individuals should be added.

Lastly, quantitative measures fail to be good predictors of loneliness since they may be unable to capture the nature of social relationships people engage in. Non-lonely people may engage in more interactions with family and friends, lonely people may engage in fewer interactions with intimates, and more interactions with strangers and acquaintances (Jones, 1982), the latter being people who are less likely to satisfy belongingness needs. In the loneliness scale of the present study, one's subjective feelings of loneliness as well as feelings of social isolation was measured but still type of contact rather than amount of contact should be emphasized in such studies.

## REFERENCES

- Andersson, L. (1982). Interdisciplinary study of loneliness with evaluation of social contacts as a means towards improving competence in old/age. *Acta Sociologica*, 25, 75- 80. doi: 10.1177/0164027592144002
- Antognoli-Toland, P.L. (2000). Adolescent loneliness: Testing a predictive model. *Journal of Theory Construction & Testing*, 4(1), 7-13.
- Apalaçi, V. (1996). *Psychological adjustment and sibling relationships of older brothers and sisters of children with pervasive developmental disorders* (Unpublished Master's thesis). Boğaziçi University, İstanbul.
- Arbuckle, J. L. (1999). *Amos 4.0* [Computer Software]. Chicago, IL: Small Waters.
- Arkar,H., Sarı, Ö. & Fidaner H. (2004) . Relationship between quality of life, perceived social support, social network and loneliness in a Turkish sample. *Yeni Sempozyum: Psikiyatri, Nöroloji ve Davranış Bilimleri Dergisi*, 42 (1), 20-27.
- Aydın, B., & Öztütüncü, F. (2001). Examination of adolescents' negative thoughts, depressive mood, and family environment. *Adolescence*, 36 (141), 77-83.
- Baker, R. V., & Oswald, L. D. (2010). Shyness and online social networking services. *Journal of Social and Personal Relationships*, 27(7), 873–889
- Bandalos, D. L. (2002). The effects of item parceling on goodness-of-fit and parameter estimate bias in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(1), 78-102.
- Bank, L., Patterson, G. R., & Reid, J. B. (1996). Negative sibling interaction patterns as predictors of later adjustment problems in adolescent and young adult males. In G. H. Brody (Ed.), *Sibling relationships: Their causes and consequences* (pp. 197-229). Norwood, NJ: Ablex.

- Bank, S. P., & Kahn, M. D. (1997). *The sibling bond*. New York: Basic Books.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, 117(3), 497- 529. Retrieved from <http://persweb.wabash.edu/facstaff/hortonr/articles%20for%20class/baumeister%20and%20leary.pdf>
- Bering, J. M. (2008). Why hell is other people: Distinctively human psychological suffering. *Review of General Psychology*, 12(1), 1–8. Retrieved from <http://dx.doi.org/10.1037/1089-2680.12.1.1>
- Bonino, S., Cattelino, E., & Ciairano, S. (2005). *Adolescents and risk. Behaviors, functions, and protective factors*. New York: Springer Verlag.
- Borys, S., & Perlman, D. (1985). Gender differences in loneliness. *Personality and Social Psychology Bulletin* 11, 63-74. doi: 10.1177/0146167285111006
- Bowlby, J. (1977). The making and breaking of affectionate bonds. *British Journal of Psychiatry*, 130, 201-210. doi: 10.1192/bjp.130.3.201
- Bozbey-Akalın, A. O. (2005). *Social skills and sibling relations of elder sisters and brothers of children with attention deficit and hyperactivity disorder* (Unpublished Master's Thesis). Çukurova University, Adana.
- Bradshaw, J. (1988). *Bradshaw on the Family: A Revolutionary Way of Self Discovery*. Deerfield Beach: Health Communications.
- Brennan, T. (1982), Loneliness at adolescence, In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*, (pp.269-290). New York: Wiley.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newsbury Park, CA: Sage.

- Brody, G. H. (1998). Sibling relationship quality: its causes and consequences. *Annual Review of Psychology*, *49*, 1-24. doi: 10.1146/annurev.psych.49.1.1
- Brody, G. H., Stoneman, Z., & Gauger, K. (1996). Parent-child relationships, family problem solving behavior, and sibling relationship quality: The moderating role of sibling temperaments. *Child Development*, *67*, 1289-1300. doi: 10.1111/j.1467-8624.1996.tb01796.x
- Brody, G. H., Stoneman, Z., & McCoy, J. K. (1994). Forecasting sibling relationships in early adolescence from child temperaments and family processes in middle childhood. *Child Development*, *65*, 771 – 784. doi: 10.2307/1131417
- Brody, G. H., & Murry, V. M. (2001). Sibling socialization of competence in rural, single parent African American families. *Journal of Marriage and the Family*, *63*, 996–1008. doi: 10.1111/j.1741-3737.2001.00996.x
- Brussoni, M. J. (2000). *We Are Family: Sibling Attachment Relationships* (Doctorate Dissertation). Retrieved from University of British Columbia Library ([https://circle.ubc.ca/bitstream/id/26979/ubc\\_2000-565130.pdf](https://circle.ubc.ca/bitstream/id/26979/ubc_2000-565130.pdf)).
- Buchholz, S. E., & Catton, R. (1999). Adolescent's perceptions of aloneness and loneliness. *Adolescence*, *34*(133), 203-204.
- Buhrmester, D. (1992). The developmental course of sibling and peer relationships. In F. Boer & J. Dunn (Eds.), *Children's sibling relationships: Developmental and clinical issues* (pp. 19–40). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. *Child Development*, *58*(4), 1101-1113. Retrieved from [http://www.du.edu/psychology/relationshipcenter/publications/buhrmester\\_gavin\\_1987.pdf](http://www.du.edu/psychology/relationshipcenter/publications/buhrmester_gavin_1987.pdf)
- Buhrmester, D., & Furman, W. (1990). Perceptions of sibling relationships during middle childhood and adolescence. *Child Development*, *61*(5), 1387-1398. Retrieved from [http://www.du.edu/psychology/relationshipcenter/publications/buhrmester\\_furman\\_1990.pdf](http://www.du.edu/psychology/relationshipcenter/publications/buhrmester_furman_1990.pdf)

- Bullock, J.R. (1993). Children's loneliness and their relationships with family and peers. *Family Relations*, 42, 46-49. doi: 10.1177/1066480700082008
- Cole, A. K., & Kearns, K. A. (2001). Perceptions of sibling qualities and activities of early adolescents. *Journal of Early Adolescence*, 21, 204-227. doi: 10.2307/1130750
- Capan, B. E., & Körler, Y. (2011). The effect of secondary school students' familial characteristics on loneliness levels. *Procedia-Social and Behavioral Sciences*, 29 (The 2<sup>nd</sup> International Conference on Education and Educational Psychology 2011), 1849-1846. doi:10.1016/j.sbspro.2011.11.432
- Carpenter, B. D., & Buday, S. (2007). Computer use among older adults in a naturally occurring retirement community. *Computers in Human Behavior*, 23, 3012-3024. Retrieved from <http://dx.doi.org/10.1016/j.chb.2006.08.015>
- Caya, M. L., & Liem, J. H. (1998). The role of sibling support in high-conflict families. *American Journal of Orthopsychiatry*, 68, 327-333. doi: 10.1037/h0080342
- Cheng H., & Furnham A. (2002). Personality, peer relations, and self-confidence as predictors of happiness and loneliness. *Journal of Adolescence*, 25(3), 327-339. doi:10.1006/yjado.475
- Cicirelli, V. G. (1980). A comparison of college women's feelings toward their siblings and parents. *Journal of Marriage and the Family*, 42(1), 111-118.
- Cicirelli, V. G. (1994). Sibling relationships in cross-cultural perspective. *Journal of Marriage and the Family*, 56(1), 7-20.
- Cicirelli, V. G. (1995). A measure of caregiving daughters' attachment to elderly mothers. *Journal of Family Psychology*, 9(1), 89-94.
- Cicirelli, V. G. (1995). *Sibling relationships across the life span*. New York: Plenum Press.

- Clingempeel, W. G., Colyar, J.J., Brand, E., & Hetherington, E. M. (1992). Children's relationships with maternal grandparents: a longitudinal study of family structure and pubertal status effects. *Child Development, 63*(6),1404–22.
- Cochran, M. & Brassard, J. (1979). Child development and personal social networks, *Child Development, 50*, 601-666. doi: 10.2307/1128926
- Coleman, J. D. (2011). *The nature of adolescence*. New York: Routledge.
- Collins, W. A., & Laursen, B. (2004). Changing relationships, changing youth: Interpersonal contexts of adolescent development. *Journal of Early Adolescence, 24*, 55–62. doi: 10.1177/0272431603260882
- Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and influences. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (2nd ed., pp. 331-361). Hoboken, N.J.: John Wiley & Sons, Inc.
- Collins, W. A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 4. Socioemotional processes* (pp. 1003–1067). New York: Wiley.
- Cumming, E. & Schneider, D. (1961). Sibling solidarity: A property of American kinship. *American Anthropologist, 63*, 498-507. doi: 10.1525/aa.1961.63.3.02a00030
- Curtis, S. (1992). Promoting health through a developmental analysis of adolescent risk behavior. *Journal of School Health, 62*(9), 417–420. doi: 10.1111/j.1746-1561.1992.tb01260.x
- Cutrona, C. E. (1982). Transition to change: loneliness and the process of social adjustment. In L. A. Peplau and D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 291-309). New York: Wiley.
- Çeçen, A.R., (2008). Üniversite öğrencilerinin cinsiyetlerine ve ana baba tutum algılarına göre yalnızlık ve algılanan sosyal destek düzeylerinin incelenmesi. *Türk Eğitim Bilimleri Dergisi, 6*(3), 415-431. Retrieved from <http://www.tebd.gazi.edu.tr/index.php/tebd/article/viewFile/169/156>

- Demir, A. (1989). UCLA Yalnızlık Ölçeğinin Geçerlik ve Güvenirliği. *Psikoloji Dergisi*, 7(23), 14-18.
- Demir, A. (1990). *Some factors that affect loneliness levels of university students* (Unpublished Doctorate Dissertation). Hacettepe University, Ankara.
- Demirtaş, A. S. (2007). *The relationship between perceived social support, loneliness and the coping stress levels of the students attending the 8th class in elementary schools* (Unpublished Master' s Thesis). Gazi University, Ankara.
- Dickstein, S., Seifer, R., & Albus, K. E. (2009). Maternal adult attachment representations across relationship domains and infant outcomes: the importance of family and couple functioning. *Attachment & Human Development*, 11, 5-27. doi: 10.1080/14616730802500164.
- Doyle, A. B., & Markiewicz, D. (2005). Parenting, marital conflict and adjustment from early- to mid-adolescence: Mediated by adolescent attachment style. *Journal of Youth and Adolescence*, 34, 97-110. doi:10.1007/s10964-005-3209-7
- Dunn, J., & Kendrick, C. (1982). *Siblings: Love, Envy, & Understanding*. Cambridge, MA: Harvard UP Print.
- Dunn, J., Slomkowski, C., Beardsall, L., & Rende, R. (1994). Adjustment in middle childhood and early adolescence: Links with earlier and contemporary sibling relationships. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 35(3), 491-504.
- Duru, E. (2008). The Analysis of the Relationships between Loneliness, Social Support, and Social Connectedness in Predicting Adjustment Difficulties. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*, 8(3), 833-856. Retrieved from <https://www.edam.com.tr/kuyeb/pdf/tr/cffc403a54b99cb5aa2eb85cf26645e0uFULL.pdf>
- Duyan, V., Çamur-Duyan, G., Gökçearslan-Çiftçi, E., Sevin, Ç., Erbay, E. & İkizoğlu, M. (2008). Analysis of the variables affecting loneliness levels of secondary school students. *Education and Science*, 33(150), 28-41.

- Dwairy, M. (2009). Parental acceptance–rejection: a fourth cross-cultural research on parenting and psychological adjustment of children. *Journal of Child & Family Studies*, 19, 30-35. doi: 10.1007/s10826-009-9338-y
- Dykstra, P. A. (1990). *Next of (non)kin: The importance of primary relationships for older adults' well-being*. Amsterdam: Swets & Zeitlinger.
- East, P. L., & Rook, K. S. (1992). Compensatory patterns of support among children's peer relationships: A test using school friends, non-school friends, and siblings. *Developmental Psychology*, 28, 163–172. doi:[10.1037/0012-1649.28.1.163](https://doi.org/10.1037/0012-1649.28.1.163)
- Edwards, R., Hadfield, L., Lucey, H., & Mauthner, M. (2006). *Sibling identity and relationships: Sisters and brothers*. New York: Routledge. doi: 10.1111/j.1741-3737.2007.00432.x
- Eker, D., & Arkar, H. (1995). Çok boyutlu sosyal destek ölçeğinin faktor yapısı, geçerlik ve güvenilirliği. *Türk Psikoloji Dergisi*, 101(34), 45-55.
- Eker, D, Arkar, H. & Yıldız, H. (2001). Çok boyutlu algılanan sosyal destek ölçeğinin gözden geçirilmiş formunun faktör yapısı, geçerlik ve güvenilirliği. *Türk Psikiyatri Dergisi*, 12(1), 17-25. Retrieved from <http://www.turkpsikiyatri.com/c12s1/cokboyutlualgilanan.pdf>
- Ekmekçi, A. Y. (2008). *Congruence of parent and child perceptions of parental acceptance-rejection* (Unpublished Master's Thesis). Boğaziçi University, İstanbul.
- Erdem, T. (1986). *The validity and reliability of the Turkish form of parental acceptance-rejection questionnaire* (Unpublished Master's Thesis). Boğaziçi University, İstanbul.
- Eren, A. (1994). *Analysis of loneliness levels and psychological needs*. (Unpublished Master's thesis). Gazi University, Ankara.
- Erikson, E. (1969). *Identity, Youth and Crisis*. New York: Norton.

- Erkan, S., & Toran, M. (2004). Alt sosyo-ekonomik düzey annelerin çocuklarını Kabul ve reddetme davranışlarının incelenmesi (diyarbakır ili örneği). *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 27, 91-97. Retrieved from [http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=9&vtadi=TPRJ,TTAR,TTIP,TMUH,TOS,THUK&c=google&ano=49745\\_e3c663ec775378ef71fc42718e13110f](http://uvt.ulakbim.gov.tr/uvt/index.php?cwid=9&vtadi=TPRJ,TTAR,TTIP,TMUH,TOS,THUK&c=google&ano=49745_e3c663ec775378ef71fc42718e13110f)
- Erkman, F. (2003, February). *Turkish children's perception of parental warmth, corporal punishment and psychological adjustment*. Paper presented at the session of Society for Cross-cultural Research Conference 32<sup>nd</sup> Annual Meeting, Charleston, South Carolina, USA.
- Erkman, F., & Rohner, R. P. (2006). Youths' perceptions of corporal punishment, parental acceptance, and psychological adjustment in a Turkish metropolis. *Cross-Cultural Research*, 40, 250-267. doi: 10.1177/1069397106287924.
- Erözkan, A. T. (2009). Ergenlerde yalnızlığın yordayıcıları. *İlköğretim-Online*, 8 (3), 809-819.
- Field, A. P. (2013). *Discovering statistics using IBM SPSS Statistics: and sex and drugs and rock 'n' roll* (4<sup>th</sup> ed.). London: Sage publications.
- Fischer, C. S., & Phillips, S. L. (1982). Who is alone? Social characteristics of people with small networks. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 21-39). New York: Wiley (Interscience).
- Fraenkel, J.R., & Wallen, N.E. (2006). *How to design and evaluate research in education*. New York: McGraw-Hill.
- Fraenkel, J.R., Wallen, N.E., & Hyun, H.H. (2012). *How to design and evaluate research in education* (8<sup>th</sup> ed.). Boston: McGraw Hill.
- Frisen A., (2007). Measuring health-related quality of life in adolescence. *Acta Paediatrica*, 96 (7), 963-968. doi:10.1111/j.1651-2227.2007.00333.x 17498184.

- Fromm-Reichmann, F. (1990). Loneliness. *Contemporary Psychoanalysis*, 26(2), 305-329. (Original Publication: 1959). Retrieved from <http://pep.gvpi.net/document.php?id=cps.026.0305a&type=hitlist&num=26&query=zone1%2Cparagraphs%7Czone2%2Cparagraphs%7Cjournal%2Ccps%7Cvolume%2C26#hit1>
- Furlong, A. & Cartmel, F. (2007) *Young People and Social Change: New Perspectives*, (2<sup>nd</sup> Edit.) Buckingham: Open University Press.
- Furman, W. (1989). The development of children's social networks. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 151-172). New York: Wiley.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the qualities of sibling relationships. *Child Development*, 56, 448-461. Retrieved from [http://www.du.edu/psychology/relationshipcenter/publications/furman\\_buhrmester\\_1985.pdf](http://www.du.edu/psychology/relationshipcenter/publications/furman_buhrmester_1985.pdf)
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of personal relationships. *Child Development*, 63, 103-115. doi: 10.1111/j.1467-8624.1992.tb03599.x
- Furman, W., & Giberson, R.S. (1995). Identifying the links between parents and their children's sibling relationships. In S. Shulman (Ed.), *Close relationships in social-emotional development*, (pp. 95-108). Norwood, New Jersey: Ablex.
- Furman, W., Jones, L., Buhrmester, D., & Adler, T. (1989). Children's, parents', and observers' perspectives on sibling relationships. In P. G. Zukow (Ed.), *Sibling interaction across cultures: theoretical and methodological issues* (pp. 165-183). New York: Springer-Verlag.
- Galambos, N.L., & Almeida, D.M. (1992). Does parent-adolescent conflict increase in early adolescence? *Journal of Marriage and the Family*, 54, 737-747.
- Geçtan, E. (1998). *İnsan olmak*. İstanbul: Metis Yayınları.

- Gierveld, J. de J., Tilburg, T. Van & Dykstra, P. A. (2006). Loneliness and social isolation. In A. Vangelisti & D. Perlman (Eds), *Cambridge Handbook of Personal Relationships* (pp. 485-500). Cambridge: Cambridge University Press.
- Goetting, A. (1986). The developmental tasks of siblingship over the life cycle. *Journal of Marriage and the Family*, 48, 703-714. Retrieved from <http://dx.doi.org/10.2307/352563>.
- Goswick, R.A., & Jones, W. H. (1982). Components of loneliness during adolescence. *Journal of Youth and Adolescence*, 11(5), 373-383. Retrieved from <http://dx.doi.org/10.1007/BF01540375>
- Grotevant, H. D., & Cooper, C. R. (1985). Patterns of interaction in family relationships and the development of identity formation in adolescence. *Child Development*, 51, 415-428.
- Hagestad, G. (1998, October). Towards a society for all ages: New thinking, new language, new conversations. Keynote address at *the Launch of the International Year of Older Persons*, United Nations. New York.
- Haworth, J. G., & Conrad, C. F. (1995). Master's education in the United States: A contemporary portrait. In: P. M. Nerad, R. June, & D. S. Miller (Eds.), *Graduate education in the United States* (pp. 263–282). New York: Garland.
- Hecht, D.T. & Baum, S. K. (1984). Loneliness and attachment patterns in young adults. *Journal of Clinical Psychology*, 40(1), 193-197.
- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: a literature review. *Clinical Psychology Review*, 26(6), 695–718.  
doi:10.1016/j.cpr.2006.04.002
- Howe, N., Aquan-Assee, J., Bukowski, W. M., Lehoux, P. M., & Rinaldi, C, M. (2001). Siblings as confidants: emotional understanding, relationship warmth, and sibling self-disclosure. *Social Development*, 10(4), 439-454.

- Imamođlu, S.E. (2008). *Examination of interpersonal relationships in young Adulthood in terms of gender, sex-role, and loneliness* (Unpublished Doctorate Dissertation). Marmara University, Institute of Education Sciences, İstanbul.
- Inderbitzen, H.M. (1994). Adolescent peer social competence: acritical view of assessment methodologies and instruments. In J. H. Ollendick and R.J.Prinz (Eds), *Advance in Clinical Child Psychology*, (pp.227-259). New York: Plenum Press.
- İlhan, T. (2012). Üniversite öğrencilerinde yalnızlık: Cinsiyet rolleri ve bağlanma stillerinin yalnızlığı yordama güçleri. *Kuram Ve Uygulamada Eğitim Bilimleri*, 12(4), 23-77.
- Jackson, T. (2007). Protective self-presentation, sources of socialization, and loneliness among Australian adolescents and young adults. *Personality and Individual Differences*, 43(6), 1552-1562.
- Jackson, L. M., Pratt, M. W., Hunsberger, B., & Pancer, S. M. (2005). Optimism as a mediator of the relation between perceived parental authoritativeness and adjustment among adolescents: Finding the sunny side of the street. *Social Development*, 14(2), 273-304.
- Jackson, E., Dunham, R., & Kidwell, J. (1990). The effects of gender and of family cohesion and adaptability on identity status. *Journal of Adolescent Research*, 5(2), 161-174.
- Jodi, K., Bridges, M., Kim, J., Mitchell, A., & Chan, R. (1999). Relations among relationships: A family systems perspective. In E. Hetherrington, S. Henderson, & D. Reiss (Eds.), *Adolescent siblings in stepfamilies: family functioning and adolescent adjustment. Monographs of the Society for Research on Child Development*, 64, 150 – 183; Serial No. 227.
- Jones, W.H. (1981). Loneliness and social contact. *Journal of Social Psychology*, 113, 295-296. doi: 10.1080/00224545.1981.9924386
- Jones, W. H. (1982). Loneliness and social behavior. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 238–252). New York: Wiley.

- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.
- Haynes, C. A., Miles, J. N. V., & Clements, K. (2000). A Confirmatory factor analysis of two models of sensation seeking. *Personality and Individual Differences*, 29, 823-839. doi:10.1016/S0191-8869(99)00235-4.
- Horney, K. (1950). *Neurosis and human growth*. New York: Norton
- Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55. doi:10.1080/10705519909540118.
- Kağıtçıbaşı, Ç. (1982). Sex roles, value of children and fertility in Turkey. In: Ç. Kağıtçıbaşı (Ed.), *Sex Roles, Family and Community in Turkey*, pp. 151-180. Bloomington, Indiana: Indiana University Press
- Karay, L. A. (2001). *Adolescents' perception of psychological maltreatment living in divorced versus intact families* (Unpublished Master's Thesis). Boğaziçi University, İstanbul.
- Khaleque, A., & Rohner, R. P. (2002). Perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and Family*, 61, 54-64. doi: 10.1111/j.17413737.2002.00054.x
- Koç, M. (2003). Gelişim ve din psikolojisi açısından ergenlik dönemi. *EKEV Akademi Dergisi*, 7 (15), 15-16.
- Kozaklı, H. (2006). *Comparison of the relationships between loneliness and social support levels in university students* (Unpublished Master's Thesis). Mersin University, Mersin.
- Kulaksızoğlu, A. (2002). *Ergenlik psikolojisi*. İstanbul: Remzi Kitabevi.

- Lamb, M. E. (1982). Sibling relationships across the lifespan: An overview and introduction. In Lamb, M. E., and Sutton-Smith, B. (eds.), *Sibling Relationships: Their Nature and Significance across the Lifespan*, (pp.1-11). Erlbaum, Hillsdale, NJ.
- Larson, R. W., & Richards, M. H. (1994). Family emotions: Do young adolescents and their parents experience the same states? *Journal of Research on Adolescence*, 4(4), 567-583.
- Larson, R. W. (1999). The uses of loneliness in adolescence. In K. J. Rotenberg, & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp.244–262). Cambridge, England: Cambridge University Press.
- Larson, R., & Verma, S. (1999). How children and adolescents spend time across cultural settings of the world: Work, play and developmental opportunities. *Psychological Bulletin*, 125(6), 701–736.
- Le Roux, A. (2009). The relationship between adolescents' attitudes toward their fathers and loneliness: A cross-cultural study. *Journal of Child & Family Studies* 18(2), 219-226.
- Lempers, J. D., & Clark-Lempers, D. S. (1992). Young, middle, and late adolescents' comparisons of the functional importance of five significant relationships. *Journal of Youth and Adolescence*, 21(1), 53.
- Lerner, R. M. & Steinberg, L. (2009). *Handbook of adolescent psychology, contextual influences on adolescent development* (3<sup>rd</sup> ed.). New York: Wiley
- Lobdell, J. & Perlman, D. (1986). The Intergenerational transmission of loneliness: a study of college females and their parents. *Journal of Marriage and the Family*, 48, 589-595. Retrieved from <http://dx.doi.org/10.2307/352045>
- MacKinnon-Lewis, C., Starnes, R., Volling, B., & Johnson, S. (1997). Perceptions of parenting as predictors of boys' sibling and peer relations. *Developmental Psychology*, 33(6), 1024 – 1031.
- Marcoen, A. & Brumagne, M. (1985). Loneliness among children and young adolescents. *Developmental Psychology*, 21(6), 1025-1031.

- Marcoen, A., & Goossens, L. (1993). Loneliness, attitude towards loneliness and solitude: Age differences and developmental significance during adolescence. In S. Jackson, & H. Rondriguez-Tomé (Eds.), *Adolescence and its social worlds* (pp. 197-227). Hillsdale, NJ: Erlbaum.
- Margalit, M. (2010). *Lonely children and adolescents*. New York: Springer
- Maruyama, G. (1998). *Basics of Structural Equation Modeling*. Thousand Oaks CA: Sage.
- Mayers, A. M., Khoo, S. T., & Svartberg, M. (2002). The existential loneliness questionnaire: Background, development and primary findings. *Journal of Clinical Psychology, 58*(9), 1183–1193
- McPherson, M., Smith-Lovin, L. & Brashears, M.E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review, 71*, 353-375. doi: 10.1177/000312240607100301.
- Medora, N., & Woodward, J.C. (1986). Loneliness among adolescent college students at a Midwestern University. *Adolescence, 21*(82), 391-402.
- Mijuskovic, B. (1986). Loneliness: counseling adolescents. *Adolescence 21*(84), 941-950.
- Milevsky, A. (2005). Compensatory patterns of sibling support in emerging adulthood: Variations in loneliness, self-esteem, depression and life satisfaction. *Journal of Social and Personal Relationships, 22*, 743–755. doi: 10.1177/0265407505056447
- Minuchin, S. (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.
- Mitchell, J. (2013). Hamlet—The lonely only and his siblings. *Psycho-Analytic Psychotherapy In South Africa, 21*(1), 28-60.
- Nasser F., & Takahashi, T. (2003). The effect of using item parcels on ad hoc goodness-of-fit indexes in confirmatory factor analysis: An example using Sarason's reactions to tests. *Applied Measurement in Education, 16*(1), 75–97.

- Neto, F., & Barros, J. (2000). Psychosocial concomitants of loneliness among students of Cape Verde and Portugal. *Journal of Psychology, 134*(5), 503–514.
- Noller, P., & Callan, V. (1991). *The adolescent in the family*. London: Routledge.
- Oliva, A., & Arranz, E. (2005). Sibling relationship during adolescence. *European Journal of Developmental Psychology, 2*(3) 253-270.
- Ostrov, E. & Offer, D. (1980). Loneliness and the adolescent. In J. Hartog, J. R. Audy & Y. A. Cohen (Eds.), *The anatomy of loneliness* (pp.170-185). New York: International Universities Press.
- Özatça, A. (2009). Family functions in predicting social and emotional loneliness among adolescents (Unpublished master's thesis). Çukurova University, Adana.
- Parlee, M. B. (1979). The friendship bond: Psychology Today's survey report on friendship in America. *Psychology Today, 13*(4), 43–54.
- Pena, J. F., & Sandlin, A. N. (2010, June). The Facebook paradox: A comparison of the cultural beliefs of Facebook users. *Paper presented at the annual meeting of the International Communication Association, Suntec Singapore International Convention & Exhibition Centre, Suntec City, Singapore.*
- Peplau, L. A., Bikson, T. K., Rook, K. S. & Goodchilds, J. D. (1982). Being old and living alone. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*, (pp. 327-347). New York: Wiley.
- Peplau, L.A., & Perlman, D. (1982). Perspectives on loneliness. In L. A. Peplau, & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 1-18). New York: Wiley-Interscience.
- Perlman, D., & Peplau, L. A. (1984). Loneliness research: A survey of Empirical findings. In L. A. Peplau & S. Goldston (Eds.), *Preventing the harmful consequences of severe and loneliness* (pp. 13–46). Washington, DC: National Institute of Mental Health, Government Printing Office.

- Pinquart, M., & Sörensen, S. (2003). Risk factor for loneliness in adulthood and old age – A meta-analysis. In S. P. Shohov (Ed.), *Advances in Psychology Research, Vol. 19* (pp. 111-143). Hauppauge, NY: Nova Science Publishers.
- Plomin, R. & Daniels, D. (1987). Why are children in the same family so different from one another? *Behavioral and Brain Sciences, 10*, 1-16  
doi:10.1017/S0140525X00055941
- Polat, A. S. (1988). *Parental acceptance-rejection* (Unpublished Master's Thesis). Boğaziçi University, İstanbul.
- Ponzetti, J. J., & James, C. M. (1997). Loneliness and sibling relationships. *Journal of Social Behavior & Personality, 12*(1), 103-112.
- Qureshi, H., & Walker, A. (1989). *The caring relationship. Elderly people and their families*. Basingstoke: Macmillan.
- Richaud de Minzi, M.C., & Sacchi, C. (2004). Adolescent loneliness assessment. *Adolescence, 39*(156), 701-709.
- Roberts, E.L., & Bengtson, V.L. (1993). Relationships with parents, self-esteem, and, psychological well-being in young adulthood. *Social Psychology Quarterly, 56*, 263–277. Retrieved from <http://dx.doi.org/10.2307/2786663>
- Rokach, A. (1989). Antecedents of loneliness: A factorial analysis. *Journal of Psychology, 23*(4), 369- 384.
- Rokach, A., & Brock, H. (1998). Coping with loneliness. *The Journal of Psychology, 132*(1), 107-127.
- Rogers, C. (1994). *Etkileşim Grupları* (Erbil, H., Trans). Ankara: Ekin Yayınları
- Rohner, R. P. (1986). *The warmth dimension*. London: Sage.
- Rohner, R. P. (1986). *The warmth dimension: Foundations of parental acceptance-rejection theory*. Beverly Hills, CA: Sage Publications, Inc.

- Rohner, R. P. (1990). *Handbook for the study of parental acceptance and rejection* (3<sup>rd</sup> ed.). Storrs, CT: Rohner Research Publications
- Rohner, R. P. (2004). The parental "acceptance-rejection syndrome": Universal correlates of perceived rejection. *American Psychologist*, 58(8), 830-840. doi: 10.1037/0003-066X.59.8.830
- Rohner, R. P. (2004). The "parental acceptance-rejection syndrome": Universal correlates of perceived rejection. *American Psychologist*, 59, 830-840. Retrieved from <http://dx.doi.org/10.1037/0003-066X.59.8.830>
- Rohner, R. P. (2005). *Handbook of the study of parental acceptance and rejection* (4<sup>th</sup> ed.). Storrs, CT: Rohner Research Publications.
- Rohner, R. P., Khaleque, A. & Cournoyer, D. E. (2005). Parental acceptance-rejection: theory, methods, cross-cultural evidence, and implications. *Ethos*, 33,299–334. doi:10.1525/eth.2005.33.3.299
- Rohner, R. & Rohner, E. (1980). Antecedents and consequences of parental rejection: A theory of emotional abuse. *Child Abuse Neglect*, 4, 189-198.
- Rokach, A. (2004). Loneliness then and now: Reflections on social and emotional alienation in everyday. *Current Psychology*, 23, 24-40. doi: 10.1007/s12144-004-1006-1
- Rook, K.S. (1984). Promoting social bonding. Strategies for helping the lonely and socially isolated. *American Psychology*, 39 (12), 1389-1407.
- Rotenberg, K. J., & Hymel, S. (1999). *Loneliness in childhood and adolescence*. New York: Cambridge University Press.
- Rubenstein, C. M., & Shaver, P. (1980). Loneliness in two northeastern cities. In J. Hartog, J.R. Andy, & Y.A. Cohen (Eds.). *The anatomy of loneliness* (pp. 319-337). New York: International Universities Press.
- Rubenstein, C.M., & Shaver, P. (1982). The experience of loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 206-223). New York: Wiley.

- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminate validity evidence. *Journal of Personality and Social Psychology*, *39*(3), 472-480.
- Russell, D. W., Cutrona, C. E., McRae, C., & Gomez, M. (2012). Is loneliness the same as being alone?. *Journal of Psychology*, *146*, 7-22. doi:10.1080/00223980.2011.589414
- Scharf, M., Shulman, S., & Avigad-Spitz, L. (2005). Sibling relationships in emerging adulthood and in adolescence. *Journal of Adolescent Research*, *20*, 64-90. doi: 10.1177/0743558404271133
- Schneider, D. M. (1983). Conclusions. In M. Marshall (Ed.), *Siblingship in Oceania: Studies in the meaning of kin relations* (pp. 389-404). Lanham, MD: University Press of America.
- Schultz, N. R., & Moore, D. (1988). Loneliness: Differences across three age levels. *Journal of Social and Personal Relationships*, *5*, 275-284. doi: 10.1177/0265407588053001
- Schumacker, R. E. & Lomax, R. G. (1996). *A Beginner's guide to structural equation modeling*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Seginer, R. (1998). Adolescents' perceptions of relationships with older sibling in the context of other close relationships. *Journal of Research on Adolescence*, *8*(3), 287-308.
- Segrin, C. (2003). Age moderates the relationships between social support and psychosocial problems. *Human Communication Research*, *29*, 317-342. doi: 10.1111/j.1468-2958.2003.tb00842.x
- Serbest, S. (2010). *The influence of the university students' perceived paternal and maternal acceptance, father involvement and depressive symptoms on their resiliency* (Unpublished Master's Thesis). Boğaziçi University, İstanbul.

- Shaver, P., & Rubenstein, C. (1980). Childhood attachment experience and adult loneliness. In L. Whalen (Ed.), *Review of personality and social psychology* (pp. 42-73). Beverly Hills, CA: Sage.
- Sherman, A. M., Lansford, J. E., & Volling, B. L. (2006). Sibling relationships and best friendships in young adulthood: Warmth, conflict, and well-being. *Personal Relationships, 13*, 151–165. doi:10.1111/j.1475-6811.2006.00110.x
- Siegelman, M. (1966). Loving and Punishing Parental Behavior and Introversion Tendencies in Sons. *Child Development, 37*, 985-992. doi: 10.2307/1126620
- Skues, L. J., Williams, B., & Wise, L. (2012). The effects of personality traits, self-esteem, loneliness, and narcissism on Facebook use among university students. *Computers in Human Behavior, 28*, 2414-2419
- Spieker, S. J. & Bensley, L. (1994). Roles of living arrangements and grandmother social support in adolescent mothering and infant attachment. *Developmental Psychology, 30*(1), 102-111.
- Spraggins, A. (2009). *Problematic use of online social networking sites for college students: Prevalence, predictors, and association with well-being* (Unpublished Doctorate Dissertation). University of Florida, USA.
- Steinberg L. (1999). *Adolescence* (5th ed.). Boston: McGraw-Hill.
- Steinberg L. (2005). *Adolescence* (7th ed.). Boston: McGraw-Hill.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11*, 1–19. doi:10.1111/1532-7795.00001
- Stocker, C., & McHale, S. (1992). The nature and family correlates of preadolescents' perceptions of sibling relationships. *Journal of Social and Personal Relationships, 9*, 179-195. doi: 10.1177/0265407592092002

- Stocker, C. M. (1994). Children's perceptions of relationships with siblings, friends, and mothers: Compensatory processes and links with adjustment. *Journal of Child Psychology and Psychiatry*, 35(8), 1447-1459.
- Stocker, C. M., Lanthier, R. P., & Furman, W. (1997). Sibling relationships in early adulthood. *Journal of Family Psychology*, 11, 210-221. Retrieved from [http://www.du.edu/psychology/relationshipcenter/publications/stocker\\_lanthier\\_furman\\_1997.pdf](http://www.du.edu/psychology/relationshipcenter/publications/stocker_lanthier_furman_1997.pdf)
- Stocker, C. M., Burwell, R. A., & Briggs, M. L. (2002). Sibling conflict in middle childhood predicts children's adjustment in early adolescence. *Journal of Family Psychology*, 16(1), 50-57.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Sunar, D. (2002). Change and continuity in the Turkish middle class family. In E. Ozdalga & R. Liljestrom (Eds.), *Autonomy and dependence in family: Turkey and Sweden in critical perspective*, (pp. 217-237). Istanbul, Turkey: Swedish Research Institute.
- Sutton, L. (1996). Gender differences in sibling/parent relationships and adjustment. *Dissertation Abstracts International*, 57(3B), 2183.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6<sup>th</sup> ed.). Boston: Pearson.
- Tanaka, J. S. (1987). How big is big enough? Sample size and goodness of fit in structural equation models with latent variables. *Child Development*, 58, 134-146. doi: 10.2307/1130296
- Tubman, J.G. & Lerner, R.M. (1994). Continuity and discontinuity in the affective experiences of parents and children: evidence from the New York longitudinal study. *American Journal of Orthopsychiatry*, 64, 112-125. Retrieved from <http://dx.doi.org/10.1037/h0079488>
- Tucker, C., Barber, B., & Eccles, J. (1997). Advice about life plans and personal problems in late adolescent sibling relationships. *Journal of Youth and Adolescence*, 26(1), 63 – 76.

TURKSTAT. (2012, May 12). *Eđitim istatikleri, net okullařma oranları*. Retrieved from <http://www.tuik.gov.tr/Gosterge.do?id=3642&metod=IlgiliGosterge>

TURKSTAT. (2014, April 17). *Nüfus istatikleri, kadın doğum hızı*. Retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=18621>

Uruk, A. (2001). *Role of peers and families in predicting the loneliness level of adolescents* (Unpublished Master's Thesis ). Orta Doęu Teknik Üniversitesi, Ankara.

Uruk, A. & Demir, A. (2003). The Role of Peers and Families in Predicting the Loneliness Level of Adolescents. *Journal of Psychology*, 137(2), 179- 194.

Walker, J. M. (1990). *Effects of perceived parental rejection, maltreatment, and attachment style on self-esteem, loneliness, and psychological distress in college students: A causal model* (Unpublished Doctorate Dissertation). University of Southern California, USA.

Weeks, M. S., & Asher, S. R. (2012). Loneliness in childhood: Toward the next generation of assessment and research. *Advances in Child Development and Behavior*, 42, 1-40.

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.

White, L. K., & Riedmann, A. (1992). When the Brady Bunch grows up: Step/half- and full sibling relationships in adulthood. *Journal of Marriage and the Family*, 54, 197-208. doi: 10.2307/353287

Williams, E. G. (1983). Adolescent loneliness. *Adolescence*, 18(69), 51-66

World Health Organization (2015, May 27). Adolescent Development. Retrieved from the World Health Organization website: [http://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/dev/en/](http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/)

Woodward, J., & Frank, B. (1988). Rural adolescent loneliness and coping strategies. *Adolescence*, 23, 559-565.

- Van Tilburg, T. (1988). *Obtained and desired social support in association with loneliness* (Unpublished Doctorate Dissertation). Vrije Universiteit, Amsterdam.
- Van Tilburg, T. (1990). The size of the supportive network in association with the degree of loneliness. In C. P. M. Knipscheer & T. C. Antonucci (Eds.), *Social network, research: Substantive issues and methodological questions* (pp. 137-150). Lisse, the Netherlands: Swets & Zeitlinger.
- Volling, B. L., & Blandon, A. Y. (2003). *Positive indicators of sibling relationship quality: Psychometric analyses of the Sibling Inventory of Behavior (SIB)*. Paper presented at the Child Trends' Positive Outcomes Conference, Washington, DC. Retrieved from <http://www.childtrends.org/files/vollingblandon.pdf>
- Yalom, I. D. (1980). *Existential psychotherapy*. New York, NY: Basic Books
- Yavuzer, H. (2002). *Child psychology*, (22. ed.). İstanbul: Remzi Kitabevi.
- Yeh, H. C. & Lempers, J. (2004). Perceived sibling relationships and adolescent development. *Journal of Youth and Adolescence*, 33(2), 133–147.
- Yilmaz, B. & Erkman, F. (2008) Understanding Social Anxiety through Adolescents' Perceptions of Interparental Conflict and Parental Rejection. In F. Erkman (ed.), *Acceptance: The essence of peace* (pp. 67-96). İstanbul: Turkish Psychological Association.
- Young, J.E. (1982). Loneliness, depression, and cognitive therapy. In L.A. Peplau & D. Perlman (Eds.). *Loneliness: A sourcebook of current theory, research and therapy* (pp. 379-406). New York: John Wiley & Sons.

APPENDICES

Appendix A

Approval Letter from Middle East Technical University Human Subjects Ethics Committee

SOSYAL BİLİMLER ENSTİTÜSÜ  
GRADUATE SCHOOL OF SOCIAL SCIENCES

DUMLUPINAR BULVARI  
06800 ÇANKAYA/ANKARA  
T : +90 312 210 20 54  
F : +90 312 210 37 63  
\*benli@metu.edu.tr  
www.sben.metu.edu.tr

ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
MIDDLE EAST TECHNICAL UNIVERSITY

Sayı : 17725172/400-612-1195  
Konu : Ayşe Ulu hk.

28.02.2014

REKTÖRLÜK MAKAMINA,

Rehberlik ve Psikolojik Danışmanlık Anabilim Dalı Yüksek Lisans Programı öğrencisi Ayşe Ulu'nun 2013-2014 eğitim öğretim yılı II. döneminde yüksek lisans tezi kapsamında "Yalnızlığı Yordayıcıları Olarak Ebevenylerden Algılanan Kabul-Red Düzeyi ile Kardeş İlişkisi Kalitesinin İncelenmesi" başlıklı çalışmasına bağlı ekli listede belirtilen Ankara İl Millî Eğitim Müdürlüğüne bağlı ilköğretim okulunda anket uygulaması yapması için görevlendirme başvurusu incelenmiş; ilgili Anabilim Dalı Başkanlığının görüşüne dayanarak adı geçen öğrencinin isteği doğrultusunda görevlendirilmesine karar verilmiştir.

Gereği için bilgilerinize saygılarımla arz ederim.

*Meliha Altunşik*  
Prof. Dr. Meliha Altunşik  
Sosyal Bilimler Enstitüsü Müdürü

Eklr: YKK  
EABD görüşü  
Öğrenciye ait ilgili evraklar

*Örbd*  
Bilgi ve gereği ricasıyla 4/03

Etik Komite Onayı

Uygundur  
*Sanan Örgen*

112  
6/3

## Appendix B

### Permission Letter from Ankara Provincial Directorate of National Education



**T.C.  
ANKARA VALİLİĞİ  
Milli Eğitim Müdürlüğü**

ÖĞRENCİ İŞLERİ  
DAİRESİ BAŞKANLIĞI  
Ev. Arç. Hd. Şube

Sayı : 14588481/605.99/1190903 20/03/2014  
Konu: Araştırma izni

**ORTA DOĞU TEKNİK ÜNİVERSİTESİNE**  
(Öğrenci İşleri Daire Başkanlığı)

İlgi: a) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü'nün 2012/13 nolu Genelgesi.  
b) 10/03/2014 tarihli ve 2852 sayılı yazımız.

Üniversiteniz Yüksek Lisans Öğrencisi Ayşe ULU' nun "**Yalnızlığı yordayıcıları olarak ebeveynlerden algılanan kabul-red düzeyi ile kardeş ilişkisi kalitesinin incelenmesi**" başlıklı tezi kapsamında çalışma yapma talebi Müdürlüğümüzce uygun görülmüştü ve araştırmanın yapılacağı İlçe Milli Eğitim Müdürlüğüne bilgi verilmiştir.

Anket formlarının (9 sayfa) araştırmacı tarafından uygulanması yapılacak sayıda çoğaltılması ve çalışmanın bitiminde iki örneğinin (od ortamında) Müdürlüğümüze Strateji Geliştirme Bölümüne gönderilmesini arz ederim.

Hakan GÖNEN  
Müdür a.  
Şube Müdürü

Güvenli Elektronik İmza  
Aşk ile Ayrıdır.  
20.03.2014  
  
**Yaşar SUBAŞI**  
Şef

24.03.2014-5294

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Bu belge, 5070 sayılı Elektronik İmza Kanununun 5 inci maddesi gereğince güvenli elektronik imza ile imzalanmıştır. Erişim için <http://evm.ankara.meb.gov.tr> adresinden 10e3-0608-3a08-08ed-bc71 kodu ile yapılabilir.

Konya yolu Başkent Öğretmen Evi arkası Beşevler ANKARA  
e-posta: itaistik06@meb.gov.tr Ayrıntılı bilgi için: Emine KONUK  
Tel: (0 312) 221 02 17/135

## Appendix C

### Sample Items from UCLA Loneliness Scale

Aşağıda çeşitli duygu ve düşünceleri içeren ifadeler verilmektedir. Sizden istenilen her ifade de tanımlanan duygu ve düşünceyi ne sıklıkta hissettiğinizi ve düşündüğünüzü her biri için tek bir rakamı daire içine alarak belirtmeniz.

	Ben bu durumu HİÇ Yaşamadım	Ben bu durumu NADİREN Yaşarım	Ben bu durumu BAZEN Yaşarım	Ben bu durumu SIK SIK Yaşarım
Çevremdeki insanlarla bir ortak yönüm var.	1	2	3	4
Kendimi grubun dışına itilmiş hissediyorum.	1	2	3	4
Dışa dönük bir insanım.	1	2	3	4
Sosyal ilişkilerim yüzeyseldir.	1	2	3	4

## Appendix D

### Sample Items from Turkish Maternal Acceptance-Rejection Questionnaire (Child-Short Form)

Bu sayfada anne-çocuk ilişkisini içeren ifadeler bulunmaktadır. Bu ifadelerin annenizin size olan davranışlarına uygun olup olmadığını düşünün. Her ifadeyi okuduktan sonra o ifade annenizin size karşı davranışları konusunda ne kadar doğru olduğunu, “Hemen hemen her zaman doğru”, “Bazen doğru”, “Nadiren doğru” veya “Hemen hemen hiçbir zaman doğru değil” seçeneklerinden birini seçerek işaretleyiniz.

	Annem için doğru		Annem için doğru değil	
	Hemen her zaman doğru	Bazen doğru	Nadiren doğru	Hemen hemen hiçbir zaman doğru değil
<b>ANNEM</b>				
Benim hakkımda güzel şeyler söyler.				
Bana hiç ilgi göstermez.				
Yaptığım şeylerle gerçekten ilgilenir.				
Hak etmediğim zaman bile bana vurur.				

## Appendix E

### Sample Items from Turkish Paternal Acceptance-Rejection Questionnaire (Child-Short Form)

Bu sayfada baba-çocuk ilişkisini içeren ifadeler bulunmaktadır. Bu ifadeleri babanızın size olan davranışlarına uygun olup olmadığını düşünün. Her ifadeyi okuduktan sonra o ifade babanızın size karşı davranışları konusunda ne kadar doğru olduğunu, “Hemen her zaman doğru”, “Bazen doğru”, “Nadiren doğru” veya “Hemen hemen hiçbir zaman doğru değil” seçeneklerinden birini seçerek işaretleyiniz.

	Babam için doğru		Babam için doğru değil	
	Hemen her zaman doğru	Bazen doğru	Nadiren doğru	Hemen hemen hiçbir zaman doğru değil
<b>BABAM</b>				
Bana çok ilgi gösterir.				
Bana istenmediğimi belli eder.				
Yaptığım şeylerle gerçekten ilgilenir.				
Bana karşı yumuşak ve iyi kalplidir.				

## Appendix F

### Sample Items from Turkish Sibling Relationship Quality Questionnaire

Lütfen aşağıdaki sorularda 'kardeşin' diye bahsedilen kişinin kim olacağını ankete başlamadan önce aşağıda belirtiniz ve soruları o kardeşinizi düşünerek yanıtlayınız.

	Hemen hemen hiç	Oldukça az	Biraz	Oldukça fazla
Kardeşin sana ne yapman gerektiğini ne kadar söyler?				
Kardeşinle senin aranda ne kadar güçlü bir sevgi duygusu vardır?				
Kardeşin sana kendi başına yapamadığın şeylerde ne kadar yardımcı olur?				
Sen ve kardeşin ne kadar bir şeyleri birbirinizden daha iyi yapmaya çalışırsınız?				

## Appendix G

### Demographic Information Form

1. Okul Türü (Anadolu, Fen, Meslek Lisesi gibi) :
2. Sınıfınız:
3. Seçtiyseniz bölümünüz:
4. Yaş:
5. Cinsiyetiniz: Kız  Erkek
6. Anneniz hayatta mı? Evet  Hayır
7. Babanız hayatta mı? Evet  Hayır
8. Anne-Babanız : Evli  Boşanmış  Diğer
9. Anneniz: Öz  Üvey
10. Babanız: Öz  Üvey
11. **Anninizin eğitim düzeyi** **Babanızın eğitim düzeyi**

Okur-yazar deĞİL	<input type="checkbox"/>	Okur-yazar deĞil	<input type="checkbox"/>
Okur-yazar	<input type="checkbox"/>	Okur- yazar	<input type="checkbox"/>
İlkokul mezunu	<input type="checkbox"/>	İlkokul mezunu	<input type="checkbox"/>
Ortaokul mezunu	<input type="checkbox"/>	Ortaokul mezunu	<input type="checkbox"/>
Lise mezunu	<input type="checkbox"/>	Lise mezunu	<input type="checkbox"/>
Yüksekokul mezunu	<input type="checkbox"/>	Yüksekokul mezunu	<input type="checkbox"/>
Üniversite mezunu	<input type="checkbox"/>	Üniversite mezunu	<input type="checkbox"/>
Yüksek lisans mezunu	<input type="checkbox"/>	Yüksek lisans mezunu	<input type="checkbox"/>
Doktora mezunu	<input type="checkbox"/>	Doktora mezunu	<input type="checkbox"/>
Bilmiyorum	<input type="checkbox"/>	Bilmiyorum	<input type="checkbox"/>
12. Kardeşiniz var mı(var ise sayısını belirtiniz)? ..... tane  
Evet  Hayır
13. Ailenizin kaçınıcı çocuĐusunuz? .....

## Appendix H

### Turkish Summary

#### 1. GİRİŞ

Yalnızlık, bireyler tarafından öznel veya nesnel olarak tek başına olmaktan ve/veya kendini topluluk içinde yalnız algılıyor olmaktan kaynaklanan evrensel ve karmaşık bir duygudur. Peplau ve Perlman (1982) tanımına göre yalnızlık, bireyin kişiler arası ilişkilerinde olmasını arzu ettiği durumla var olan durum arasında fark olduğu takdirde yaşayacağı olumsuz durumdur. Tanıma bakıldığında yalnızlığın olumsuz, istenmeyen ve acı veren duyguları içerdiği görülmektedir. Ayrıca bilişsel bir unsur olarak bireylerin kendilerini yalnız hissetme algısının önemi de vurgulanmaktadır.

Ergenlik dönemi bireyin hayatında fiziksel, psikolojik ve sosyal açılardan önemli değişimlerin gerçekleştiği bir dönemdir (Frisen, 2007). Değişim sürecinin stresli bir şey olduğu düşünülecek olursa, ergenlik dönemi de hızlı değişimlerin olduğu, stresli bir dönemdir. Bu değişimlerin hızla başarılmasının gerekliliği göz önünde bulundurulduğunda, ergenlik döneminin ne ölçüde stresli dönem olduğu görülmektedir. Ayrıca, yaygın, olağan veya olağandışı yaşantılardan kaynaklanabilen stres de bu değişim stresine eklenebilir. Örneğin, ergenler aile işlevlerinin iyi olduğunu belirtse de yeni başlayan bağımsız olma çabaları, özerkliği kazanma ile sınırları ve kuralları zorlamayı da içeren gerginlikler aile yaşantılarında oldukça yaygın görülür (Coleman, 2011). Çocukluk döneminden çıkıp girmiş oldukları ergenlik dünyası onlarda tam bir yetişkin olma özelliklerine henüz sahip olamama durumu onlarda yetersizlik duygusu ve buna bağlı olarak bir karmaşa yaratabilmektedir. İşte bu durumda, bir taraftan ergenler bedenlerinin ve psikolojik durumlarının değişiyor olmasına alışmaya çalışırken, bir yandan da değişen sosyal yapıya ayak uydurmaya çalışmaktadır.

Ergenlik veya erken yetişkinlik dönemine geçiş içinde olan lise öğrencilerinde genel olarak bu zorluklarla başa çıkmak önemli bir gelişim görevi olmaktadır. Ergenlik kesinlikle sadece bir defaya mahsus olan gelişimsel bir dönemin veya istikrarsızlığın

daha baskın olduđu bir dönem olmayıp yaşamın diđer geçişlerinde (örneğin üniversiteden mezun olma, işe başlama, evlilik) olduđu gibi uyum gerektiren diđer geçiş dönemlerine benzemekte ve yaşam boyunca bir çok defa olan geçişlerden biri olarak ele alınmaktadır. Bu deęişim ve geçişle yaşanan güçlükler kişilerarası ilişkinin önemini daha da arttırmakta, genç bireylerin kararsızlık ve paylaşma isteęi, onları çoęunlukla akran gruplarına yönlendirmektedir. Bu yönlendirmenin yanı sıra, ergenler ebeveynlerinden tamamen vazgeçmeyip ebeveynlerinin onlarla birlikte ya da onların arkasında olup olmadıklarını bilmek isterler. Eđer ebeveynlerinin desteęini, ilgisini almadığını hissedersen aileden kaynaklanan yalnızlık duygusu yaşanabilir. Öncelikli olarak kendilerine birinci derecede yakın hissettikleri kişiler her zaman olmasa da çoęu zaman kendi aile bireyleri olacaktır. 21. yüzyılın şafağında dünya aile yapısı, kardeş ve ebeveyn-çocuk ilişkisi açısından deęişimler gözlenmektedir. Deęişikliklere rağmen kişinin evinin insana güzel ve güvenli gelmesi, sığınılacak bir liman olduđu düşüncesi devam etmektedir. Eđer aileler ergene destek kaynağı olmazlarsa, sadece ergenlerin yalnızlık duygusunu yaşamalarını kolaylaştırmış olmaz; yaşayacakları yalnızlık duygusunu derinleştirmiş olurlar. Bu yönüyle aile ve kardeş ilişkilerinin nitelięi ergenin psikolojik saęlığı açısından belirleyicidir.

Aile kurumu sosyalleşme ve toplumsal davranışları öğrenme açısından çok önemli bir yere sahiptir. Aileler çocukları kabul ettiklerini ve onların yanında olduklarını belirtmelerinde farklılıklar bulunmasına rağmen, çocukların ailesi tarafından desteklenme onlardan sıcaklık ve yakınlık alma ihtiyacı deęişmez. Kardeşler de birbirlerinin sosyalleşme sürecinde yadsınamaz bir öneme sahiptir. Her ne kadar arkadaş ve okul çevresi gençlerin duygu ihtiyaçlarını kısmen karşılasa da ebeveyn-çocuk ve kardeş ilişkisi, önemini devam ettirmektedir. Kız ve erkek kardeşlerin varlığı dostluk/yoldaşlık, yardım ve duygusal destek açısından önemli bir kaynaktır. Büyük kardeşler koruyucu, öğretmen veya rol model olmakta hatta bazen uzakta olan veya olmayan ebeveynlerin yerini doldurmaya çalışmaktadırlar (Furman ve Buhrmester, 1985).

Ebeveyn kabul ret kuramına göre ebeveyn den algılanan kabul durumu bireyin yaşam dönemine göre deęişkenlik göstermektedir. Birçok kuram daha çok erken çocukluk ve

bebeklik hatta bebekliğin ilk ayları üzerinde yoğunlaşmış anne yoksunluğu ve anneden ayrılmayla ilgili hassasiyet üzerinde dururken, Rohner (1986), bireylerin gelişimsel değişimlerine bağlı olarak yalnız hissetmeye olan yatkınlığını ayrı ayrı ele almaktadır. Bu gelişimsel dönemler; bebeklik, çocukluk ve ergenlik dönemleridir. Bu çalışmada, esas konu ve özne ergenlerdir. Rohner, ergenlik döneminde bireylerin reddedilmenin etkilerini bastırmak için daha çok fiziksel sosyal ve bilişsel, kaynaklara sahip olduklarını ancak bu etkilerin ve bastırma şekillerinin çocukluktan ergenliğe ve hatta yetişkinliğe kadar devam edecek olursa sancılı sonuçlara yol açabileceğini belirtmektedir. Sancılı sonuçların belki en önemlisi de ebeveynlerinden çocukluğunda red duygusu deneyimi olanların, etkilerini yetişkinliğine taşıyıp bu döngüyü çocuklarına yansıtıyor olmasıdır (Rohner, 1986).

Ergenlerin ebeveynleri tarafından kabulü edildiklerini ve onlarla bir olduklarını algılamaları ile özgüvenleri, kendi kimliğini belirlemeye yönelik keşifleri, empatik davranışları arasında olumlu ilişkiler vardır (Jackson, Dunham, ve Kidwell, 1990). Ergenlerin fikirlerini belirtmesine fırsat tanıyan ya da bunu teşvik eden ebeveynler kimlik keşiflerini sağlıklı yapabilen çocuklar yetiştirirler (Grotevant ve Cooper, 1985). Ebeveyn sıcaklığı hisseden ergenlerin toplumsal olarak kabul görmeyen davranışları daha az gösterdikleri, psikolojik olarak kontrolün altında olmasının da çocukların içe yönelim davranışlarını arttırdığı bulunmuştur (Doyle ve Markiewicz, 2005).

Kardeş ilişkileri ebeveyn, eş ve çocuklarla olan ilişkilere kıyasla, bir çok bireyin yaşayacağı en uzun ömürlü ilişki olma potansiyelinde (Bank ve Kahn, 1997) olup, genlerdeki ve aile yaşantılarındaki ortaklık özelliği taşıması açısından da arkadaş ilişkilerinden farklı özellik göstermektedir. Kısacası kardeş ilişkileri hem ebeveynlerle olan hem de arkadaşlarla olan ilişkilerden daha farklı niteliklere sahiptir. Kardeş ilişkileri samimiyet ve önemi açısından ebeveyn ilişkisine benzerken; güç statüsü, yardım ve tatmin bakımlarından da arkadaş ilişkilerine benzer özelliktedir (Furman ve Buhrmester, 1985).

Ebeveyn tutumlarının kardeş ilişkileri üzerinde etkisi bulunmaktadır. Sargınlık, uyum ve sevgi içeren ebeveyn tutumu algılamayla, daha sıcak ve olumlu kardeş ilişkisi

bağlantılıdır. Buna karşılık, ebeveynlerinden ret, ihmal ve saldırganlık algılayanlar, kardeşleriyle daha çatışmalı ve saldırgan ilişki içerisinde olurlar. Çocuklara yönelik haksız ve eşitliksiz tutumlar da kardeşler arası bağı olumsuz yönde etkiler ve kardeşler arasında yüksek düzeyde çatışmaya sebep olmaktadır (Oliva ve Arranz, 2005). Ebeveynlerden algılanan arttırılmış bağımsızlık, yüreklendirme ve kabul duygusu, kardeşler arası anne rekabetini düşürür ve kardeşler arası iletişimin kalitesini arttırır (Brussoni, 2000).

İnsan hayatının uzun ve zorlu süreçlerinden biri olan ergenlik çoğunlukla tutarsız, kararsız ve karışık duyguların deneyimlendiği bir dönemdir (Yavuzer, 2002) Bu süreçte aile tutumları yalnızlığa sebep olan önemli bir faktör olarak kabul edilir. Yalnızlık üzerinde aile desteğinin etkisini açıklayan bir çok araştırma bulunmaktadır (Eker ve Arkar, 1995; Duru 2005; Eker ve ark., 2001). Gelişmekte olan yetişkinlik döneminde, gençlerin iyi oluşları onların aile ilişkileri ile ilişkilidir (Roberts ve Bengtson, 1993). Ebeveyn çocuk ilişkisinde katılım, sıcaklık ve destek seviyeleri gelişen yetişkinin psikolojik uyumunu etkileyebilir (Tubman ve Lerner, 1994).

Çocuklar ve ergenler, aile üyelerini özellikle anne-baba ve kardeşlerini duygusal olarak uzak, samimiyetten yoksun ve destek vermeyen kişiler olarak hissedenler evlerinde yabancılaşmayı yaşadıklarını bildirmişlerdir. Evde kimsenin onları dinlemediğini ya da onların günlük hayatıyla ilgilenmediğini sezerlerse, kendilerini ailelerinden sosyal olarak yalıtılmış hisseder, sıklıkla duygusal iletişimini azaltırlar (Margalit, 2010).

Kardeş desteğine sahip olmanın yüksek benlik saygısı, yaşam doyumu ile düşük yalnızlık düzeyi ile anlamlı düzeyde ilişkili olduğu bulunmuştur. Ayrıca, kardeş desteğinin anne desteğinin düşük olduğu durumlarda bireyde ortaya çıkabilecek depresyon ve özgüven problemlerini telafi edici etkisi vardır (Milevsky, 2005).

Ergenin olgunlaşması, ebeveynlerin baskınlığını tehdit etmeye başlayınca çatışma ve ebeveynlerden uzaklaşma ortaya çıkar (Lerner ve Steinberg, 2009). Eğer ergen bu ebeveyn baskınlığını belli bir düzeyin üstünde yaşarsa, yönünü ailesinden, onu anlayan

ve teselli edebileceğini düşündüğü arkadaşlarına çevirebilir. Bu durum ergenlerin yaşamlarında arkadaşlarının en etkili yere sahip olduğu anlamına gelmez. Araştırmalar ebeveynlerin ve akranların ergen üzerindeki etki alanını ayırt etmiştir. Boş zamanlarını geçirmek gibi yaşam tarzı ile ilgili konularda daha çok akran etkisi görülürken, gelecek de dahil olmak üzere okul ve kariyer tercihlerinde daha çok ailelerinden etkilenmektedirler (Collins ve Steinberg, 2006).

Yukarda belirtilen bilgilerin ışığında bireylerin psikolojik sağlığı açısından bu derece önemli bir dönemde bulunan ergenlikte, kardeş ve ebeveyn ilişkilerini kapsayan aile ilişkilerinin yalnızlık bağlamında çalışılması hem kuramsal hem de uygulamaya yönelik bilgi birikiminin oluşması açısından önemli görülmektedir.

### **1.1 Çalışmanın amacı**

Bu çalışmanın amacı, cinsiyet, yaş, sınıf, okul türü, alan türü, doğum sırası ve kardeş sayısı değişkenleri kontrol edilerek anne ve babadan algılanan kabul-ret düzeyi ile kardeş ilişkisinin niteliğinin gençlerdeki yalnızlık düzeyini ne ölçüde yordadığını belirlemektir.

### **1.2 Çalışmanın önemi**

Bu çalışma, Türkiye'de yalnızlık üzerine ebeveyn kabul düzeyinin yordayıcı değerini araştırmak için yapılan ilk girişimlerden biri olması ve aynı zamanda anne ve baba puanlarını ayrı ayrı değerlendirmesi açısından önem taşımaktadır. Ergen ebeveynleri üzerine yapılan çalışmalarda daha çok odak noktası annelerdir, bir kısmı da anne ve babanın ortalamasını alarak ebeveynleri genel olarak raporlamaktadır ve çok azı anne ve babayı ayrı ayrı ele almaktadır (Lerner ve Steinberg, 2009).

Aile ilişkileri konu başlığı altında, aile ilişkilerinin kardeş ilişkileri boyutunu içeren çok fazla çalışmaya rastlanmamaktadır. Kardeş ilişkisi kalitesi Türkiye'de yalnızlık bağlamında incelenmiş değildir. Kardeş ilişkileri ile ilgili yapılan çalışmaların birçoğunun engelli bir kardeşe sahip olma konusunu incelediği görülmektedir.

Ergenlik döneminde kardeş ilişkilerinin niteliği ile ilgili çalışmalarda alan yazında bir boşluk vardır. Türkiye’de kardeş ilişkileri niteliği üzerine çok az çalışma yapılmıştır. Daha çok doğum sırası, yaş farkı ve kardeş cinsiyeti gibi değişkenler incelenmiştir. Bu çalışmanın sonuçları psikolojik danışmanların ve ergen çocuklu ailelerin, yalnız bireylere müdahale etme çabalarına katkı yapacaktır.

## **2. YÖNTEM**

Bu araştırmada nicel araştırma yöntemlerinden biri olan değişkenler arasında anlamlı düzeyde ilişki olup olmadığına bakan ilişki araştırma yöntemi kullanılmıştır (Frankel, Wallen, ve Hyun, 2012). Bağımlı değişken yalnızlık, yordayıcı değişkenler ise algılanan anne-baba red-kabulü, kardeş ilişkisi kalitesi ve demografik bilgilerdir.

### **2.1 Araştırma Sorusu**

Bu çalışmada ‘Cinsiyet, yaş, sınıf, okul türü, alan türü, doğum sırası ve kardeş sayısı kontrol edildiğinde anne ve babadan algılanan kabul-red puanları ile kardeş ilişkisi kalitesi lise öğrencilerinin yalnızlığını ne derecede yordamaktadır?’ sorusunun yanıtı araştırılmıştır.

### **2.2 Örneklem**

İki aşamalı, seçkisiz küme örnekleme kullanılmıştır. Milli Eğitim Bakanlığı verilerine göre Ankara’da farklı türlerde 353 tane lise seviyesinde okul vardır (MEB, 2014). Hedef popülasyon Ankara’nın on değişik ilçesinde bulunan bütün devlet liselerinde okuyan öğrencilerdir. Örneklem oluşturulurken, Ankara’nın 10 değişik ilçesinde (Altındağ, Bala, Çankaya, Etimesgut, Gölbaşı, Keçiören, Mamak, Pursaklar, Sincan ve Yenimahalle) bulunan bütün devlet liselerinin olduğu listeden SPSS programı aracılığıyla 50 okul seçilmiştir.

Okullar türüne göre gruplandırıldığı zaman Anadolu liselerinden toplanan veriler çalışmanın büyük çoğunluğunu ve % 73,8’ini oluştururken, meslek liseleri % 25,1, % 1,1’i ise fen liseleri ve sosyal bilimler liselerinden oluşmaktadır. Bu okullardan da ortalama üçer sınıfa envanterler uygulanmıştır.

### 2.2.1. Katılımcıların Demografik Özellikleri

Yalnızlık, ebeveyn kabulü ve kardeş kalitesi arasındaki ilişkiyi incelemek için 1451 öğrenci (779 kız, 672 erkek) üzerinde çalışma yapılmıştır. Yaş aralığı 14 ile 19 arasında değişkenlik göstermiştir. Katılımcıların yaş ortalaması ise 16,17, standart sapması ise 1,08'dir. Öğrencilerin sınıf düzeylerine bakıldığında 499 öğrenci 9.sınıf (% 34,4), 376 kişi 10. sınıf (% 25,9), 493 kişi 11. sınıf (% 34) ve 12. sınıflardan ise sadece 83 öğrenci (% 5,7) bulunmaktadır.

### 2.4 Veri Toplama Araçları

Veriler, kişisel bilgileri içeren demografik bilgi formu, UCLA Yalnızlık Ölçeği, Anne-Baba Kabul Red Ölçeği-Çocuk Kısa formu ve Kardeş İlişkisi Kalitesi Ölçeği kullanılarak toplanmıştır.

*The University of California Los Angeles (UCLA) Yalnızlık Ölçeği:* Ölçek, 20 sorudan oluşan 4'lü Likert tipi bir öz-bildirim ölçeğidir. Ölçekte 10 direkt, 10 ters kodlanmış maddeler mevcuttur. Ölçekten alınabilecek en düşük puan 20, en yüksek puan ise 80'dir.

Türkiye'de UCLA Yalnızlık Ölçeğinin güvenilirlik ve geçerlik çalışması Demir (1989) tarafından yapılmıştır. İç-güvenirlik katsayısı .96, test-tekrar-test yöntemi ile 5 haftalık süre zarfında korelasyon katsayısı .94 çıkmıştır. Ölçekte bulunan her soru sosyal ilişkilerle ilgili olup ne kadar sıklıkla söz konusu durumla karşılaştıkları sorulmaktadır. Bu çalışmada ise Cronbach alfa katsayısı .86 çıkmıştır. .70'den sonrası yeterli olarak kabul gördüğü (Hair et al, 2010) göz önüne alınırsa, çalışmada çıkan katsayı yeterli bulunmuştur.

*Ebeveyn Kabul Red Ölçeği-Çocuk-Kısa Form-EKRÖ:* EKRÖ Kısa Formu anket tipi bir öz-bildirim ölçeğidir. EKRÖ ilk defa Rohner, Saavedra ve Granum tarafından 1971 yılında geliştirilmiş olup 1980 yılında revize edilmiştir (Yılmaz ve Erkman, 2008). EKRÖ'nün üç çeşidi bulunmaktadır; yetişkin, ebeveyn ve çocuk. Bu çalışmada çocuk formu kullanılmıştır. Maddeler, anne ve babanın davranışlarının çocuğun hislerini nasıl etkilediğini sormaktadır (Rohner, 2003).

Çocuk EKRÖ Kısa Form 24 sorudan oluşmaktadır.4'lü likert tipi puanlamada, 4 = her zaman doğru, 1 = asla doğru değil anlamlarına gelmektedir. 13. soru ters puanlanmaktadır. Bu ölçekten alınan toplam puan ne kadar yüksek çıkarsa çocuğun algıladığı red düzeyinin o kadar yüksek çıktığı anlamına gelmektedir. 24 puan maksimum algılanan sevgi ve kabul düzeyini ifade etmektedir. 96 puan ise maksimum düzeyde red algısı olduğunu göstermektedir (Serbest, 2012). Sıcaklık/yakınlık, düşmanlık/öfke, ilgisizlik/ihmalkarlık ve ayırt edilememiş red düzeyi olmak üzere dört alt boyuttan oluşmaktadır.

EKRÖ Çocuk Kısa Formu, anne versiyonunun iç tutarlık açısından güvenilirliğine bakıldığında madde toplam korelasyonu .20 ile .72 arasında değişirken Cronbach alfa .89 çıkmıştır (Yılmaz ve Erkman, 2008). Baba versiyonunun madde toplam korelasyonu .24 ile .71 arasında değişkenlik gösterirken, Cronbach Alfa katsayısı .90 çıkmıştır. Bu çalışmada, Cronbach Alfa katsayısı anne ve baba formlarının alt ölçekler için ayrı ayrı hesaplanmış ve değerler.70 iç tutarlık katsayısı için alt limitiyle değerlendirilmiş (Hair ve ark., 2010) ve ölçeğin bütün alt boyutlarının yeterli değerlere ulaştığı görülmüştür.

*Kardeş İlişkisi Kalitesi Ölçeği:* 1985 yılında Furman ve Buhrmester tarafından geliştirilmiş olan Kardeş İlişkisi Kalitesi Ölçeği, 48 maddeli, 5'li likert tipi bir öz-bildirim ölçeğidir. Bu ölçekte, her birisi 3 soru ile temsil edilen 16 kardeş ilişkisinin kalitesine yönelik özellikleri ölçülmektedir. Bu alt ölçekler yardımlaşma, annenin yanlı davranışı, babanın yanlı davranışı, kardeşle ilgilenme, kardeşin ilgilenmesi, kardeşin baskın olması, kardeşten baskın olma, sevgi, arkadaşlık, düşmanlık, benzerlik, samimiyet, rekabet, kardeşe hayranlık duyma, kardeşin hayranlık duyması ve tartışmadır. Kardeş İlişkisi Ölçeği dört açıdan değerlendirme yapmaktadır; yakınlık, statü/güç, çatışma ve rekabet. Virna Apalci (1995) ölçeği Türkçe'ye uyarlamıştır.

Bu çalışmada Cronbach alfa değerleri sıcaklık/yakınlık için .95, çatışma için .85, rekabet için .77, güç için .78'tir. ayrıca doğrulayıcı faktör analizi sonuçları da kabul edilebilir değerler arasında çıkmıştır.

## 2.5 Veri Toplama Süreci

Bu çalışmanın verileri, 2014 yılı bahar döneminde Ankara'daki lise öğrencilerine anket uygulanarak toplanmıştır. Veriler toplanmaya başlamadan önce Orta Doğu Teknik Üniversitesi İnsan çalışmaları Etik Kurulundan ve Milli Eğitim Bakanlığı'ndan gerekli izinler alınmıştır. Veriler gönüllü olan okullardan Mart ve Nisan aylarında toplanmıştır. Anketin uygulanması yaklaşık bir ders saati boyunca sürmüştür. Soruların en başında, çalışmanın amacı ve anketin nasıl doldurulması gerektiğiyle ilgili gerekli bilgiler yer almış, özellikle, öğrencilerden dürüst olmaları konusunda ricada bulunmuş ve gizlilik konusuyla ilgili gerekli bilgilendirmeler yapılmıştır. Katılımcıların çalışmadan istedikleri zaman ayrılacakları bilgisi de verilmiştir.

## 2.6 Veri Analizi

Bu çalışmada açıklayıcı ve çıkarımsal istatistik yöntemleri kullanılmıştır. Analizler IBM Statistical Packages of Social Sciences 22 (SPSS) and AMOS 20.0 programlarıyla yapılmıştır. Ana analizlere başlamadan önce veriler parametrik olup olmadığı konusunda test edilmiştir.

Kardeş ilişkisi kalitesine bakıldığından dolayı katılımcılardan kardeşi olmayanlar çalışmadan çıkartılmıştır. Yalnızlık puanı, anne baba ret-kabul puanı ve kardeş kalitesi puanı için ise % 10'dan fazla eksik veri içeren 272 veri çalışmadan çıkarılmıştır.

Bağımlı değişkenleri ölçmek için Likert tipi ölçek kullanılmıştır. Bağımsız değişkenler, oran ölçeği tarafından ölçülmekte olup kesintisiz verilerdir ve üç grup puanlama karşımıza çıkmaktadır. Birincisi, anne puanı; ikincisi, baba puanı ve üçüncü ise kardeş puanlarıdır. Bağımlı değişken ise yalnızlıktır.

İlk olarak, ana analizi yapılmadan önce varsayımlar kontrol edilmiş ve geçerliği kabul edilmiştir. Ardından, çoklu hiyerarşik regresyon analizi kullanılarak değişkenler arasında analiz yapılmıştır. Çalışmada bir tane kesintisiz bağımlı değişken ve iki taneden fazla bağımsız değişken olduğu için çoklu regresyon modeli uygun

olmuştur. Yaş, sınıf, okul türü, alan türü, kardeş sayısı ve doğum sırası değişkenlerinin ikiden fazla kategorisi bulunduğundan boş kodlama (dummy coding) kullanılmıştır.

## 2.7 Çalışmanın Kısıtlılıkları

Çalışmanın deseni ve örneklemin özellikleri açısından bazı kısıtlılıklar mevcuttur. En muhtemel sorunlar; katılımcıların özellikleri, verilerin toplandığı ortamların farklı farklı olması sorunu, öz-bildirim tekniğinin kullanılmış olması ve örneklemin seçilme aşamasıdır. Kullanılan kardeş ölçeğinin doğası gereği bir katılımcı için, sadece bir kardeşi hakkında görüş alınıyor olması diğer kardeşleri ile ilişki kalitesini ölçmeye mani olmuş ve çalışma açısından önyargı oluşturmuştur. Ayrıca, iki kardeşin görüşleri alınıp ardından onları karşılaştırmanın daha faydalı olacağı düşünülmesine rağmen bu çalışmada uygulanamamıştır.

## 3. BULGULAR

Bu çalışmanın sonuçları, incelenen değişkenler arasında ergenlik döneminde yalnızlığın en güçlü yordayıcısı olarak anneden algılanan red duygusu olduğunu göstermiştir. Demografik değişkenler (cinsiyet, yaş, sınıf düzeyi, okul türü, çalışma alanı, doğum sırası ve kardeş sayısı) istatistiksel olarak kontrol edildiğinde, % 18,1 varyans anne ve baba kabulü ile açıklanmıştır. Kardeş ilişki kalitesi değişkenleri eklendiğinde, açıklanan varyans % 19,6'ya yükselmiştir. Kardeş ölçeğinin sıcaklık, rekabet ve çatışma boyutları yalnızlığı anlamlı derecede yordarken, kardeşler arası güç ilişkisi durumu yalnızlığın anlamlı bir belirleyicisi çıkmamıştır. Kardeş değişkenleri tek başına yalnızlık puanındaki varyansın sadece % 1,5'ini açıklamıştır. Çalışmada cinsiyet, yaş, okul türü, doğum sırası, sınıf düzeyi, alan ve kardeş sayısının demografik değişkenleri yalnızlığı anlamlı yordayıcı olarak bulunmamıştır. Regresyon analizi yanında, t-testi cinsiyet bakımından çalışma değişkenlerini karşılaştırmak amacıyla yapılmıştır. Sonuçlar katılımcıların cinsiyet açısından anlamlı farkı babadan algılanan kabul duygusu ve kardeşlerin sıcaklık ilişkisi değişkenlerinde bulunmuştur. Erkek katılımcıların ( $M = 40,38$ ,  $SD = 14,54$ ), kız katılımcılara ( $M = 38,23$ ,  $SD = 14,41$ ) oranla babalarından daha fazla red duygusu algıladığı sonucuna ulaşılmıştır. Ayrıca,

kız öğrencilerin erkek öğrencilere göre kardeşleriyle daha sıcak ilişkileri olduğu ortaya çıkmıştır. Anne kabul puanı, kardeş rekabeti, kardeş çatışması ve kardeşler arası güç ilişkisi değişkenleri cinsiyete göre anlamlı bir şekilde değişiklik göstermemiştir.

#### 4. TARTIŞMA

Çalışma sonuçlarına göre, kabul düzeyi yüksek ve sıcak anne-babalar ergenlerin yalnızlığını negatif yönde anlamlı düzeyde yordadığı bulgusu, alan yazındaki başka sonuçlara da benzerlik göstermektedir. Alan yazınına bakıldığında, ebeveyn kabul-reddinden çok ebeveynliğin türleri çalışılmıştır. Bu çalışma ebeveyn kabul-reddini aynı hat üzerinde yer alan iki boyut olarak kabul etmiştir ve ebeveynlerin bu doğrultuda değişiklik gösterdiğini varsaymıştır. Bu şekilde, yetkili (authoritative) olan yani çocuklarına karşı sıcak olan, desteğini gösteren ve çocuğun gelişimsel ihtiyaçlarına cevap veren standartları koyabilen aile türü ergenin sağlıklı gelişimi ile ilişkilendirilmiştir ve bu anlamda kabul düzeyi yüksek aileler de çocuklarına gerekli bakım, şefkat, sevgi, destek ve sıcaklığı göstermeleri bakımından bu türe benzetilebilir. Diğer boyut olan red düzeyi yüksek olan ebeveynler ise, çocukları tarafından soğuk, saldırgan, ilgisiz ve sevgi göstermiyor şekilde algılanırlar. Öte yandan, yüksek davranış kontrolüne sahip, manevi ilgi, sıcaklıktan ve iki yönlü iletişimden yoksun, cezalandırıcı disiplin stilleri olan authoritarian ebeveynler (Margalit, 2010) de red düzeyi yüksek ailelere benzerlik göstermektedir. Margalit (2010) ergenlerin düşük benlik saygısını, düşük benlik algılarını ve yüksek yalnızlık düzeyini otoriter (authoritarian) ebeveynlik stili ile ilişkilendirmiştir. Bu araştırmadan çıkan anne ve babadan algılanan kabul düzeyinin ergenlerdeki düşük yalnızlık düzeyi ile anlamlı derecede ilişkili çıkması Margalit (2010)'in bulguları ile uyumludur. Jackson (2007) da ergenlerde ebeveyn bakımı ve ilgisi ile yalnızlık arasında güçlü bir ilişki bulmuştur. Jackson ve arkadaşları (2005) da çocukları için sevgi dolu bir ortam sağlayan yetkili (authoritative) ailelerin çocuklarının daha düşük yalnızlık bildirdikleri sonucuna varmıştır.

Araştırma sonuçlarına göre, ebeveyn kabulü yalnızlığın % 18,1'ini açıklamıştır. Uruk'un (2001) aile yapısı ve akran ilişkilerinin yalnızlığı yordamlarına göre yaptığı karşılaştırma çalışmasında, aile yapısı yalnızlığın % 15'ini açıklarken, akran ilişkileri % 35 varyans açıklamıştır. Bu iki çalışmaya da bakıldığında ailenin ergen yaş grubunda yalnızlığın büyük bir kısmını açıklamadığı görülür. Cutrano'nun (1982) bulguları da bu fikri desteklemiş ve erken yetişkinlerde yalnızlığın güçlü belirleyicilerinin aile ilişkilerinden ziyade, flört etme ve arkadaşlarıyla olan ilişkilerindeki memnuniyeti ya da memnuniyetsizliği olarak belirlemiştir. Goswick ve Jones (1982) da lise ve üniversite öğrencilerinden oluşan bir grupla çalışma yürütmüş ve lise öğrencilerinde yalnızlığı etkileyen en güçlü faktörü akran ilişkileri olarak bulmuştur, aile ilişkilerinin daha az etkileyen olduğu sonucuna varmıştır. Lerner ve Steinberg (2009) ergenin olgunlaşması ve büyümesinin ebeveyn hakimiyetini tehdit ettiğini ve aralarındaki çatışmayı arttırdığını belirtmiştir. Bu durum da teselli ve destek bulmak amacıyla, ergenin yönünü benzer tecrübeler yaşayan akran gruplarına çevirmesine sebep olmuştur. Tüm bu sonuçlar elbette akranların ergenlerin hayatında en etkili yere sahip olduğu sonucuna ulaştırmaz. Güncel araştırmalar ebeveyn ve akranların etki alanını ayırt etmiş ve boş zaman faaliyetleri gibi yaşam tarzı ile ilgili konuların daha çok akran etkisi altında iken gelecek de dahil olmak üzere kariyer ve okul ile ilgili konuların çoğunlukla ebeveyn tarafından etkilendiğini göstermiştir (Collins ve Steinberg, 2006). Eğlence ve boş zaman faaliyetlerinin ergenlerin kimlik ihtiyaçlarının karşılanması üzerindeki önemi dikkate alındığında, akran etkisinin yalnızlık üzerinde daha etkili olduğu düşünülmektedir.

Ailesi tarafından ihmal edilen, ihtiyacı olan desteği göremeyen ve tatmin edici aile ilişkileri olmayanlar yoğun duygusal yalnızlık yaşayabilirler (Özatça, 2009). Weiss (1973), duygusal yalnızlığın tanımında eşi, ailesi, çocuğu veya sevgilisi ile yakın ilişki eksikliği bulunan kişilerin duygusal yalnızlığı daha çok yaşadığına vurgu yapmıştır. Bullock (1993) da sıcak, sevecen ve destekleyici ailelerin çocuklarının düşük yalnızlık düzeyi gösterdiklerini belirtmiştir. Aileden kaynaklı yalnızlığın yaşandığı aile ortamlarında desteklenmemek, önemsenmemek, alınan kararlarda söz hakkı verilmemesi ergenleri etkileyen olumsuz aile özellikleridir. Aile ilişkileri ve duygusal yalnızlık arasındaki ilişkiyi destekleyen, bu çalışmanın bulgularına paralel sonuçlar

veren başka alıřmalar da vardır (Segrin, 2003; Rubinstin, Shaver, ve Peplau, 1982; Akar ve Sarı, 2004, een, 2008).

Ebeveyn ile olan iliřkilerin yanı sıra kardeřlerle olan iliřkilerde sıcaklık, rekabet, g iliřkisi ve atıřma alt boyutları bakımından incelenmiř ve yalnızlık ve kardeř iliřkileri de istatistiksel olarak anlamlı sonular vermiřtir. Sıcaklık, rekabet ve atıřma alt boyutları yalnızlıęı anlamlı řekilde yordarken, g alt boyutu anlamlı sonular vermemiřtir. Bulguların alan yazın ile uyumlu olduęu grlmřtir. Yakın ve destekleyici kardeř baęları olan ergenler daha az yalnızlık raporlamıřlardır ve bu bulgu Ponzetti ve James (1997), Margalit (2010) ve Milevsky (2005.)'nin sonuları ile tutarlıdır. Margalit (2010) 'in alıřmasında, daha fazla kardeř desteęi alan bireyler daha az yalnızlık, yksek derecede benlik saygısı ve yařam memnuniyeti bildirmiřlerdir.

Tutarlı olarak, Sherman ve arkadařları (2006) sıcaklıęın yksek atıřmanın dřk olduęu uyumlu kardeř iliřkilerine sahip olanların, dřk yalnızlık ve yksek benlik saygısına; kardeřleriyle yksek sıcaklık ve yksek atıřma yařayan bireylerin ise yksek yalnızlık ve dřk zgvene sahip oldukları sonucuna ulařmıřtır. Yakın sıcak ve destekleyici kardeř iliřkileri kiřilerin sadece benlik saygıları ve psikolojik uyumlarını etkilemez, aynı zamanda hem aile iinde hem de aile dıřında yalnızlık yařamalarının nn geer, hatta ebeveyninden hissedilen mesafeyi bile telafi edebilir (Yeh ve Lempers, 2004). Kardeř iliřkilerinin nitelięi kardeřler arası yař farkı ne olursa olsun yalnızlıęı anlamlı derecede yordamaktadır (Sherman, Lansford, ve Volling, 2006).

Kardeř desteęi, depresyona karřı ve zgven iin anneden gelen dřk desteęi telafi edici etkiye sahiptir ve kardeř sıcaklıęı ile yalnızlık arasında negatif ynl bir iliřki vardır (Milevsky, 2005). Dięer taraftan kardeř atıřması yalnızlıęı olumlu ynde yordamıř ve Stocker (1994) da kardeř atıřması ile yalnızlık, akranlara karřı saldırgan davranıřlar ve dřk zgven arasında anlamlı derecede pozitif iliřki bulmuřtur.

#### 4.1 Uygulamaya Yönelik Öneriler

Psikoloji alanında çalışan uzmanların, son yıllarda önemli görevlerinden birisi de ebeveynleri çocuk yetiştirmek konusunda eğitmek olmuştur. Gazeteler, dergiler ve televizyon programları ebeveyn-çocuk ilişkisi yönündeki yayınları çok sık gündeme getirir olmuştur. Nasıl iyi ebeveyn olunur, ergenlerle nasıl iletişim kurulur, çocuğun hayatına saygı gösterme vs. konular çok popüler konulardır. Uzmanlar çocuklarla konuşurken kullanılması gereken kelimelere dair bile açıklamalar yapmaktadır. Psikolojik ihmal, istismar ve baskı gibi konulara ilişkin farkındalık artmıştır.

Yalnızlığın nedenlerini anlamak, müdahale ve onunla başa çıkmak için ilk adım olarak görülebilir. Bu çalışma profesyonel ve kişisel gelişim kitaplarına bilgi kaynağı olması açısından önemlidir. Ergenlerin kendileri hakkında güvenli ve olumlu hissetmeye ihtiyacı vardır ve böylece yalnızlığı daha düşük derecede deneyimleyebilirler. Tamamen yalnızlığı önlemek her ne kadar mümkün olmasa da onu başarılı bir şekilde yönetmek olanaklıdır (Rokach ve Brock, 1998) ve bu bilgiler bu anlamda ipucu verebilecek niteliktedir.

Ebeveynler, çocuklarının sağlıklı gelişimi için ergen çocuklarının kendini ifade edebilmesi müsaade etmeli ve onları eleştiri ve küçümseme olmaksızın dinlemelidir. Aile desteğinden yoksun gençler korku ve yalnızlık içinde yaşama endişesi çekerler (Kulaksızoğlu, 2002). Karamsarlık ve hoşnutsuzluk duygularından acı çeken gençler de ebeveynlerine güvenme ihtiyacı hissederler.

Yakın kardeş ilişkileri de ergenler için önemli bir destek mekanizmasıdır ve bunun pek çok psikolojik yararı vardır. Örneğin kardeş desteği yaşam stresleri ve diğer sosyal bağlardaki eksikliğin olumsuz etkisini azaltabilir (Lerner ve Steinberg, 2009). Anne-babalık okullarında kardeş ilişkilerinin olumlu yönde geliştirilmesi için yapılması gerekenler de program içerisinde yer almalıdır ve bu konuya dikkat çekilmelidir.

Sonuç olarak ergenin ailesi aile üyeleri arasında sevgi, merhamet ve hoşgörüyü sağlamaya çalışmalı ve aile içi bir sıkıntı olduğunda ergenlerinde karar

mekanizmasında aktif rol alması onlardaki yalnızlığı azaltacak ve kendilerini daha değerli hissetmelerini sağlayacaktır. Ebeveynler ve kardeşler ile sıcak, güvenli ve istikrarlı ilişkilerin yaşandığı rahatlatıcı bir evde yetişmek aile hayatının sınırlarını aşan, iyi bir sosyalleşme dönemi geçirmek için değerli bir temel oluşturur.

#### **4.1. Gelecek Çalışmalar İçin Öneriler**

Marcoen ve Goossens (1993) aile kaynaklı yalnızlık ile akran kaynaklı yalnızlık arasındaki farkın öneminden bahsetmiş ve ergenlerde yalnızlık çalışanlara bu konuya önem verilmesine dikkat çekmiştir. Böyle bir ayırım ile daha kapsamlı sonuçlar elde edilebilir. Richaud de Minzi ve Sacchi'nin (2004) de belirttiği gibi ailenin yanı sıra ergenlerde yalnızlık çalışmak için sosyal ağ ve arkadaşlarıyla ilgili olan görüşleri alınmalıdır. Gelecek çalışmalarda sosyal destek kontrol değişkeni olabilir.

Çalışmada katılımcının kardeşinin ya da kardeşlerinin de bahsi geçen kardeş ilişkisinin niteliğine dair görüşlerini almak çalışmaya yeni bir boyut kazandırarak daha geniş bir çerçeve çizilebilmesini sağlayabilir çünkü iki kardeşin kardeş ilişkisi niteliğine ilişkin alguları birbirinden farklılık gösterebilir.

Bir kardeş çalışmasında, kardeş çiftleri cinsiyetlerine göre analiz edilmelidir. Erkek-erkek çiftlere göre kız-kız kardeş çiftlerin davranışı farklılık gösterebilir. Erkek ve kız kardeşler hemcinsi olanlara karşı daha farklı davranış sergileyebilmektedir. Kardeşler arası ilişkide yakın olmanın işaretleri kız ve erkekler için ayrıdır. Gelecek çalışmalarda, yaş farkı, cinsiyet farkı ve beraber veya ayrı yaşama daha zengin veriler elde etmeyi sağlayacaktır.

Alanda daha fazla yalnızlık ve onunla anlamlı ilişki gösteren değişkenler arasında hem neden sonuç ilişkilerini anlamaya yönelik hem de yalnızlığın nasıl azaltılabileceğine ilişkin çalışmalar yapılmalıdır.

Bu çalışmada, ebeveynlerden algılanan kabul-red düzeyi şimdiki zamanda ölçülmüştür. İleriki çalışmalarda, aynı çalışma yine yalnızlık düzeyini yordamak üzere

yetiřkinler üzerinde ve onların aile kabul-reddine iliřkin gemiř tecrübeleri alınarak da yapılabilir. Böylece yalnızlıđın gemiř ocukluk yařantılardan ve onun bugün üzerindeki etkilerinden kaynaklandıđını öne süren kuramların da bir kez daha test edilmesi sađlanabilir.

Bu alıřma ergenlerden alınan verilerle ve Ankara ili ierisinde yapılmıřtır. alıřma farklı řehirlerde yinelenebilir.

**Appendix I**  
**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 : Ulu-Yalçınkaya  
Adı : Ayşe  
Bölümü : Rehberlik ve Psikolojik Danışmanlık

**TEZİN ADI** (İngilizce) : LONELINESS WITH REGARD TO MATERNAL AND PATERNAL ACCEPTANCE-REJECTION AND SIBLING RELATIONSHIP QUALITY IN HIGH SCHOOL STUDENTS

**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:**