## THE RELATIONSHIP BETWEEN BIRTH ORDER, PERCEIVED PARENTING STYLES, AND EARLY MALADAPTIVE SCEMAS

## A THESIS SUBMITTED TO

THE GRADUATE SCHOOL OF SOCIAL SCIENCE

OF

MIDDLE EAST TECHNICAL UNIVERSITY

BY

GÖZDE NİLÜFER

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR

THE DEGREE OF MASTER OF SCIENCE

IN

THE DEPARTMENT OF PSYCHOLOGY

JUNE, 2016

Approval of the Graduate School of	f Social Sciences	
		Prof. Dr. Meliha Altunışık Director
I certify that this thesis satisfies all Master of Science.	the requirements a	as a thesis for the degree of
		Prof. Dr. Tülin Gençöz Head of Department
This is to certify that we have read adequate, in scope and quality, as a		
	As	soc. Prof. Deniz Canel Çınarbaş Supervisor
<b>Examining Committee Members</b>		
Assoc. Prof. Özlem Bozo	(METU, PSY)	
Assoc. Prof. Deniz Canel Çınarbaş Asst. Prof. Tuğba Uzer Yıldız	(METU, PSY) (TED, PSY)	

in accordance with academic rules and ethi	document has been obtained and presented ical conduct. I also declare that, as required ted and referenced all material and results
that are not original to this work.	teu anu referenceu an material anu results
	Name, Last Name: Gözde, Nilüfer
	Signature :
	Signature .

#### **ABSTRACT**

## THE RELATIONSHIP BETWEEN BIRTH ORDER, PERCEIVED PARENTING STYLES, AND EARLY MALADAPTIVE SCHEMAS

### Nilüfer, Gözde

M.S., Department of Psychology

Supervisor: Assoc. Prof. Dr. Deniz Canel Cinarbas

June 2016, 118 pages

The aim of the current study was to investigate the relationship between birth order, perceived parenting styles, and early maladaptive schemas. We aimed to investigate differences in schema domains and perceived parenting styles based on birth order status of individuals. For this purpose, 294 individuals participated in the study. They were between the ages of 18 and 30. Only participants whose parents were still married were included in the study. Also, participants were excluded if their parents had died and if they have adopted siblings. We conducted MANOVA analysis in order to figure out the differences in schema domains based on birth order; however, we could not support our hypothesis that firstborn and lastborn siblings differ in their schema domains. However, we found that lastborn siblings considered their mothers as more overprotective and anxious compared to firstborn siblings. Fathers' parenting style did not differ according to birth order. Finally, through regression analyses, we explored other predictor variables of schema domains. According to results, negative parenting styles significantly predicted schema domains. Both mothers' and fathers' style predicted Disconnection, Impaired Autonomy, and Impaired Limits. However, only parenting style of mothers predicted Other Directedness and High Standards schema domains. There were also some demographic variables that predicted schema domains. Males and younger people had higher Disconnection schema domain. Younger people also had higher Impaired Autonomy domain. Individuals with low education mother had higher Other Directedness domain. Finally, females and younger people had higher Unrelenting Standards schema domain.

Keywords: Birth Order, Early Maladaptive Schemas, Schema Domains, Parenting Style

# DOĞUM SIRASI, ALGILANAN EBEVEYNLİK BİÇİMLERİ VE ERKEN DÖNEM UYUMSUZ ŞEMALAR ARASINDAKİ İLİŞKİ

### Nilüfer, Gözde

Yüksek Lisans, Psikoloji Bölümü

Tez Yöneticisi: Doç. Dr. Deniz Canel Çınarbaş

Haziran 2016, 118 sayfa

Bu çalışma, kişilerin doğum sırasının, algılanan ebeveynlik tutumlarının ve şema alanlarının ilişkisini incelemek üzere yapılmıştır. Çalışmada, kişilerin doğum sıralarına bağlı olarak sema alanlarında ve algılanan ebeyevnlik tutumlarında farklılık göstermesi beklenmiştir. Bu amaçla, yaşları 18 ile 30 yaş arasında olan 294 kişi çalışmaya katılmıştır. Çalışmaya sadece anne ve babası hala evli olan kişiler katılmıştır. Ebeveynlerinden herhangi biri vefat eden kişiler veya üvey kardeşe sahip kişiler çalışmaya dahil edilmemiştir. MANOVA analizleri sonuçlarına göre, doğum sırasına bağlı olarak şema alanlarında herhangi bir farklılık bulunamamıştır. Ancak, büyük ve küçük kardeşler arasında annelerin algılanan ebeveynlik tutumlarına ilişkin farklılık bulunmuştur. Bu sonuca göre, küçük kardeşler büyük kardeşlere kıyasla annelerinin daha korumacı ve endişeli olduğunu belirtmiştir. Son olarak, regresyon analizleri ile sema alanlarını yordayıcı faktörler incelenmiştir. Buna göre, hem anne hem babanın olumsuz ebeveynlik biçimleri Kopukluk, Zedelenmiş Otonomi ve Zedelenmiş Sınırlar şema alanlarını yordamıştır. Ancak, sadece anne ebeveynlik biçimleri Diğeri Yönelimlilik ve Yüksek Standartlar şema alanlarını yordamıştır. Bu sonuçların yanı sıra, bazı demografik değişkenler, şema alanlarını yordamıştır. Buna göre, erkekler daha fazla Kopukluk şema alanına, genç katılımcılar daha fazla Kopukluk ve Zedelenmiş Otonomi alanına sahip bulunmuştur. Annesi düşük eğitim seviyesine sahip katılımcıların daha fazla Diğeri Yönelimlilik sema alanına sahip olduğu bulunmuştur. Son olarak, kadın katılımcılar ve genç katılımcılar daha fazla Yüksek Standartlar şemasına sahip bulunmuşlardır.

**Anahtar Kelimeler:** Doğum Sırası, Erken Dönem Uyumsuz Şemalar, Şema Alanları, Ebeveynlik Biçimleri

To My Lovely Siblings;

Özge and Yiğit

## **ACKNOWLEDGEMENTS**

To begin with, I would like to express my gratitude to my supervisor Assoc. Prof. Dr. Deniz Canel Çınarbaş for her courage, guidance, and helpful feedbacks during the process. I also thank to Examining Committee members; Assoc. Prof. Dr. Özlem Bozo and Asst. Prof. Dr. Tuğba Uzer Yıldız for their valuable comments and feedbacks.

Moreover, I want to thank my family for their love, support, and courage. They always believe me to be successful. Furthermore, I am very grateful to my boyfriend for her courage and support.

Finally, I want to thank to all my lovely friends for being my friends and giving courage and support.

## TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT	iv
ÖZ	v
DEDICATION	vii
ACKNOWLEDGEMENTS	viii
TABLE OF CONTENTS	ix
LİST OF TABLES	xi
CHAPTER	
1.INTRODUCTION	1
1.1. Adler's Theory	1
1.2. Sulloway's Theory	6
1.3. Empirical Support for Birth Order Influences	9
1.4. Birth Order and Parenting Styles	17
1.5. Other Variables Related to Birth Order Influences	24
1.6. Schema Theory and Development of Early Maladaptive Schemas	27
1.6.1. Early Maladaptive Schemas and Schema Domains	28
1.6.2. The Relationship between Schemas and Personality Traits	32
1.6.3. Parenting Styles and Early Maladaptive Schemas	35
1.7. The Aim of the Present Study	37
2.METHOD	38
2.1. Participants	38
2.2. Measures	40
2.2.1. Young Schema Questionnaire	40
2.2.2. Young Parenting Inventory	42
2.3. Procedure	43
2.4. Statistical Analysis	43
3.RESULTS	44
3.1. Descriptive Information for Measures of the Study	44
3.2 Intercorrelations among Demographic Variables and Measures of the Study	46

3.3. Differences in Schema Domains and Parenting Styles based on Birth Order and	
Other Demographic Categories	51
3.4. Regression Analyses	55
4.DISCUSSION	59
4.1. The Importance of the Study	71
4.2. Strengths and Limitations of the Study	71
4.3. Clinical Implications and Future Suggestions	72
REFERENCES	76
APPENDICES	89
A.INFORMED CONSENT/GÖNÜLLÜ KATILIM FORMU	89
B.DEMOGRAPHIC FORM/DEMOGRAFİK BİLGİ FORMU	90
C.YOUNG SCHEMA QUESTIONNAIRE/ YOUNG ŞEMA ÖLÇEĞİ	91
D.YOUNG PARENTING INVENTORY/YOUNG EBEVEYNLİK ÖLÇEĞİ	97
E.ETHICS COMMITTEE APPROVAL 1	02
F. EARLY MALADAPTIVE SCHEMAS IN DIFFERENT STUDIES 1	03
G.TURKISH SUMMARY1	06
H. TEZ FOTOKOPİSİ İZİN FORMU1	18

## LİST OF TABLES

## **TABLES**

Γable 2.1 Demographic Characteristics of Participants    3	39
Table 3.1 Descriptive Information of Schema Domains and Early Maladaptive Schemas4	14
Table 3.2 Descriptive Information of Perceived Parenting Styles	46
Fable 3.3 Pearson's Correlation between Demographic Variables and Young Maladaptive         Schema Domains and Parenting Styles	48
Γable 3.4 Pearson's Correlations between Schema Domains and Subcategories of         Perceived Parenting Style of Mothers	49
Γable 3.5 Pearson's Correlations between Schema Domains and Subcategories of         Perceived Parenting Style of Fathers       5	50
Table 3.6 Categorization of the Demographic Variables5	51
Γable 3.7 Gender Differences on Schema Domains.    5	52
Table 3.8 Age Differences on Schema Domains5	53
Γable 3.9 Educational Level Differences on Schema Domains	54
Table 3.10 Birth Order Differences on Perceived Parenting Style of Mothers	55
Table 3.11 Predictor Variables of Schema Domains	58

#### CHAPTER 1

#### INTRODUCTION

The influence of birth order on various aspects of personality development is one of the most significant and controversial issues in psychology (Stewart & Eckstein, 2012). It is striking that although there are many studies with regard to the association between birth order and intellectual and personality development (Stewart & Stewart, 1995), there are no known studies related to the influences of birth order on development of different maladaptive schemas. This may be due to the fact that schema theory is a rather new area and requires further investigations. Thus, this study aims to investigate the relationship between birth order, parenting styles, and early maladaptive schemas.

## 1.1. Adler's Theory

Adler (1927, 1937) maintained that people essentially strive for *power* and *competence*. Thus, being an older or younger sibling within a family helps to foster different characteristics in order to achieve power and competence (Adler, 1937). Fundamentally, Adler emphasized the attempts of individuals to be unique and their striving for superiority by following different goals in life. Therefore, birth order position plays a great role in the emergence of different goals and personality characteristics because family is one of the earliest social environments that children encounter (Adler, 1924). The influences of birth order can be seen in various domains including personality traits, thinking patterns, attainment of life goals, and also behaviors (Lohman, Lohman & Christensen, 1985).

Adler (as cited in Ansbacher & Ansbacher, 1956) mainly considered the meaning of life as "finding a place in the group" (p. 514). He claimed that all individuals feel inferior; hence, people try to find a place in which they belong in order to deal with inferiority feelings.

According to Adler, inferiority feelings are essential to be motivated for achievement and contribute to the development of personality in various ways. If individuals maintain inferior feelings, or inferiority complex as Adler calls it, based on different birth order position, then they demonstrate a greater tendency to acquire maladaptive personality characteristics. Hence, birth order position has a great role in building personality characteristics (Adler, 1924).

Adler emphasized the subjective interpretation of environment, interaction of environment and genetics, and interpretation of behavior according to the social group to which the individual belongs (Adler, 1927). The first group that the individual encounters is the family. Thus, the individual's interaction style with each family member is crucial with respect to aspiration of *superiority* and *power* (Adler, 1927). Along with the relationship and interaction with mother and father, sibling relations and birth order position play a major role in shaping personality and attainment of special life styles.

Based on Adler's (1927) theory of sibling position, each child has unique experiences within a family context. That is to say, each individual within the same family environment has divergent and special involvement (Sullivan & Schwebel, 1996). The conditions are certainly not equal or similar for every child within a family context, and each child develops different life styles, coping mechanisms, and strategies to adapt to the structure (Adler, 1932; Manaster, 1977). Sibling status or birth order is one of the most crucial issues that explain why each child interprets the situation differently and develops various personality characteristics (Shulman & Mosak, 1977). Eckstein, Sperber, and Miller (2009) inferred that siblings within the same family might show varied qualities as if they were from different families. In this regard, Adler (1937) attributed the differentiation between siblings to finding a comfortable and ideal position within the family. One's unique position decreases the sibling rivalry for parental care.

According to Adler, firstborns have a special time when they are the center of attention (Adler, 1928). Yet, when a second child is born, he or she immediately encounters another individual who already possessed the care, attention, and love of the parents. Consequently, later born siblings have to share all the attention of their parents with older siblings (Sullivan & Schwebel, 1996). As Adler (1927) claimed, the power struggle is a remarkably significant aspect of birth order position influences. Upon the arrival of other siblings, firstborns may feel like they are losing their power (Adler, 1927). Adler (1956) used the term *dethronement* considering the birth of a second child as dispossessing of the unique

status of first child. He maintained that older siblings try to find ways in which they regain their *powerful* status and *superiority*. On the other hand, younger siblings consider their older sibling as *pacesetters*; hence, they struggle to achieve as much as their older siblings (Ansbacher & Ansbacher, 1956; Hartshorne, Hartshorne, & Hartshorne, 2009).

Adler (1928) mentioned various positions of each child within the family. Adler (1928) considered firstborns as more *problematic* because of the effects of dethronement. The second child has some advantages due to the presence of a role model. On the other hand, he also stated that because of the superiority struggle between first and lastborn individuals, both firstborns and lastborns might develop neuroses. Middle born people become healthier individuals compared to firstborn and lastborn individuals, as they are not affected by the struggle (Adler, 1928). Furthermore, he described older children as powerful and influential due to the fact that they have a special time to be unique and center of consideration of their parents (Adler, 1928). The desire to protect and help other people is considered as significant features of firstborn siblings because they tend to learn to be protective from parents. Therefore, they may treat their younger siblings as if they are their parents. They may also wish for people to remain loyal to them. On the other hand, younger individuals attempt to find various ways of being and remaining important and unique for their families. According to Adler, firstborn people are more responsible, serious and perfectionist, middle born people are more agreeable and peacemaking, and lastborn people have more inferior feelings and helplessness feelings (Adler, 1928).

Based on Adler's view, Leman also (1985) claimed that firstborn individuals are more likely to succeed in achievement-oriented tasks. They really seek to please other individuals. They may not share their actual feelings or thoughts; because they may think that they are not quite good if other people do not agree with them. Leman (1985) drew attention to the fact that first born people put emphasis on rules and they are more likely to be inflexible and biased toward other individuals who may think differently. As firstborns are followed by other siblings, they realize that their mothers' love and care will be divided between all siblings. Thus, they are eager to regain attention from parents when the younger siblings arrive. Succeeding in achievement-oriented tasks would be one of the influential roads of coping with competition between other siblings for parental care (e.g. Paulhus, Trapnel, & Chen, 1999). Accordingly, for firstborn children, becoming conscientious and successful in intellectual tasks become crucial which shape their personality. On the other hand, they are prone to be more anxious and angry because they are forced to share the attention of their mothers with other siblings.

With regard to personality development of firstborns, Forer (1976) maintained that they are more likely to be *traditional*, *conformist*, *obedient to family rules and self-controlling*. Because of high expectations of family, firstborns might consider themselves as insufficient and deficient. Furthermore, the approval motivation for firstborns is essential. They can change their opinions very quickly in order to gain social acceptance.

According to Forer (1976), being the only child within a family reinforces self-confidence due to the fact that there is no need for competition or rivalry. Considering the qualifications of only children, *being dominant, verbal* and *perfectionist* are the most striking features (p. 9). In addition to this, they generally desire and seek to please authority including family, teacher, or manager.

As for being the youngest sibling within the family, the child may also have various specific characteristics such as being more *liberal*, *joyful* and *empathic* (Ansbacher & Ansbacher, 1956). In a similar manner, for the second children, Forer (1976) mentioned two assumptions. The first assumption is that younger siblings may take a disadvantaged place regarding superior competitive qualities of older siblings. The second assumption is that they become *the most-loved* child as a result of using dissimilar strategies. However; being a female or male and having a female and male sibling become crucial considering birth order effects. To illustrate, a younger boy with an older sister may become warmhearted with high self-esteem because he may also regard his sister as his mother. On the other hand, a girl with an older sister is more likely to develop satisfying interpersonal relationships compared to her older sibling. It may stem from the more relaxed and less tense attitudes of parents toward the later born child.

Shulman and Mosak (1977) differentiated between *ordinal birth position* and *psychological birth position*. Adler (as cited in Ansbacher & Ansbacher, 1956) described ordinal positions as *firstborn, second, middle, youngest,* and *only*. Furthermore, Adler (as cited in Ansbacher & Ansbacher, 1956) put an emphasis on psychological birth order as declaring "it is not, of course, the child's number in the order of successive births which influences of [*sic*] his character, but the situation into which he is born and the way in which he interprets it" (p. 377). Shulman and Mosak (1977) claimed that psychological position indicates the acceptance of a role within family and has an utmost significance in understanding of the influences of birth order. For example, a boy who has an older sister may feel as the firstborn of the family owing to being the first male child. This issue is highly related with cultural issues and gender roles in society. Nonetheless, there is no

consensus regarding using either ordinal or psychological position for birth order studies (Shulman & Mosak, 1977). There are many researchers who supported Adler and used psychological birth order (e.g., Campbell et al, 1991; Ergüner, Tekinalp, & Terzi, 2014; Kalkan, 2008; Lohman et al., 1985). On the other hand, most of the research was based on actual birth order (e. g., Carlson, Watts & Maniacci, 2006; Dunkel, Harbke, & Papini, 2009; Healey & Ellis, 2007; Herrera, Zajonc, Wieczorkowska, & Cichomski, 2003). In association with these issues, Campbell et al. (1991) declared that there is a high correspondence between psychological birth order and actual birth order. In other words, people who are the oldest sibling in their family generally feel themselves as firstborns.

Adler (as cited in Ansbacher & Ansbacher, 1956) and Forer (1976) also pointed out that there are significant variables which affect the relation between birth order and personality including family size, gender of child and siblings, age differences between siblings, socioeconomic status of parents, and cultural values (e. g. Ernst & Angst, 1983; Jordan, Whiteside & Manaster, 1982; Herrera et al., 2003; Okudaira, Kinari, Mizutani, Ohtake & Kawaguchi, 2015; Watkins, 1992). Forer (1976) also considered "age gap between siblings, illness or disability of siblings or parents, stepbrothers and sisters, adopted children and twins", which all changes the dynamics of birth order effects and sibling relationship. According to Forer (1976), smaller age gap between siblings increases the sibling rivalry and differentiation of siblings. Moreover, Ernst and Angst (1983) emphasized that parents with low socioeconomic status tend to have more children, which decreases the parental resources. Therefore, low socioeconomic status may be associated with family size, and consequently, having more siblings may lead to undesirable experiences (Ernst & Angst, 1983). In addition, gender of siblings may be related to cultural values and gender roles (Ernst & Angst, 1983). For example, in some cultures, firstborn males compared to firstborn females may gain more attention as a result of gender roles; hence, gender of siblings may play a major role in birth order influences (Ernst & Angst, 1983; Forer, 1976).

In summary, Adler (1927) mentioned that birth order plays a major role in personality development. Based on birth order status, each sibling has divergent and special characteristics as a result of differential experiences with parents (Adler, 1927). Moreover, in line with Adler (1927), Forer (1976) emphasized some important components of birth order influences such as age differences between siblings, socioeconomic status, family size, and gender of siblings. From another perspective, Sulloway (1996) also focused on birth order influences on personality development. On the other hand, Sulloway (1996) explained his

theory based on evolutionary approach. Therefore, next part will focus on Sulloway's birth order theory.

## 1.2. Sulloway's Theory

Sulloway (1996) provided a different perspective considering the birth order effects on personality development. He conceptualized family niche model to explain the different characteristics of each sibling. It is mostly parallel with Adler's theory considering the fact that each sibling develops various and dissimilar features. On the other hand, Sulloway's (1996) theory was fundamentally rooted in evolutionary perspectives. Darwin (1859) mentioned four essential conflicts as same-sex conflict, differential parental investment by the sexes, parent-offspring conflict and sibling-sibling conflict. Sulloway (1996) developed his sibling theory based on Darwin's sibling-sibling conflict. He claimed that the conflict between siblings is a result of the competition for attainment of parents' restricted resources. He also pointed out that this conflict causes parent-offspring conflict because of rivalry between siblings. From an evolutionary perspective, Darwin (1859) also claimed that the firstborn child has a more advantaged place in terms of reproduction value. In the light of Darwin's evolutionary theory, Sulloway (1996) maintained that older siblings have more advantages regarding physical qualities, age, and power so they benefit from these advantages when competing with other siblings for parental investment. On the other hand, younger siblings may become the favorite of their parents because they are more disadvantaged and the parents tend to protect them against older siblings (Sulloway, 1996).

Sulloway (1996) proposed that siblings tend to reduce competition by developing different ideal positions in order to gain parental investment, which refers to all resources of a family including nurturance, love, care, and attention. Differentiation also provides less conflict and competition between siblings, which draws a parallel between the theory of Alfred Adler and that of Sulloway (1996).

Because of differentiation of siblings, each child tends to follow different personality patterns in order to obtain parental investment. According to Sulloway's (1996) theory, the first child obtains much of the parental care. Thus, he or she is more likely to pay homage to values, rules, and expectations of family. In association with connection to parental framework, firstborns tend to behave in a more obedient way in order to protect their position. They may become more conscientious and they may feel more responsibility in order to follow through the expectations of the family. As a result, they become more ambitious, organized, and achievement oriented. They are considered as more neurotic,

which refers to having less emotional stability. Additionally, they are more conformist and conventional compared to their younger siblings as a result of their obedient life style. On the other hand, later born individuals try to find a different niche which the firstborn did not choose in order to gain parental care. Therefore, later born people are less associated with the values, rules, and expectation of their family structure. They may question authority figures and defend their rights. Moreover, later born individuals have different interpersonal strategies such as being more agreeable, which prevents any conflict between siblings and other family members. All in all, firstborn people are more identified with family framework, whereas, later born people are de-identified and develop different mechanisms and strategies to obtain the family investment (Sulloway, 1996).

In summary, Sulloway (1996) provided an important perspective regarding sibling differences based on identifying different and special niches in order to gain parental care and attention. After the firstborn children establish a special position as generally being hard working, obedient, and responsible within the family, later born children attempt to establish different positions.

Sulloway (1996) asserted that firstborns are "more achievement-oriented, antagonistic, anxious, assertive, conforming, extraverted, fearful, identified with parents, jealous, neurotic, organized, planful, responsible, self-confident, traditional, and stressful." (pp. 68-70). On the other hand, he considered later born children as "adventurous, altruistic, cooperative, easygoing, empathic, open to experience, popular, rebellious, risk-taking, sociable, and unconventional" (pp. 68-70). All of these different traits of each sibling position seem to provide an understanding of developing different mechanisms for gaining parental interest and searching a "unique family niche" (p. 343). Especially related with openness to new experiences, Sulloway (1996) claimed that struggling for finding unique and diverse niches play a critical role in this regard. According to Sulloway (1996), firstborns attempt to protect their precious standing within the family; hence, they are supposed to become more self-confident and dominant. On the other hand, later born individuals are supposed to construct more welcoming and agreeable attitudes in order to obtain unique niche and decrease competition between their siblings.

Siblings also tend to concentrate on different areas in order to prevent intense sibling competition (Whiteman, McHale & Crouter, 2007). For example, one sibling may prefer to succeed in math; whereas the other chooses to succeed in sports. Different interests, abilities, and pursuits provide more diversification, which enables the siblings to reach the limited

resources of family in special ways and build their uniqueness in the family (Whiteman et al., 2007).

From his evolutionary perspective, Sulloway (1996) declared that diversification of siblings have considerable benefits. Firstly, it helps to reduce the rivalry between siblings who strive to gain restricted parental attention. Next, diversification also increases the attention of parents toward both siblings. Furthermore, it provides less dependence of individuals on their parents because they learn specific strategies and coping mechanisms when reaching parental care (Sulloway, 1996).

Sulloway (1996) investigated specific personality traits in relation to birth order. In terms of *Big Five* personality traits (Goldberg, 1990), Sulloway (1996) claimed that firstborn individuals are higher with respect to *extraversion*, *conscientiousness* and *neuroticism*. On the other hand, later born individuals are higher in the domains of *openness to experience* and *agreeableness*. By being agreeable younger siblings might secure their position by virtue of decreasing the competition between older siblings. Moreover, they tend to be open to new experiences in order to explore and maintain particular niches and status that the older siblings did not choose (Beck, Burnet & Vosper, 2006).

Solomon (1998) reviewed Sulloway's model and emphasized the cultural values, norms, and social background when interpreting birth order influences. Similarly, he suggested that birth order studies should consider many aspects such as social and cultural elements along with sibling position.

In line with this information, our study may contribute to the literature by investigating the early maladaptive schemas of firstborn and lastborn siblings in Turkey. Despite the fact that there are several research studies supporting birth order influences in Western cultures, there is a lack of research in other cultures. Furthermore, investigation of perceived parental treatment is very crucial in understanding of common parenting styles and their influences on development of early maladaptive schemas in this culture. Although we did not examine specific cultural factors in this study, the results provide an understanding about how birth order, sibling size, family background, socioeconomic status, and parenting styles are related to maladaptive schemas of individuals.

## 1.3. Empirical Support for Birth Order Influences

Birth order has been one of the most popular issues in psychology literature especially in the past years. There are many studies that investigate the relationship between birth order position and specific personality characteristics.

A group of researchers examined the thoughts and opinions of people about various personality characteristics based on specific birth order position. For instance, Baskett (1985) concluded that parents have more expectations from their firstborn children. Moreover, they have more positive representation of their firstborn children compared to their middle born and lastborn children. Nyman (1995) also supported that participants identified firstborns more positively compared to other sibling positions. According to Baskett (1985), parents consider their firstborn children as *extraverted*, *compliant* and *unspoiled*. They regard their younger children as *friendly*, *noncompliant* and *inadequate* in terms of academic achievements (Baskett, 1985). Similarly, Harris (1998) stated that people believe firstborns are "serious, sensitive, responsible, worried, and adult oriented" and later borns are "independent, cheerful, and rebellious" (p. 375).

Herrera et al. (2003) also studied "young, childless, unmarried and diverse ethnic groups" in order to analyze the opinions of people about the relationship between personality characteristics and birth order position (p.144). Participants attributed more positive qualities to their own birth order in the family. For example, first born people attributed more positive traits to the first born position. Consistent with previous findings, people consider firstborn people as "more intelligent, responsible, obedient, stable, least emotional, and least creative" (Herrera et al., 2003, p. 144). Participants reported only children as "most disagreeable". Lastborn people are considered as "most creative, emotional, extraverted, disobedient, irresponsible, and talkative." (p. 144). Moreover, middle born people are regarded as "most envious, least bold, and talkative." (p. 144).

Similarly, Nyman (1995) investigated different personality characteristics based on birth order position. Participants depicted firstborn position as "achievers, aggressive, ambitious, caring, dominant, independent, leaders, maternal, nurturing, responsible, and thoughtful"; only children as "independent, self-centered, selfish, and spoiled"; middle born people as "achievers, sociable, ambitious, caring, friendly, outgoing, and thoughtful"; and lastborn people as "dependent, friendly, outgoing, passive, spoiled, and thoughtful" (p. 55). The specified qualities of each sibling position seem consistent with other research in the literature.

In association with people's opinions about birth order, Stewart (2004) studied how and to what extent the knowledge about birth order position of clients may affect the early perception and formulation of them by their therapists. He questioned that knowing the birth order may lead the therapist to attribute specific characteristics to the person without considering real observations. In this study, counseling psychologists who have cognitive behavioral, psychodynamic, and humanistic approaches read a case episode mentioning history and career problems of a male client and psychologists were required to formulate this case and choose suitable traits for the client. In the case example, the birth order position of the client varied across psychologist groups. Based on the results, counseling psychologists attributed specific characteristics to the client according to his birth order position. Also, the therapists' therapeutic approach, level of previous experience, and number of clients with which they worked before did not affect the results. When all these findings are taken into account, psychologists tend to use representativeness heuristics which refers to making decisions and judgments according to similarity (Kahneman, Slovik, & Tversky, 1982). More specifically, under ambiguous situations, people draw a conclusion based on similarity with previous experiences (Kahneman et al., 1982). Therefore, the therapists make some hypothesis according to clients' birth order status. Birth order information is one of the most significant components along with other information about the client. This study leads the way for further studies about how birth order information may influence the perceptions of therapists.

Many researchers studied the responsibility level of siblings. For example, Pulakos (1987) studied college students who have two to nine siblings. Pulakos (1987) concluded that firstborn individuals take on more responsible roles. Additionally, males were regarded as more irresponsible compared to females. Harris and Morrow (1992) also examined the association between responsibility and birth order position by taking into account gender differences. The participants were university students who have two, three or four siblings. They controlled "participants' age, family income, religious background, race, intactness of the family, number of siblings, and gender of siblings." Although they could not support the hypothesis that firstborns tend to be more responsible, they concluded that females are more responsible compared to males. The researchers demonstrated that there is a link between gender and responsibility. They also remarked that being responsible may be associated with age differences instead of birth order or gender. In other words, as the age of the participants increases, the responsibility might increase as a result of maturation.

With regard to achievement, many theorists and researchers referred that firstborns perform better in achievement tasks and related areas (e.g. Falbo, 1981; Jordan, Whiteside & Manaster, 1982, Leman, 1985, Paulhus, et al., 1999). According to Forer (1976), the need for and desire of achievement of firstborns may stem from the pressure of mothers for achievement. Also, mothers tend to be more dissatisfied with failures of firstborn children. Using within family design, Paulhus et al. (1999) asked participants to compare themselves and their siblings and they found that firstborns have higher levels of conscientiousness and achievement orientation. Sampson and Hancock (1967) studied in a high school sample by controlling "age of participants, age gap between siblings, and occupation and education level of fathers." (p. 400). They included siblings who have maximum five years difference. Sampson and Hancock (1967) found that individuals who have a younger sister or older brother were more associated with the desire of achievement. Moreover, the results demonstrated that males have more desire for achievement compared to females. Firstborn individuals experience lower anxiety in achievement tasks. Melillo and College (1983) also investigated the connection between achievement and birth order position. They included women who are registered in a doctorate program at a university. The results indicated that most of the women were the only child or oldest child in their family. Melillo and College (1983) emphasized that gender roles and high expectations of the parents may play a role in this association. Supporting Melilo and College's finding, Simonton (2008) mentioned that most of the 182 were women psychologists who were also firstborns.

In parallel, Jordan et al. (1982) aimed to discover the core elements of birth order influences on the motivation for achievement. They included seven birth order schemes. In the scheme A, the first child and the only child were combined. In the scheme B, there were five categories as "firstborn, second born, middle born, lastborn, only child" as stated by Adler (Shulman & Mosak, 1977). In the scheme C, middle second born people were regarded as a separate group from second born of two siblings. In the scheme D and E, the family size and age gap between siblings were also considered. In the scheme F and G, researchers also considered gender of siblings. Guided by these birth order schemes, Jordan et al. (1982) identified achievement motivation as "work, mastery, competitiveness and personal unconcern." The only significant result was obtained in the scheme F considering gender of siblings. Male firstborn individuals were found more competitive and achievement oriented compared to female firstborns (Jordan et al., 1982). In terms of competitiveness, male only children were found as more competitive than all other sibling positions except male older siblings. Moreover, female only children declared that they would have less personal concern if they achieve less compared to other sibling positions. It is striking that

gender of the siblings was a crucial component of the relationship between achievement and birth order (Jordan et al., 1982). This study provides an understanding about the fact that there is a need to include some important variables such as gender of siblings, age differences, and family size along with birth order position in order to investigate birth order influences.

A group of researchers examined the relationship between dominance and birth order. For instance, in Perlin and Grater's (1984) study, participants had two siblings and the maximum age difference between each sibling was four. The participants were also raised in intact families. Firstborns identified themselves as more dominant compared to middle born and lastborn siblings. Moreover, younger siblings identified themselves as more submissive compared to older and middle siblings. Another study by Harris and Morrow (1992) demonstrated that firstborn males are more dominant compared to firstborn females, whereas younger female siblings are more dominant compared to younger male siblings. Researchers evaluated that gender was significant in terms of siblings' dominance. Also, there was a positive association between socioeconomic status and dominance. This may be due to the fact that higher socioeconomic parents represent "power, control, and dominance" for their children (Harris & Morrow, 1992).

Ashby, LoCicero and Kenny (2003) evaluated the association between perfectionism and birth order position in a university sample. They differentiated between adaptive and maladaptive perfectionism (Slaney, Ashby & Tripp, 1995). Ashby et al. (2003) concluded that older siblings show more adaptive and maladaptive perfectionism compared to middle born and younger siblings. Moreover, middle born people demonstrate least adaptive perfectionist attitudes and behaviors compared to older and younger siblings. Finally, younger siblings were found to be least perfectionist. Researchers explained that parents have higher expectations from their first children, and this may cause firstborns to be more perfectionistic to meet their family expectations. On the other hand, younger siblings are not as perfectionist because they do not make as much effort as their older siblings in order to meet the expectations of parents (Ashby et al., 2003). In association with perfectionism, Davis (1996) investigated the status striving quality in firstborn and lastborn people in Canada and concluded that firstborn people desire more status compared to lastborns. Additionally, if younger individuals have many older siblings, their desire for status further reduces. Therefore, number of older siblings affects the desire of status for younger siblings; whereas number of younger siblings does not affect the status aspiration of older siblings. However, other studies displayed that perfectionism of younger siblings is a controversial

issue. They may desire to achieve as much as their older siblings, so they may also become perfectionist (Adler, 1927). The empirical support for the relationship between birth order and perfectionism is controversial, and there is no general agreement about this relationship.

In addition to perfectionism and high standards, Sullivan and Schwebel (1996) investigated the relationship between birth order position and irrational thoughts and beliefs in romantic relations in an unmarried university population. They found that firstborn individuals have more irrational beliefs and cognitive style about their romantic relationships. They claimed that this study supports Adler's theory by stating that birth order position may also be reflected in varied cognitions and thinking patterns in interpersonal relationships. In parallel with Adler's theory, they suggested that firstborn individuals have higher expectations from their relationships in an unreasonable manner. They may also desire strict rules in their relationships. This study also supported Adler's (1937) hypothesis that lastborn people are better in interpersonal relations (Sullivan & Schwebel, 1996).

Big Five personality traits are one of the most investigated phenomena in birth order studies. To illustrate, Healey and Ellis (2007) investigated the relationship between birth order and conscientiousness and openness to experience by using within family design.

University students were compared with their own siblings. The maximum age difference between two siblings was five and the minimum age difference was one and half years. They defined conscientiousness as being responsible, organized, and academically achiever. They defined openness to new experiences as being nontraditional, rebellious, and liberal. They reported that firstborn people are more achieving people and more conscientious; whereas, later born individuals were found as more rebellious and open to new experiences. This study supported the Sulloway's (1996) proposal by demonstrating the association between conscientiousness and firstborn position and the association between openness to new experiences and last born position.

Some researchers criticized that younger siblings being more rebellious may be associated with age differences. Accordingly, in order to reduce confounding effects of "age", they also studied older people (Healey and Ellis, 2007). Still, they found similar significant results. In addition to all these findings, Healey and Ellis (2007) also compared same gender siblings. The difference in conscientiousness was considerably bigger for female- female dyads compared to male-male dyads; however, the difference in openness to new experiences was not significant between female-female dyads and male-male dyads. In line with this study, Sampson and Hancock (1967) demonstrated that later born people have

higher levels of agreeableness and rebelliousness. They also controlled for "sibship size, family background, and socioeconomic position" which are key elements of family constellation. Specifically, they regarded firstborns as pleasing their family through developing a conscientious and obedient character. Younger siblings were considered as more *liberal*, *rebellious*, and *agreeable*. Sampson and Hancock (1967) explained that later born people might attempt to find different roles as being more empathic, agreeable, and good in relationships, and willing to be unique in order to gain parental care.

Studies that investigate the relationship between the extraversion and birth order are controversial. Some researchers found that older siblings are more extraverted (e.g. Bleske-Rechek & Kelley, 2014); whereas mothers declared that younger sibling are more extraverted (Dixon, Reyes, Herrera et al., 2003, Leppert& Pappas, 2008; Polet, et. al, 2010). However, Sulloway (1996) put a different approach that distinguishes the sociability and dominance sides of extraversion trait for older and younger siblings. According to Sulloway (1996), firstborns are higher in dominance aspect of extraversion trait. Some researcher also supported the idea of Sulloway by maintaining that the dominance aspect of extraversion is mostly associated with firstborn individuals; whereas, sociability aspect of extraversion is predominantly related with younger siblings (e. g. Beck, Burnet & Vosper, 2005; Jefferson, Herbst & McCrae, 1998).

Considering the link between extraversion and birth order, Pollet, Dijkstra, Barelds and Buunk (2010) conducted the between family design study with a large sample (1494 people and the age range was 18 to 79). The study included people who have only one sibling. Pollet et al. (2010) also controlled for "gender, marital status, educational level, and age." Inconsistent with Sulloway's idea and related research findings in the literature, they found that firstborn siblings are lower compared to younger siblings in terms of dominance and self-confidence domains of extraversion. Pollet et al. (2010) maintained that this conclusion may be due to the fact that when raising first children, the parents are more prone to controlling their children's behavior and become more protective which may trigger the conformist behaviors of first born children and lead them to become introverted. In association with this issue, Amanat and Butler (1984) stated that overprotection by parents is negatively associated with extraversion and positively associated with submissive and obedient behaviors. During the rearing of the younger child, the parents become more experienced and comfortable. Hence, younger siblings might become more extraverted and dominant. They also highlighted that this conclusion could be because of the fact that the dynamics of birth order influence might show differences between children, adolescence,

and adult groups. Moreover, using *between family designs* may be a confounding effect (Pollet et al., 2010).

Similarly, Dixon and colleagues (2008) examined the relationship between birth order and extraversion, controlling for family size, gender, and age. They included people who have between six or more siblings. The maximum sibling number was sixteen. They studied 361 siblings. The adopted siblings were also included; however, the siblings younger than 18 were excluded in this study. The youngest siblings were found as more sociable, which is a dimension of extraversion supporting the findings of Sulloway (1996). Moreover, the younger three siblings were also found as more extraverted compared to oldest three siblings. The study demonstrated that birth order rather than family size, gender or number of siblings has an effect on extraversion. The reason why younger siblings become more extraverted and social may be the need for gaining notice of the parent and finding a special niche that is different from older siblings.

Beck, Burnet, and Vosper (2005) also investigated the relationship between birth order and various domains of extraversion. They conducted a *within family design* and included maximum nine years age gap between siblings. The youngest sibling in the study was 17 years old. If there were more than two siblings, the two who are closest in age were compared. The siblings compared their siblings and themselves. This study supported Sulloway's (1996) theory stating that older siblings are more associated with dominance part of extraversion (assertiveness, activity and excitement); however, younger siblings are more related to sociability (positive emotions, warmth and gregariousness) part of extraversion.

As a different phenomenon, Greene and Clark (1970) studied the birth order effects on concerns of people in a college sample and they found that firstborn people are considerably more concerned about experiences and events in the past; whereas, later born people are more concerned about the future. Moreover, the age gap between siblings did not influence these associations.

Considering locus of control, Fraser and Nystul (1983) in their study in Australia with undergraduate students asserted that female younger siblings have an inclination to have an external locus of control which refers to attribution of reasons and results of experiences and events to external factors rather than inner control. Fraser and Nystul (1983) believed that this result is parallel with Adler's hypothesis claiming that later born siblings are more dependent and they are more likely to not take responsibility for experiences.

All in all, Stewart and Stewart (1995) analyzed the trends in birth order studies in the literature by searching journal articles, books, and dissertations from 1973 to 1993. It is noticeable that many research articles focused on the influences of birth order on "achievement, intelligence, the interaction between siblings and parents, personality and psychopathology" (p. 24). In terms of each sibling position, the firstborn children are the most studied position. Stewart and Stewart (1995) also noticed that the criticisms by Schooler (1972) and Ernst and Angst (1983) have an utmost significance for methodology of the birth order studies. Schooler (1972) and Ernst and Angst (1983) criticized that many researchers do not control for significant variables such as gender, family income, sociocultural elements, or number of siblings. According to them, when these variables are controlled, birth order influences might disappear. Ernst and Angst (1983) also emphasize the method of studies. That is to say, choosing between or within family design changes the results. As a general framework, Stewart and Stewart (1995) provide an understanding about the domains, frequency and methodology of birth order studies in the literature.

Similarly, Eckstein et al. (2009) conducted a review of approximately 200 studies related with birth order effects. Essentially, they concluded that most of the studies found that firstborn individuals are regarded as *achiever*, *conformist*, *dominant*, *obedient*, *uncomfortable in new situations*, *responsible and conscientious*. Moreover, *agreeableness*, *rebellious*, *empathic*, *popular* qualities were attributed to youngest children (pp. 415-417). They believed that younger child might show more ambitious patterns compared to older siblings, because they have a desire to achieve as much as their older sibling (Eckstein et al., 2009).

It is also important to note that there is a lack of consistent findings in birth order literature owing to methodological problems, description of birth order variables, and disregarding of confounding variables (Manaster, 1977). When it comes to empirical findings, despite the fact that many studies found similar conclusions as supporting Adler's and Sulloway's theories (e.g. Ashby, LoCicero & Kenny, 2003; Baskett, 1985; Healey & Ellis, 2007), there are some crucial controversies with respect to effects of birth order position on various domains of personality (e.g. Marini & Kurtz, 2011). When Marini and Kurtz (2011) examined the connection between personality traits and birth order by gathering data from participants, same gender peers of participants and parents of participants, they did not find a significant association despite controlling for family variables such as socioeconomic conditions and size of family.

In summary, it is remarkable that birth order position as related with parental expectations, interaction styles, different rearing attitudes, and competition between siblings may lead to diverse personality traits, strategies, and coping mechanisms. Moreover, siblings from different positions tend to become dissimilar in order to reduce competition. In virtue of diversification, siblings have more chance to obtain parental care (Adler, 1927).

In line with previous studies, we investigated whether birth order position is related to the individuals' early maladaptive schemas. These schemas are also part of our personality, so birth order might play a role in development of different maladaptive schemas. As mentioned in the literature, differential family treatment, and personal interpretation of family environment are connected to birth order influences on personality. Therefore, next part will focus on how birth order is associated with parenting styles.

## 1.4. Birth Order and Parenting Styles

Parents are very crucial in an individual's lifespan. Parental attitudes and behaviors considerably contribute to the psychological well-being of their children (Jordan et al., 1982). Despite the fact that siblings share the same mothers and fathers, their experiences with their caregivers are unique and diverse (Adler, 1927; Sulloway, 1996). Thus, they tend to develop different characteristics, mechanisms, and strategies as a consequence of diverse and unique experiences (Adler, 1927; Sulloway, 1996). Moreover, siblings tend to make comparisons among themselves according to perceived differential family treatment (Feinberg, Neiderhiser, Simmens, Reiss, & Hetherington, 2000). These comparisons may lead to unfavorable feelings such as 'hostility, competition, and unfairness' between siblings (Whiteman et al., 2007, p. 644).

The theoretical framework of Adler (1927) and Sulloway (1996) also support the concept of *non-shared environmental elements*, which refer to the varied and unique experiences of individuals within a single family environment owing to their unique position (Jang, Livesley & Vernon, 1996; Loehlin, 1992). Also, from a developmental perspective, children who were reared in the same family tend to differ from each other in terms of characteristic features reflecting the dynamics of *non-shared environmental influences* (Hoffman, 1991). Jang et al. (1996) explained that because of sibling status, each individual has unique and special communication style within the same family atmosphere. In other words, the dissimilarity between siblings might stem from non-shared environmental variables rather than genetic dispositions (Dunn & Plomin, 1991).

Plomin, Asbury, and Dunn (2001) endeavored to understand how *non-shared* environmental influences affect the differentiation of siblings from developmental perspective. Non-shared environment is defined as the effects of environment causing people to diverge and vary from each other (Plomin et al., 2001). Plomin et al. (2001) reported that non-shared environmental influences stem from "family constellation (e.g. Hoffman, 1991), sibling interactions (e.g. Vandell, 2000), peer influences (e.g. Harris, 1998), and nonsystematic elements" (p. 227). Plomin et al. (2001) emphasized that despite the fact that siblings have the same mothers and fathers, their experiences, perceptions, and interpretations are unique as a consequence of all non-shared environmental factors.

The researchers from the behavioral genetic area mentioned both *objective* and *subjective environmental differences* (Hoffman, 1991, p. 191). Taking into account objective environmental differences, researchers emphasize that each child is born into different conditions within the family. As an illustration, firstborns receive more attention from the mother. On the other hand, when second children are born, they have to share the parents' attention with the older siblings (Lasko, 1954). From another perspective, parents usually lack experience in child rearing when they have the first child; however, in the second child, they are more knowledgeable in terms of how a child develops. As a result of their experiences, they change their attitudes and expectations toward their children (Baskett, 1985; Stewart, 2012). It was found that families control and discipline more when they have the first children; and they give more responsibility to first children (Baskett, 1985; Hilton, 1967).

When considering subjective environmental variables, Hoffman (1991) stated that siblings display dissimilar behavioral reactions, attitudes, or life styles due to their age differences. Thus, from a developmental perspective, the perception, interpretation, and progression of the environment are unique and special for each sibling. In a review by Plomin, Asbury and Dunn (2001), they asserted that siblings can show varied personality qualities as if they were from different families because of non-shared influences including diverse interpretation of events, sibling relations, and various family structures. Although there are many common factors for siblings within a family environment, environmental differences might set the stage for diversification of siblings in terms of identity formation (Plomin et al, 2001).

When it comes to interpretation of environment by siblings, each sibling interprets the environment in reference to other siblings (Hoffman, 1991). As a demonstration, within a

warm and caring family environment, one sibling may think that her parents give more love to her sibling compared to herself, so she may not feel as loved (Hoffman, 1991). Comparison with other siblings is the key in the formation of self (Hoffman, 1991).

Blake (1981) mentioned the *resource dilution hypothesis* which refers to the fact that increases in the number of siblings within the family lead to decrease in shared resources of parents such as physical, relational, and psychological support. Therefore, the oldest child is the most advantageous considering attainment of resources of parents (Ansbacher & Ansbacher, 1956; Forer, 1976).

Many researcher raised concern about the influences of perceived attitudes of parents that cause siblings to develop different personality patterns (e. g. Dunn & Plomin, 1991; Forer, 1976). Especially, studies from developmental perspective give an understanding about how the relationship between birth order and parenting styles occurs and is maintained.

In the light of theories that have been mentioned before, each sibling has unique and special involvement with the mother and father (Moore, Cohn, Campbell, 1997). Moore and colleagues claimed that mothers had attitudes, feelings, and behaviors that are more positive toward to their second children compared to first born children when they were both two months old. They suggested that this may result from many variables. Firstly, they mentioned that postpartum depression is relatively more severe when the mother has the first child; however, the depression decreases when the mothers have second child. Moreover, thanks to having more practice, mothers are more likely to develop more positive affect and intimacy with their later children (Moore et al., 1997).

On the other hand, Keller and Zach (2002) indicated that mothers are inclined to spend less time with their later born children compared to firstborn children, which seems parallel with Sulloway's (1996) theory. Keller and Zach (2002) also found that fathers spend much time with their firstborn children, especially if it is a boy. These conclusions support the evolutionary theory of Sulloway considering the fact that parental resources are restricted and firstborn individuals have an advantage in attainment of these resources.

Hallers-Haalboom and colleagues (2014) investigated the 'sensitivity and intrusiveness' qualities of parents toward their oldest and youngest children and they reached a conclusion that compared to fathers, mothers are more sensitive and less intrusive toward their children. When attitudes and behaviors of both mothers and fathers toward the firstborn

and last born children were compared, parents show more sensitivity and less intrusiveness toward their firstborn children than to the last born children. Sensitivity includes comprehending the child's needs and desires and acting to fulfill those needs in a convenient way (Ainsworth, Bell & Stayton, 1974, as cited in Hallers-Haalboom et al., 2014). Intrusiveness is related to the interruption of child's thoughts, feelings, and behaviors, which may cause a lack of autonomy of the child (Hallers-Haalboom et al., 2014). Moreover, the authors asserted that gender of caregiver and also gender of sibling may affect the relationship style and quality; however, results did not confirm that gender is influential in parents' sensitivity. Nevertheless, fathers and mothers show more intrusive attitudes and behaviors toward their youngest son compared youngest daughters.

On the other hand, in another study, Hilton (1967) compared the mother's attitudes and styles toward their children and found that mothers have a tendency to become more intrusive toward their older children. For example, when children were asked to make a puzzle, mothers gave more detailed instructions and assisted their older children. Moreover, mothers displayed more profound emotions toward their older children. More specifically, when older siblings failed to do a task, mothers showed more extreme disappointment. On the other hand, mothers also demonstrated their positive feelings much more toward their older children. Importantly, mothers lacked consistency toward older siblings. That is to say, their attitudes and feelings shifted rapidly according to successes or failures of older siblings. It demonstrated that love of mother toward older children is associated with achievement (Hilton, 1967). Interestingly, when younger siblings were successful, mothers displayed less encouragement.

Another developmental study by Dunn and Kendrick (1981) observed the interaction between mothers and their firstborn and later born children at home when younger siblings were between eight and fourteen months old. According to Dunn and Kendrick (1981), if the siblings had the same gender, both of them displayed more positive acts in their social interaction. Additionally, if the gender of younger sibling was different from the firstborn sibling, firstborn child tended to exhibit more negative social interaction style toward the other sibling. Between eight and fourteen months, positive style increased between siblings who had same gender; whereas negative style increased between siblings who had different gender. As another important finding of the study, the interaction between mother and firstborn child and later born child was equal to each other when second born was eight months old; however, when second born child was fourteen months old, the involvement of mother in terms of interaction and play time was significantly higher for later born child if

the gender was different. Age gap between siblings did not affect any conclusion in this study (Dunn & Kendrick, 1981).

In terms of the influences of older siblings on the communication between mother and younger child, Cicirelli (1978) concluded that if siblings are from different gender, mothers tend to express and verbalize the tasks less to younger child when the older sibling is present. On the other hand, if both siblings are female, the interaction of mother with younger sibling stays stable when the older female sibling came; however, if they are male, the interaction is higher when older boy is present (Cicirelli, 1978). In general, he found that mothers tend to explain the tasks more to their sons compared to daughters (Cicirelli, 1978).

Harris and Howard (1985) maintained that the positive perception of the parental attitudes and behaviors by a child seem highly linked with the recognition of favoritism by the parents. Moreover, Kiracofe and Kiracofe (1990) highlighted the association between birth order and perception of favoritism. To illustrate, males regardless of their birth order expressed that they have a perception as being favored by their mothers. Additionally, the first born males expressed that they were the favorite child of both parents. Females regarded themselves as the most favored in all sibling position especially by their fathers (Kiracofe & Kiracofe, 1990). Chalfant (1994) also supported that people have a tendency to be perceived as most favored by opposite sex parent. That is to say, males considered themselves as favorite of their mothers; whereas females considered themselves as favorite of their father. According to Rohde et al. (2003), favoritism of siblings is a controversial issue, because firstborn child may become the favorite due to their potential reproduction merit; whereas the need for protection of later born child may make them the favorite child. Rohde et al. (2003) studied university students from different countries comprising of Austria, Germany, Israel, Norway, Russia and Spain, in order to examine the birth order influences on diverse family dealings and interactions. They concluded that last born siblings were regarded as the favorite and the most rebellious child in their families by both firstborn and last born people. In terms of closeness to parents, most of the firstborn individuals reported themselves as closer to parents; whereas lastborn siblings were closer to their older siblings than to their parents irrespective of number of siblings. Importantly, middle born people had the least close feelings toward their parents.

As for the relationships between birth order and parenting in adulthood, Suitor and Pillemer (2007) demonstrated that last born adults were considered as having emotionally warmer relationships with their mothers, whereas firstborn people were considered as a

supporter in a crisis or stressful situations. Firstborn individuals have special time with their parents as being the center of attention; however, as a result of having more children, parents are obliged to reduce their time spent with their first children (Adler, 1928, Blake, 1989, Sulloway, 1996). Nonetheless, firstborns can be considered as more advantageous in terms of having a special time without competing with siblings. In association with this, later born children may experience less attention from their mothers. Because of the fact that firstborn children have much of the parent's resources, parents have high expectations from their firstborn children (Suitor & Pillemer, 2007). Thus, they may demand more support in the case of problems or crises. In addition to these findings, Suitor and Pillemer (2007) also concluded that mothers feel emotionally closer to their daughters compared to their sons in adulthood.

Siennick (2013) evaluated the permanence and constancy of relationship between siblings and parents from adolescence to adulthood. As expected, siblings who were emotionally closer to their parents in their adolescence period continued to have closer relationship in their adulthood. In addition, siblings who have had close relations with their parents gained more support considering financial issues (Siennick, 2013).

Tamrouti-Makkink, Dubas, Gerris and van Aken (2004) examined the differential influences of *coercive control* and *emotional warmth* of parents on adolescence adjustment and well-being considering birth order position and gender of siblings. The results indicated that coercive control is related to difficulties in adjustment of children for both same gender siblings and opposite gender siblings. More specifically, coercive control of parents was associated with internalizing behaviors of their daughters. In other words, daughters tend to cope with problems and stress by directing toward themselves. Moreover, lack of emotional warmth from fathers was linked with externalizing behaviors of their firstborn children who have opposite gender siblings. For example, these children might show aggressive behaviors toward other people.

Someya, Uehara, Kadowaki, Tang and Takahashi (2000) studied the influences of birth order and gender on perceived parental styles in Japan. This study with parents having two children particularly showed that there is an interaction between gender and birth order on perception of parenting style. More precisely, the oldest male individuals considered their parents as having a more rejecting style compared to younger siblings. Therefore, Someya et al. (2000) assumed that cultural factors may lead the parents to place more responsibility on male firstborns as being the role model for other siblings. In terms of emotional warmth,

female individuals considered their parents as emotionally warmer especially when they are the firstborn in the family. They concluded that these results seem parallel to cultural dynamics of Japan (Someya et al., 2000). Thus, cultural framework is a significant aspect of understanding the relationship between birth order and parenting styles.

Kitamura, Sugawara, Shima and Toda (1998) also investigated the association between the care and overprotection facets of parenting and birth order position and gender of siblings in a longitudinal study with Japanese pregnant women. The results indicated that the perceived parental care including affection, empathy, and attention decreased if the children had older siblings. More specifically, the parental care was considered less if people had older sisters and parental overprotection was considered less if people had older and younger brothers.

Kammeyer (1967) put an emphasis on the significant factors associated with birth order influences on personality. Kammeyer (1967) principally maintained that different styles of parenting toward older and younger sibling establish the roots of dissimilar personality characteristics of each sibling. He claimed that along with birth order, its effects on many aspects such as child development and personality should be taken into account. He stated that parents tend to become more protective and anxious when rearing the first born child. Also, parents have a chance to spend more time with their first born child compared to the later born child (Kammeyer, 1967). Hence, firstborn individuals are highly identified with their family perspective and they endeavor to take the responsible role among siblings. On the other hand, later born siblings have an opportunity to observe the relationships between parents and their older siblings and thus, they have several role models (Kammeyer, 1967). Nevertheless, according to the Kammeyer (1967), later born children are exposed to stressful situations experienced by their older siblings. For example, they witness their older siblings starting school. Also, parents become more knowledgeable about child rearing when they have more children and they modify their behaviors. As a consequence of this change, parents tend to become more carefree and relaxed. Kammeyer (1967) concluded that all this information should be considered when forming hypotheses about birth order influences.

In summary, the relationship between birth order and perceived parenting style is one of the crucial domains in developmental psychology. As mentioned in many research articles, the child rearing practices and experiences of parents, family dynamics, gender roles, and socio-cultural factors seem highly related to different perceived parenting attitudes for each sibling within a family. That is to say, each sibling experiences a different family

environment although they have the same parents. This might lead to development of different personalities. It is striking that there are many significant variables that affect the birth order influences on perceived parenting style and personality.

#### 1.5. Other Variables Related to Birth Order Influences

Gender is an important factor with regard to birth order effects (Hoffman, 1991). Gender is associated with cultural values and stereotypes (Brody, 1997). Fagot (1978) maintained that girls are exposed to more behavioral feedbacks linked with dependency whereas boys are encouraged to be independent. Damian and Roberts (2015) maintained that males are more receptive of parental influence to be more dominant and obedient, which constitutes the *traditional niche*. This situation is parallel with cultural and social norms that impose the role of taking responsibility on males. However, when parental expectation related to achievement is considered, parents tend to expect more achievement from their daughters compared to their sons (Bhanot & Jovanovic, 2005). Nevertheless, they have greater expectations from their firstborn children compared to later born children (Hao, Hotz & Jin, 2008).

In parallel with this, having a sibling with the same gender may differ from having a sibling with different gender (e.g. Okudaira et al, 2015; Toman, 1971). Whiteman, McHale and Crouter (2007) contributed that the "imitation, modeling, and, also differences between siblings" are considerably higher and more salient when siblings are the same gender (p. 654). More specifically, Okudaira et al. (2015) claimed that men tend to be less competitive if they have an older sister. Moreover, women tend to be more competitive if they have an older sister. They also maintained that when the first child is female and later child is male, this leads to an increase in *role asymmetry* due to the fact that assertiveness and competitiveness are more closely associated with male gender roles (Okudaira et al., 2015). As a result of role asymmetry, boys were found more competitive and assertive if they had a younger sister (Okudaira et al., 2015). Another developmental study by Carey (1986) pointed out that the interaction and communication style of sibling pairs with same gender versus opposite gender are distinctive. According to Carey (1986), if siblings had same gender, both imitation and contrast effects increased.

Along with the gender issue, as mentioned before, there are many other significant confounding variables that affect the relationship between personality characteristics and birth order position (Damian & Roberts, 2014; Ernst & Angst, 1983). Travis and Kohli (1995) maintained that socioeconomic status could be important with regard to relationship

between birth order and intellectual achievement. For example, birth order has a particular influence on educational completion of people who have middle class parents (Travis & Kohli, 1995). The only children were more likely to have higher educational level compared to other sibling positions. Travis and Kohli (1995) explained this result with resource dilution hypothesis. That is, the learning environment of parents including their educational level and income has a mediator role in the relationship between birth order and educational completion. Therefore, socioeconomic status is associated parental resources, and only children have more advantages in attainment of these resources (Travis & Kohli, 1995). Number of siblings and age gap between siblings (e.g. Jensen & Mchale, 2015) also become crucial factors considering the effects of birth order on personality. Moreover, "the family values, ethnic background, culture, societal rules, and norms" (p. 150) might become key components of birth order effects on different personality characteristics (Herrera et al., 2003). Taking into account all these components, the acceptance of a certain family position such as being the eldest child, the youngest child, or the only boy among girls determines social adaptation, style of interaction with peers, and adults, as well as different parameters of adult life.

In addition to confounding variables of birth order literature, there is a controversy among researchers with respect to methodological issues. It is, for instance, controversial to use *between family designs* versus *within family designs* when investigating birth order. Between family designs give information from different individuals in different families. That is to say, each individual reports their birth order and researchers make a comparison between firstborn and later born people across different families. On the other hand, within family designs compare firstborns and later borns from the same family. Considering birth order studies, both *between family design* and *within family design* can be acceptable because both of them have some advantages and disadvantages.

Between family designs have some risks related to inadequacy of controlling some confounding variables such as siblings' gender, family backgrounds, socioeconomic status, and sib-ship size. Some researchers argue that this design also misses the data from special niches of siblings within the same family environment (Sulloway, 1995). Many researchers consider within family designs as superior to between designs considering the control of confounding variables (e.g. Bleske- Rechek, & Kelly, 2014; Paulhus et al, 1999). Some researchers also assert that certain birth order influences may disappear when within family design is used (Ernst & Angst, 1983).

On the other hand, within family designs introduce "age" as a confounding variable. In these designs, firstborns are always older than later born people across all families. Thus, firstborns would be more conscientious because of their maturation process, which arises from their ages rather than their birth order (Hogan & Roberts, 2004). Moreover, within family designs have some drawbacks including single rater issue. From each family, there is usually one rater who is reporting on themselves and other siblings, which may lead to biased reports of siblings. All in all, both of the design methods have different advantages and drawbacks (Paulhus et al, 1999; Damian & Robert, 2015). Black et al. (2011) suggested that the drawbacks of *between family designs* can be reduced by controlling important confounding variables. This design also reduces the age confounding because participants who are firstborn, middle born or last born may be in the same age range. *Between family designs* are also superior in terms of decreasing social desirability effects because each individual reports their personality characteristics independently. Michalski and Schakelford (2001) also supported the use of between family designs to examine birth order influences due to the fact that within family designs do not consider within family change over time.

Another controversial issue related with birth order literature is the use of *psychological birth order* versus *actual ordinal position*. Adler (1956) put an emphasis on psychological birth order, which is the perception of the individual regarding his or her position within the family. He stated that this is more influential compared to actual birth position. However, Stewart (2012) claimed that using actual birth order by controlling significant family constellation variables might be an effective way of investigating birth order influences. Nonetheless, there is no consensus in birth order literature, and there are different perspectives about the issue of birth order (Bjerkedal, Kristensen, Skjeret, & Brevik, 2007; Harris, 2006; Sulloway, 2007; Wichman, Rodgers, & MacCallum, 2006).

As mentioned, researchers have paid attention to how birth order is linked with personality and parenting styles for many years. On the other hand, only in recent years theorists introduced the concept of early maladaptive schemas, which can be considered as a part of personality. Thus, early maladaptive schemas have emerged as a new research question in relation to parenting styles and birth order. The development of schema theory and early maladaptive schemas will be introduced in the next part.

#### 1.6. Schema Theory and Development of Early Maladaptive Schemas

Each child has some crucial needs including love, care, and security (Young et al., 2003). The attitudes and styles of parents have a significant role in personality development of child (Young et al., 2003). Schema theory essentially has been established based on this relationship between child and parents (Young et al., 2003). If the parents do not meet the child's needs, the child tends to develop maladaptive schemas that are associated with specific needs of child (Young et al., 2003).

Attachment theory by Bowlby (1988) is one of the main contributors for Schema theory, because the key point of this theory is that the relationship between the child and the attachment figure is crucial for understanding the personality development of the child. From cognitive perspective, Beck (1972) defined schemas as clustered thought and feeling patterns enabling people to comprehend and interpret experiences immediately. These theories are major roots of Schema theory. Schema theory is a rather recent theory introduced by Young (1999). It builds on various theoretical approaches such as Cognitive Behavioral Theory, Psychoanalytic Theory, and Gestalt Theory.

In schema theory, schemas are defined as "patterns imposed to reality or experience to help individuals explain it, to mediate perception, and to guide their responses" (Young, Klosko & Weishaar, 2003, p.6). Schemas enable people to comprehend the experiences and give meaning to these experiences (Young et al., 2003). In this regard, Young (1999) supposed that early maladaptive schemas are a mixture of innate temperament, unfavorable experiences with family members, and unmet basic emotional needs of the child including nurturance, love, and care by the caregivers. According to schema theory, there are five key emotional needs as "secure attachment to others; autonomy, competence, and sense of identity; freedom to express valid needs and emotions; spontaneity and play; realistic limits, and self-control" (Young et al., 2003, pp. 14-15).

Young conceptualized the early maladaptive schemas (EMSs) in the framework of "a broad, pervasive theme or pattern; comprised of memories, emotions, cognitions, and bodily sensations; regarding oneself and one's relationship with others; developed during childhood and adolescence; elaborated throughout one's lifetime and dysfunctional to a significant degree" (Young et al., 2003, p.7). Essentially, he considered schemas as having a significant role in the interpretation of experiences. Early maladaptive schemas generally originate from temperament, unfavorable experiences and early interaction style with parents, siblings, and also the environment.

Young et al. (2003) considered unfavorable experiences as "toxic frustration of needs, traumatization or victimization, experiences of too much of a good thing, and selective internalization and identification with significant others" (p.10). In the *toxic frustration of needs*, people are usually deprived of core needs such as love and caring by significant others. As a result of toxic frustration of needs, individuals might develop Emotional Deprivation or Abandonment schemas. As other unfavorable experience, *traumatization* or *victimization* may lead to Mistrust/Abuse, Defectiveness/Shame or Vulnerability to harm schemas. As a third pattern, experiences of too much of a good thing might be associated with lack of autonomy and realistic limits and this might cause Dependence/Incompetence or Entitlement/Grandiosity schemas. As a last pattern, selective internalization and identification with significant others are linked with internalization of specific characteristics of significant others by child (Young et al., 2003).

## 1.6.1. Early Maladaptive Schemas and Schema Domains

According to Young et al. (2003), there are 18 categories of early maladaptive schemas. Moreover, these schemas are grouped under five domains. This section will introduce schema domains and specific early maladaptive schemas of Young et al. (2003).

In the Disconnection and Rejection domain, the core emotional demands and needs are usually not satisfied by significant others. Considering key emotional needs, if *security*, *acceptance*, *safety*, *stability*, *nurturance*, *empathy* and *sharing of feelings* are not met by the parents, people tend to develop maladaptive schemas from this domain. In terms of specific early maladaptive schemas (EMS) of Disconnection and Rejection domain, Abandonment/Instability, Mistrust/Abuse, Emotional Deprivation, Defectiveness/Shame, and Social Isolation/Alienation are considered.

The Abandonment/ Instability schema is essentially related to unpredictability and instability of the parents. The children may have a sense that their needs of attachment, support, protection, and caring are not met and their parents might abandon them. This schema can be regarded as having the most detrimental effects on the individual's life.

In the Mistrust/ Abuse schema, as a consequence of personal experiences as a child, people usually have a belief that other people will abuse, lie, cheat or manipulate them. People with Mistrust/Abuse schema might consider that other people will use them for their own benefit.

People with Emotional Deprivation schema usually assume that their emotional needs will not be met by others. With regard to emotional needs, *deprivation of nurturance*, *deprivation of empathy* and *deprivation of protection* are considered as key elements. Fundamentally, people have a need for affection and warmth by their parents. They also need to be listened and to be understood. They desire to share their feelings and thoughts. Additionally, children have a need for guidelines implemented by their parents. Yet, if these core needs are not met, people tend to develop Emotional Deprivation schema.

The people with Defectiveness/Shame schema have a feeling that they are *inferior*, *defective*, *bad* and *unwanted*. They also believe that if they show their true self, they will not be loved by other people. As a result of these beliefs and feelings, they are more prone to be sensitive to "criticism, rejection or blame" and they tend to feel more shame compared to other people (p. 20).

People with Social Isolation schema separate themselves from the outside environment. They consider themselves as unusual and dissimilar from ordinary people. These beliefs might be as a result of a lack of courage instilled in children by their parents for socialization, or feeling shame about their family of origins, family structure or attitudes and behaviors of the parents.

As a second EMS domain, "Impaired Autonomy and Performance" domain is connected to unmet needs of competence and autonomy, which lead to feelings of inadequacy in terms of taking independent roles. People with this schema domain usually have overprotective and enmeshed families. This domain includes four early maladaptive schemas that are Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, and Failure schemas.

Individuals with Dependence/Incompetence schema have a tendency to think that they are incompetent in performing independently and taking responsibility. More specifically, they may feel incapable of coping with everyday problems without help from others, making judgment or reaching a conclusion about an issue quite difficult.

Individuals with Vulnerability to Harm or Illness schema tend to think that there will always be a risk of catastrophic events and they are excessively worried about these risks and thoughts. These thoughts might be about *medical catastrophes* (e.g. heart attack, cancer), *emotional catastrophes* (e.g. losing her or his senses), and *external catastrophes* (e.g. traffic accidents, earthquake).

Individuals with Enmeshment/Undeveloped Self schema usually have extreme intimacy and emotional connection with their parents. As a result of extreme closeness, people tend not to develop their own self and identity. They always need others in order to be satisfied; otherwise they may feel empty.

In the Failure schema, people have a tendency to consider themselves as insufficient compared to other people. They do not believe that they will be successful in various domains such as intellectual areas or sports. They have a feeling of being untalented, deficient or unsuccessful.

In the third domain called "Impaired Limits", the themes are connected to *lack of inner limits, responsibility toward other people*, or *long term goal orientation*. In this domain, people may have experiences such as disregarding the rights of other people, a lack of understanding and respecting other people's perspective. These may be associated with extreme permissive attitudes of parents, lack of discipline or deficiency in role models. There are two specific early maladaptive schemas connected to Impaired Limits domain. These are "Entitlement/ Grandiosity and Insufficient Self-Control/Self-Discipline."

People with Entitlement/Grandiosity schema have a tendency to maintain that they are superior compared to other people. Moreover, they may think that they do not have to obey the rules. They may display unreasonable reactions without consideration of other people's thoughts and feelings. To illustrate, they may have an extreme desire to be the most successful, the most beautiful or handsome, or the most popular. They may wish to be the most dominant or most competitive. They usually lack of empathy.

Individuals with Insufficient Self-Control/Self-Discipline schema have deficiencies in controlling themselves. They may also have difficulties in facing their failures and they cannot endure these unfavorable results.

"Other Directedness" constitutes the fourth domain of EMS. The schemas within this domain are associated with disregarding one's own desires and needs, focusing instead on others' expectations and desires in order to gain approval by other people. These people usually have families that emphasized *conditional acceptance*. For example, they may show their love, when their children obey their rules or meet their expectations. Therefore, people put a great emphasis on pleasing other people causing neglect of their own needs and desires. In the context of Other Directedness domain, there are three maladaptive schemas. These are "Subjugation, Self-Sacrifice, Approval Seeking/Recognition Seeking" schemas.

People with Subjugation schema tend to be under to the influences of other people in an extreme manner. They have to disregard their own thoughts and feelings in order to prevent rejection, anger, or abandonment. They suppress their needs and emotions. In this schema, people tend to become conformist and obedient.

In the Self Sacrifice schema, people intentionally emphasize the expectations, and desires of other people instead of regarding their own satisfaction. The reason why some people focus entirely on other people's desires might be avoidance of guilt that can result from regarding just one's own self, and avoidance of pain inflicted by other people.

People with the Approval Seeking/Recognition Seeking schema are excessively concerned about being approved and recognized by other people, instead of building their own identity with their own needs and desires. They establish their self-esteem according to the approval of other people. Related to seeking approval, people may intensely focus on academic successes, social acceptance, or status quo in order to get recognition and endorsement.

As the fifth and last domain, "Over-Vigilance and Inhibition" domain is essentially linked with ignorance of the needs of *play* and *spontaneity*. Therefore, people become inclined to disregard their spontaneous thoughts and feelings. This schema domain is also related to obedience to rules and ethical considerations. People with Over-Vigilance and Inhibition schema might come from demanding or punitive parents. They also develop a more perfectionist style and become hypersensitive to mistakes. This domain contains four specific schemas of Negativity/ Pessimism, Emotional Inhibition, Unrelenting Standards/ Hypercriticalness, and Punitiveness.

In the Negativity/Pessimism schema, people usually concentrate on negative sides of the experiences and events. They are extremely afraid of "pain, death, making mistakes, conflicts, problems, or resentment" (Young et al., 1999, p. 26). Due to extreme concentration on negative side of the experiences, they are identified with "chronic worry, vigilance, complaining or indecision" (p. 26).

Emotional Inhibition schema is related to utmost inhibition and suppression of spontaneous behaviors and feelings. These individuals tend to inhibit their own needs to avoid rejection and disapproval. For instance, people with this schema tend to suppress their emotions such as anger, sadness or their sexual desires. They avoid free expression of their feelings.

Making great effort to achieve and reach the highest standards is mainly pertained to Unrelenting Standards/ Hyper-criticalness schema. These high standards generally lead to extreme pressure and criticism toward oneself and also other people. Unrelenting standards may also cause dissatisfaction in various domains such as academics, health, or romantic relationships. Unrelenting standards can also be considered as perfectionism and having strict rules in many domains including cultural and religious perspectives, and overemphasis on time and efficiency.

People having Punitiveness schema maintain a belief that they deserve punishment if they make a mistake. Therefore, this schema is associated with being intolerant, and punitive toward oneself and also other people. They cannot endure imperfection, mistakes or unfavorable feelings.

Initially, Young (1990) described 16 maladaptive schemas; however, as a result of clinical experiences and research, Young (1999) and Young et al. (2003) maintained that there are 18 maladaptive schemas under the five schema domains as stated; however, number of maladaptive schemas and identification of domains have changed across different studies (Schmidt, et al., 1995, Soygüt, Karaosmanoğlu, & Çakır, 2009). Soygüt et al. (2009) also emphasized that clinical population is more likely to reflect early maladaptive schemas compared to normal population. In the present study, we considered 14 schemas under five schema domains as suggested by Soygüt et al. (2009). (see Appendix F).

In summary, according to Young et al (2003), there are 18 schemas under five schema domains; however, in the present study, 14 maladaptive schemas under five schema domains were considered. These early maladaptive schemas can be conceptualized as the negative or neurotic aspects of normal personality, and naturally they are related to other personality characteristics.

#### 1.6.2. The Relationship between Schemas and Personality Traits

There is a scarcity of research that investigates the relationship between maladaptive schemas and birth order, even though there are several research studies that investigate the relationship between personality traits and birth order. Therefore, a summary of the relationship between early maladaptive schemas and personality traits is provided in this section.

Muris (2006) examined the relationship between maladaptive schemas, personality traits, parental rearing behaviors, and psychopathological symptoms in a nonclinical sample.

The sample was adolescents between 12 and 15 years old. One third of participants' families were separated. He used YSQ-A (Young Schema Questionnaire for adolescents), EMBU (Castro, Toro, Van der Ende& Arrindell, 1999) which is a Swedish form of parental rearing behaviors, Big Five Questionnaire for Children (Barbaranelli, Caprara, Rabasca&Pastorelli, 2003), and The Psychopathology Questionnaire for Youths (PQY, Hartman et al., 2001). In this study, maladaptive schemas were categorized under the impaired autonomy and performance, other directedness, and excessive control. According to the results, older participants obtained lower scores in self-sacrifice, social undesirability, and anxiety. Moreover, older participants tended to regard their parents as less controlling and less emotionally warm. The findings indicated that age is a mediator for adolescent group in the relationship between schemas and perception of parenting style. Moreover, gender also had a significant effect on maladaptive schemas. For example, boys reported themselves as more socially isolated compared to girls and girls reported more problems related to eating patterns.

Another finding of the study is that neuroticism was significantly associated with maladaptive schemas (Muris, 2006), which is parallel with other studies (Sava, 2009). Neuroticism was significantly associated with Failure, Dependence/Incompetence, Vulnerability to Harm/Illness, Enmeshment, Subjugation, Self-Sacrifice and Unrelenting Standards. With respect to psychopathological symptoms, there were positive associations between Social Undesirability, Mistrust/Abuse, Unrelenting Standards, Failure and depression; Emotional Inhibition, Abandonment, Social Isolation and anxiety; and Social Isolation, Unrelenting Standards and eating problems. Muris (2006) also highlighted that the most common schemas were "Unrelenting Standards, Self-Sacrifice, Insufficient Self-Control and Self-Discipline." He also asserted that these schemas are also the most prevalent schemas in nonclinical adult samples.

Sava (2009) evaluated the association between the maladaptive schemas, *five-factor* model of personality and irrational beliefs in a university sample in Romania. Irrational beliefs were defined according to Ellis's (1994) Cognitive-Behavioral Theory and included "demandingness, awfulizing/catastrophizing, low frustration tolerance, and global evaluation of human worth and self-downing."

Sava (2009) initially found that there is a significant negative connection between agreeableness and maladaptive schemas and positive connection between neuroticism and maladaptive schemas. More specifically, the schemas under the Disconnection and Rejection

and Impaired Boundaries construct were positively associated with low agreeableness and high neuroticism. Sava (2009) also found that there is a negative association between conscientiousness and Dependence, Incompetence, and Insufficient Self-Control.

Considering the association between irrational beliefs and personality domains, Sava (2009) reached the corresponding conclusion that high neuroticism and low agreeableness are considerably linked with irrational thinking patterns. In terms of the relationship between maladaptive schemas and irrational beliefs, Sava (2009) concluded that demandingness is positively associated with all schemas. Overall, this study demonstrated that high neuroticism is the most closely associated personality trait with maladaptive schemas and irrational beliefs. Lower level of agreeableness is also related with disturbed cognitions such as Rejection and Impaired Boundaries.

Thimm (2010) also analyzed the relationship between the *five-factor* model of personality and early maladaptive schemas and found similar results in the psychiatric outpatient sample from Norway. The age of participants ranged between 18 and 67. They found that there is a high correlation between neuroticism and most of the maladaptive schemas except Self-Sacrifice and Entitlement. In addition, he concluded that there is a negative relationship between extraversion and the schemas of Emotional Deprivation, Mistrust, Social Isolation, Failure, Defectiveness, Subjugation, and Emotional Inhibition. Considering openness to new experiences, a negative relationship was found between openness and the schemas of Failure and Emotional Inhibition. In terms of agreeableness, a negative relationship was found with Mistrust, Entitlement, and Insufficient Self-Control schemas. On the other hand, there were a positive relationship between agreeableness and Self-Sacrifice. With respect to conscientiousness, there was a negative relationship between Insufficient Self-Control and Dependence with this trait of personality. In addition to all these findings, Thimm (2010) further claimed that Big Five personality dimensions are mostly associated with Insufficient Self-Control, Dependence, Social Isolation, Failure, Subjugation, Entitlement, and Defectiveness schemas. On the other hand, personality traits did not predict Enmeshment, Emotional Deprivation, and Self-Sacrifice. This study provides a sense about the associations between maladaptive schemas and cognitive, behavioral, and emotional aspects of personality.

All in all, personality traits are linked with early maladaptive schemas. In line with this information, neuroticism is particularly positively related to maladaptive schemas; whereas, agreeableness is particularly negatively related to maladaptive schemas. Despite the

fact that there is no known study investigating the relationship between birth order and early maladaptive schemas, studies that examine the relationship between personality traits and maladaptive schemas might provide an understanding about the issue. In light of findings mentioned so far, we hypothesized that firstborn and lastborn siblings will differ in schema domains. Also, it should be considered that parenting styles are very crucial for firstborn and lastborn siblings and development of maladaptive schemas, so the relationship between parenting styles and maladaptive schemas was mentioned in the next section.

# 1.6.3. Parenting Styles and Early Maladaptive Schemas

It is striking that even though early maladaptive schemas seem to be mostly associated with undesirable and negative parenting styles, there are very few empirical studies investigating this relationship. Nevertheless, existing studies supported that there is a significant association between parenting styles and several maladaptive schemas.

Muris (2006), as discussed before, investigated the association between parenting and EMSs. Parental rearing behaviors included "anxious rearing, control, rejection, and emotional warmth (Muris, 2006, p. 407). Undesirable rearing behaviors including anxious rearing, control, and rejection were associated with Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation/Alienation, Social Undesirability, Entitlement/Grandiosity, Insufficient Self-Control/Discipline and Emotional Inhibition.

Harris and Curtin (2002) investigated the connection between perceived parental style, early maladaptive schemas, and depression. Low parental care was positively linked with high Defectiveness/Shame, Insufficient Self-Control, Incompetence/Inferiority, and Vulnerability schemas and depression. Furthermore, they found that parental overprotection is linked with Defectiveness/Shame, Insufficient Self-Control, and Vulnerability schemas. Harris and Curtin (2002) also confirmed that early maladaptive schemas mediate the relationship between parenting style and depression. In other words, these four schemas were predictors of depression symptoms when people had overprotective parents or low parental care.

Gfroerer, Kern, Curlette, White and Jonyniene (2011) examined the relationship between Baumrind's (1971) parenting styles, psychological birth order, and life styles of Adler (1927). Although this study does not include early maladaptive schemas, lifestyles show similarities with maladaptive schemas. According to Baumrind (1971), there are three types of parenting as *authoritative*, *authoritarian*, and *permissive* styles. Authoritative

parents can be considered as having apparent guidance and limits, care, and warmth as well. Authoritarian parents tend to have extreme rules and control and they may punish their child in the non-fulfillment of obedience to parents. Lastly, permissive parents have a lack of clear boundaries and guidance. Therefore, this study examined how perceived parenting style is connected to lifestyle and psychological birth order position of an individual. Lifestyles included belonging/social interest, going alone, taking charge, wanting recognition, being cautious, harshness, entitlement, being liked by all, striving for perfection, and softness (Ansbacher & Ansbacher, 1956). In this regard, belonging/social interest lifestyle is connected to feeling a sense of belonging in a group. Going along is highly linked with agreeableness of the person and coping mechanisms. Taking charge as a lifestyle is associated with the desire of serving as the most dominant within a group. Wanting recognition involves the aspiration of achievement and gaining approval by other people. Being cautious can be considered as a consequence of unpredictable and unsafe parents in childhood; hence, people with this lifestyle tend to be cautious about experiences and people. In terms of additional lifestyles, harshness refers to people's perception of difficulties in childhood. Entitlement is associated with a lack of tolerance when expectations are not satisfied, and people with this theme tend to desire intense attention. Being liked by all lifestyle is related to the desire of pleasing other people. Striving for perfection is associated with problem solving skills, organizational structure, and order. Softness is associated with positive representation of childhood (Adler, 1927).

Results demonstrated that being cautious is positively related to authoritarian parenting style and negatively related to authoritative parenting style (Gfroerer et al., 2011). Maternal authoritativeness and paternal permissiveness were related to belonging and social interest life style. Moreover, maternal authoritativeness was positively linked with wanting recognition and liked by all and negatively linked with going along, being cautious, and softness. Furthermore, there was a negative relationship between softness and authoritativeness. Parental permissiveness was negatively related to belonging/social interest. They also confirmed that psychological birth order is connected to father's and mother's authority. More specifically, only children and middle born children are more likely to consider their parents as more authoritative and less authoritarian compared to other sibling positions. However, there was no association between lastborn and firstborn sibling position and parenting style.

This study (Gfroerer et al., 2011) provided some guidelines when forming our hypothesis for the present study, although there are differences in constructs and

measurement. Similar to previous findings, we expected that parenting styles show variability based on birth order status. Based on differential parenting style, we also expected that firstborn and lastborn siblings differ in schema domains, similar to Gfroerer et al's findings (2011) regarding lifestyles of Adler (1927).

# 1.7. The Aim of the Present Study

On the basis of all these theoretical frameworks and empirical investigations, this study aimed to study early maladaptive schemas of firstborn and lastborn individuals. It was expected that there would be differences between firstborn and lastborn individuals in terms of total schema score and schema domains. Firstborn individuals were expected to have higher schema scores compared to lastborn individuals. This hypothesis was based on Adler's (1927) view that firstborn individuals are more problematic as a result of dethronement effect. Moreover, the claims about firstborns are more neurotic (Sulloway, 1996) and neuroticism is positively associated with maladaptive schemas (Muris, 2006) provided some guidelines for this hypothesis. Based on differentiation of siblings, we hypothesized that firstborn and lastborn individuals differ in schema domains. It was not possible to state hypotheses regarding each schema domain, because there are no empirical findings regarding the effect of birth order on specific schema domains. We also expected that there would be differences in perceived parenting styles of firstborn and lastborn siblings. Fundamentally, we expected that firstborn and lastborn individuals differ in schema domains and parenting styles. In addition to these main hypotheses, we also investigated variables such as age, gender, birth order, and parenting style as predictors of maladaptive schemas.

#### **CHAPTER 2**

#### **METHOD**

### 2.1. Participants

Only participants who had intact families were selected. In other words, only participants whose parents are still married were included in the study. Also, participants were excluded if their parents had died and if they have adopted siblings.

In the present study, as shown in Table 2.1, 294 participants were between the ages of 18 and 30 (M = 22.72, SD = 2.47). In the study, 71.4% (n = 219) of participants were female and 28.6% (n = 84) were male. In terms of education level of participants, 67.7% (n = 199) were university students, 28.9% (n = 85) were at master and doctorate students, 3.4% (n = 10) had high school or lower level education. As for birth order status, 45.9% (n = 135) of participants were firstborn siblings and 54.1% (n = 159) were lastborn siblings in their families. The maximum number of siblings was four; 78.6% (n = 231) had one sibling, 18% (n = 53) had two siblings, and 3.4% (n = 10) had three siblings. The participants had at least one sibling between the ages of 18 and 30.

Participants' parental education level was distributed as; for mother, 2.7% (n=8) were literate, 27.2% (n=80) were primary school graduate, 7.8% (n=23) were secondary school graduate, 27.6% (n=81) were high school graduate, 31.3% (n=92) were college graduate, 2% (n=6) had a master's degree, and 1.4% (n=4) had a doctorate degree. The educational level of fathers was, 1% (n=3) were literate, 13.9% (n=41) were primary school graduate, 9.8% (n=29) were secondary school graduate, 25.9% (n=76) were high school graduate, 42.5% (n=125) were college graduate, 4.4% (n=13) had a master's degree, and 2.4% (n=7) had a doctorate degree. As for monthly family income of participants, 1.7% (n=5) had an income between 0.999 Turkish Liras (TL), 13.3% (n=39) had an income between 1000-1999 TL, 19.7% (n=58) had an income between 2000-2999 TL, 15% (n=44) had an income between 3000-3999 TL, 19.7% (n=58) had an income

between 4000-4999 TL, and 30.6% (n = 90) had an income over 5000 TL (see Table 2.1. for details).

**Table 2.1**Demographic Characteristic of Participants

Variables	N (294 participants)	%
Gender	Total: 294	
Female	210	71.4
Male	84	28.6
Age	Total: 294	
Between 18-21	100	34.0
Between 22-25	160	54.6
Between 26-30	34	11.6
<b>Education Level</b>	Total: 294	
University students	199	67.8
Master and doctorate students	85	28.8
High school graduate or lower	10	3.4
Birth order status	Total: 294	
Firstborn	135	45.9
Lastborn	159	54.1
Number of siblings	Total: 294	
1	231	78.6
2	53	18.0
3	10	3.4
Mothers' Education	Total: 294	
Literate	8	2.7
Primary School	80	27.2
Secondary School	23	7.8
High School	81	27.6
College	92	31.3
Master	6	2.0
Doctorate	4	1.4
Fathers' Education	Total: 294	
Literate	3	1.0
Primary School	41	13.9
Secondary School	29	9.9
High School	76	25.9
College	125	42.5
Master	13	4.4
Doctorate	7	2.4
Familial Monthly Income	Total: 294	
0-999 TL	5	1.7
1000-1999 TL	39	13.3
2000-2999 TL	58	19.7
3000-3999 TL	44	15.0
4000-4999 TL	58	19.7
5000+ TL	90	30.6

#### 2.2. Measures

We distributed an online survey in order to reach more people. Following informed consent, participants completed a demographic information form. This form included questions regarding participant's age, gender, education level, birth order position, number of siblings, gender of siblings, age of siblings, education level of parents, familial monthly income, and intactness of family.

Then, they completed Turkish version of Young Schema Questionnaire-Short Form-3 in order to assess early maladaptive schemas. Lastly, they completed Turkish version of Young Parenting Questionnaire (Young, 1994) in order to assess perceived parenting styles of their parents.

#### 2.2.1. Young Schema Questionnaire

The 90-item Young Schema Questionnaire Short Version 3 (YSQ, Young, 1999) representing 14 early maladaptive schemas was used. It is a 6-point Likert type scale ranging from 1 (completely untrue of me) to 6 (describe me perfectly). There are five schema domains in this version of YSQ.

The original long version of Young Schema Questionnaire contains 205 items representing 16 early maladaptive schemas (Young, 1990). Schmidt, Joiner, Young and Telch (1995) evaluated the reliability and validity of YSQ long version in a nonclinical sample and they concluded that there are twelve factors that are similar with Young's (1990) construct. As a different factor, *fear of losing control* emerged. They also found convergent validity with parallel theoretical frameworks. Early maladaptive schemas were negatively associated with self-esteem, positively associated with depression, and personality disorder dispositions.

The third version of YSQ has 90 items (Young, 1999) and three more schemas than the original instrument developed by Young (1990). These are Approval Seeking, Punitiveness, and Pessimism (Young, 1999). Also, Entitlement and Insufficient Self Control schemas were integrated and identified as one schema. Calvate, Orue and Gonzalez-Diez (2013) evaluated the 3<sup>rd</sup> version of YSQ in a Spanish sample and found support for its reliability and validity.

Soygüt, Karaosmanoğlu and Çakır (2009) adapted the inventory to Turkish and evaluated the psychometric qualities of Turkish Young Schema Questionnaire-Short Form-3 in a university sample and found 14 factors. These 14 factors were categorized under five

schema domains which were *Disconnection, Impaired Autonomy, Impaired Limits, Other-Directedness*, and *Unrelenting Standards*. According to Soygüt et al. (2009), the internal consistency of the five schema domains was in the range of .53 and .81. Test-retest reliability of the scale was between .66 and .83. In terms of convergent validity, there were significant correlations between 14 early maladaptive schemas and depression (between .34 - .64), anxiety (.13 - .52), and interpersonal sensitivity (.15 - .58). Moreover, there were significant correlations between five schema domains and depression (r = .55 - .68, p < .01), anxiety (r = .18 - .54), and interpersonal sensitivity (r = .20 - .60).

Sarıtaş and Gençöz (2011) also evaluated the psychometric properties of YSQ-Short Form-3 in a nonclinical adolescent sample. They found three schema domains as *Impaired Limits-Exaggerated Standards*, *Disconnection/Rejection* and *Impaired Autonomy-Other Directedness*. In terms of concurrent validity of the scale, there was a positive association between Impaired Limits-Exaggerated Standards schema domain and anger (r = .36, p < .01), anxiety (r = .35, p < .01), and negative affect (r = .36, p < .01). Positive associations were also found between Disconnection and Rejection schema domain and anger (r = .32, p < .01), anxiety (r = .49, p < .01) and negative affect (r = .44, p < .01), and negative association was found between Disconnection-Rejection schema domain and positive affect (r = .19, p < .01). There were positive associations between Impaired Autonomy- Other Directedness schema and anger (r = .28, p < .01), anxiety (r = .46, p < .01), and negative affect (r = .38, p < .01). Finally, a negative association was found between Disconnection-Rejection schema domain and positive affect (r = .19, p < .01).

As mentioned, although many factors show correspondence across different studies, number of maladaptive schemas and schema domains may show variability across studies (see Appendix F for a comparison of schemas and domains across studies). We did our research based on Soygüt (2009) and colleagues' version of the instrument because they adapted this instrument to Turkish and found valid and reliable support for Young's (1999) original schema inventory. Soygüt at al. (2009) also found similar results with studies that are conducted in Western cultures. Moreover, their sample was university students. In our study, most of the participants were university students. Hence, we used 14 maladaptive schemas that are categorized under five schema domains (Soygüt et al., 2009). Cronbach's alpha values of total schema score was .78, disconnection schema domain was .72, impaired

autonomy schema domain was .75, impaired limits schema domain was .32, other directedness schema domain was .51, and unrelenting standards was .47 in our study.

# 2.2.2. Young Parenting Inventory

Young Parenting Inventory (Young, 1994) is a 72-item self-report instrument that measures perceived parenting styles of parents. It was used in order to reveal the relationship between maladaptive schemas and parenting styles of both mother and father as experienced by the participant. It is a 6-point Likert-type scale ranging from 1 (*completely untrue of me*) to 6 (*describe me perfectly*). Except for the first five items of Emotional Deprivation schema, higher scores demonstrate unfavorable parental attitudes and behaviors.

Karaosmanoğlu and Soygüt (2004) adapted the instrument to Turkish, and Soygüt, Çakır, and Karaosmanoğlu (2008) investigated the psychometric properties of Turkish version of Young Parenting Inventory in a university sample. There were ten common mothers and fathers' form, including factors emotionally depriving, overprotective/anxious, belittling/criticizing, pessimistic/worried, normative, restricted/emotionally inhibited, punitive, conditional/achievement focused, overpermissive/boundless and exploitative/abusive parenting styles. Cronbach's alpha values of the maternal form ranged between .53 - .86 and of paternal form between .61 and .88. In terms of test-retest reliability, maternal form ranged between .38 and .83 (p < .01) and paternal form ranged between .56 and .85 (p < .01).

In terms of convergent validity, the correlation between YPI mother form and depression subscale ranged between .13 and .43, the correlation between YPI mother form and anxiety subscale ranged between .15 and .30, the correlation between YPI mother form and interpersonal sensitivity subscale of Symptom Checklist Scale (SCL-90-R) ranged between .12 and .36. The correlation between YPI father form and depression subscale ranged between .18 and .36, the correlation between YPI father form and anxiety subscale ranged between .13 and .30, the correlation between YPI father form and interpersonal sensitivity of Symptom Checklist Scale (SCL-90-R) ranged between .21 and .34.

The YPI inventory also showed discriminant validity. Significant differences between normal and clinical samples were found with regard to belittling/criticizing, emotionally depriving, exploitative/abusive, conditional/achievement focused, overpermissive/boundless and restricted/emotionally inhibited parenting styles in mother form. Normative, belittling/criticizing, emotionally depriving, exploitative/abusive,

overpermissive/boundless, pessimistic/worried, and punitive parenting styles were significantly higher in the clinical sample.

In our study, Cronbach's alpha value of Young Parenting Inventory mother form was .78 and father form was .88.

#### 2.3. Procedure

Firstly, we received permission from ethical committee of Middle East Technical University. Then, an online survey was created using Qualtrics, which included demographic form, Young Schema Questionnaire and Young Perceived Parenting Style Inventory. Participants completed the survey via internet. In the beginning of survey, participants took informed consent. The survey took approximately 25 minutes to complete.

# 2.4. Statistical Analysis

In the present study, Statistical Package for the Social Science (SPSS) was used in order to conduct statistical analyses. Initially, descriptive information of the study measurements and demographic variables were investigated. Moreover, correlations among demographic variables and measures of the study were conducted. Following this step, MANOVAs were performed in order to analyze the significant differences between demographic variables on the schema domains and parenting styles. In this regard, we hypothesized that there would be differences in schema domains according to birth order. Therefore, firstborn and lastborn siblings have significantly different total schema scores. Specifically, firstborns were expected to have higher total schema scores compared to lastborn siblings. We also hypothesized that firstborn and lastborn siblings differ in schema domains. In order to test these hypotheses, we conducted MANOVA analyses. In terms of perceived parenting styles, we hypothesized that firstborn and lastborn siblings would differ in perceived parenting style. This hypothesis was also tested by MANOVA analysis.

After that, as follow up analysis, regression analysis was conducted in order to investigate birth order and parenting styles as predictors of schema domains. We did not support that birth order predicts schema domains. Therefore, we conducted hierarchical regression analyses in order to examine other predictor variables of schema domains.

# **CHAPTER 3**

#### **RESULTS**

# 3.1. Descriptive Information for Measures of the Study

Means, standard deviations, minimum-maximum score ranges, and Cronbach's alpha coefficients were calculated for the total score of Young Schema Questionnaire, the five schema domains of Young Schema Questionnaire, Young Parenting Inventory mother form, and Young Parenting Inventory father form (see Table 3.1, 3.2). Moreover, means, standard deviations, minimum-maximum score ranges of each maladaptive schema and the subscales of perceived parenting style of parents were calculated (see Table 3.1, 3.2).

 Table 3.1

 Descriptive Information of Schema Domains and Early Maladaptive Schemas

Measures	N	Mean	SD	Range (Min May)	Cronbach's
Voung Cohomo				(Min-Max)	alpha
Young Schema Questionnaire					
YSQ Total	294	233.61	52.55	94-424	.78
Schema	234	233.01	32.33	<b>94-4∠4</b>	.76
Domains					
Domanis	294	50.61	18.11	23-118	.72
IA	294	63.20	20.63	29-140	.75
IL IL	294 294	25.67	25.67	7-40	.73
OD	294	35.94	35.94	14-58	.51
US	294 294	30.92	8.00	9-50	.31 .47
	294	30.92	8.00	9-30	.47
Maladaptive Schemas					
ED	294	8.87	4.51	5-27	
F	294	12.89	5.81	6-34	
r P	294 294	12.77	5.56	5-30	
SI	294 294				
		18.23	6.80	7-42 5-27	
EI	294	12.58	5.43	5-27	
AS	294	21.48	5.65	6-35	
E	294	15.41	6.33	8-37	
E/ISC	294	25.67	6.20	7-40	
SS	294	15.15	4.84	5-30	
A	294	9.68	4.19	5-27	
P	294	20.79	5.09	8-36	
D	294	10.93	5.18	6-36	
VH	294	12.45	4.78	5-27	
US	294	9.44	3.77	3-18	

# Table 3.1 Cont'd

Note. YSQ Total = Young Schema Questionnaire Total, D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other-Directedness, US = Unrelenting Standards, ED = Emotional Deprivation, F = Failure, P = Pessimism, SI = Social Isolation, EI = Emotional Inhibition, AS = Approval Seeking, E = Enmeshment, E/ISC = Entitlement/Insufficient Self Control, SS = Self Sacrifice, A = Abandonment, P = Punitiveness, D = Defectiveness, VH = Vulnerability to Harm, US = Unrelenting Standards

**Table 3.2**Descriptive Information of Perceived Parenting Styles

Measures	N	Mean	SD	Range (Min-Max)	Cronbach's alpha
Young					
<b>Parenting</b>					
Inventory					
YPI-M	294	156.93	37.50	78-275	.81
YPI-F	294	155.18	45.63	71-319	.78
YPI-Total	294	312.11	75.61	153-552	.88
Subscales of					
Mothers'					
<b>Parenting</b>					
N	294	33.00	12.74	12-69	
B/C	294	21.94	6.41	9-42	
ED	294	16.99	7.45	8-43	
E/A	294	8.78	4.59	7-37	
O/A	294	21.98	7.30	7-39	
C/AF	294	16.94	5.77	5-30	
OP/B	294	10.62	4.95	6-34	
P/W	294	8.52	4.23	3-18	
P	294	9.60	3.45	4-20	
R/EI	294	8.56	3.45	3-18	
Subscales of					
Fathers'					
Parenting					
N	294	33.89	13.45	12-71	
B/C	294	15.21	8.20	9-51	
ED	294	20.65	9.71	8-48	
E/A	294	9.27	4.55	7-32	
O/A	294	19.87	6.98	7-42	
C/AF	294	17.17	6.07	5-30	
OP/B	294	11.02	5.28	6-32	
P/W	294	7.99	3.97	3-18	
P	294	9.97	3.68	4-22	
R/EI	294	10.14	3.86	3-18	

Note. YPI-M = Young Parenting Inventory Mother Form, YPI-F = Young Parenting Inventory Father Form, N = Normative, B/C = Belittling/ Criticizing, ED = Emotionally Depriving, E/A = Exploitative/Abusive, O/A = Overprotective/Anxious, C/AF = Conditional/Achievement Focused, OP/B = Overpermissive/Boundless, P/W = Pessimistic/Worried, P = Punitive, R/EI = Restricted/Emotionally Inhibited

# 3.2. Intercorrelations among Demographic Variables and Measures of the Study

Pearson's correlation coefficients were calculated in order to investigate the relationships between gender, age, birth order, mother's education level, father's education

level, familial monthly income, and Young Schema Inventory Domains, Young Parenting Inventory Mother Form, Young Parenting Inventory Father Form, and the subscale scores of perceived parenting styles (see Tables 3.3, 3.4, 3.5).

Table 3.3

Pearson's Correlation between Demographic Variables and Young Maladaptive Schema Domains and Parenting Styles

Variables	G	A	ВО	ME	FE	FMI	D	IA	IL	OD	US	YPI-M	YPI-F
G	1	.05	.10	01	.04	07	.16**	.01	01	01	12*	.11	.05
A		1	40**	03	08	.16**	18**	18*	12*	11	15*	08	03
BO			1	.08	.05	08	.04	.03	.05	001	.003	.05	02
ME				1	.66**	.53**	01	.06	09	15**	03	01	01
FE					1	.49**	03	.04	01	08	03	01	05
FMI						1	08	.01	01	05	02	01	03
D							1	.72**	.23	.41*	.29**	.58**	.50**
IA								1	.18	.49**	.44**	.59**	.50**
IL									1	.33**	.44**	.19**	.24**
OD										1	.48**	.38**	.30**
US											1	.35**	.28**
YPI-M												1	.65**
YPI-F													1

\*p < .05 \*\* p < .001

Note. G = Gender, A = Age, BO = Birth Order, ME = Mother Education, FE = Father Education, FMI = Familial Monthly Income, D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other Directedness, US = Unrelenting Standards, YPI-M = Young Parenting Inventory Mother Form, YPI-F = Young Parenting Inventory Father Form

49

 Table 3.4

 Pearson's Correlations between Schema Domains and Subcategories of Perceived Parenting Style of Mothers

Variables	D	IA	IL	OD	US	N	B/C	ED	E/A	O/A	C/AF	O/B	P/W	P	R/EI
D	1	.72**	.23	.41**	.29**	.27**	.70**	.49**	.39**	.24**	.15**	.46**	.27**	.36**	.30**
IA		1	.18	.49**	.44**	.32**	.82**	.32**	.31**	.40**	.22**	.36**	.25**	.28**	.26**
IL			1	.33**	.44**	.15**	.31**	.02	08	.08**	.20**	.09	.11	.07	.10
OD				1	.48**	.26**	.59**	.10	.07	.23**	.18**	.18**	.25**	.19**	.15**
US					1	.29**	.45**	.10	02	.25**	.35**	.11	.17**	.15**	.09
N						1	.25**	.27**	.34**	.34**	.64**	.19**	.49**	.43**	.44**
B/C							1	.26**	.30**	.32**	.19**	.35**	.22**	.25**	.23**
ED								1	.34**	.003	13**	35**	.31**	33**	.37**
E/A									1	.16**	.18**	.55**	.26**	.45**	.24**
O/A										1	.33**	.29**	.29**	.20**	.14**
C/AF											1	.17**	.37**	.35**	.21**
O/B												1	.28**	.44**	.19**
P/W													1	.33**	.43**
P														1	.31**
R/EI															1

*No*\* *p* < .05 \*\* p < .001

Note. D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other Directedness, US = Unrelenting Standards, N = Normative, B/C = Belittling/Criticizing, ED = Emotionally Depriving, E/A = Exploitative/Abusive, O/A = Overprotective/Anxious, C/AF = Conditional/Achievement Focused, O/B = Over-permissive/Boundless, P/W = Pessimistic/Worried, P = Punitive, R/EI = Restricted/Emotionally Inhibited.

Table 3.5

Pearson's Correlations between Schema Domains and Subcategories of Perceived Parenting Style of Fathers

Variable	D	IA	IL	OD	US	N	B/C	ED	E/A	O/A	C/AF	O/B	P/W	P	R/EI
D	1					.30**	.48**	.48**	.41**	.22**	.18**	.39**	.32**	.34**	.26**
IA		1				.37**	.45**	.34**	.35**	.38**	.27**	.30	.34**	.28**	.24**
IL			1			.26**	.10	.07	.08	.15**	.29**	.12**	.18**	.18**	.17**
OD				1		.30**	.19**	.15**	.14**	.21**	.22**	.19**	.20**	.21**	.16**
US					1	.34**	.14**	.10	.07	.17**	.38**	.11	.14*	.14*	.17**
N						1	.57**	.42**	.35**	.48**	.68**	.18**	.57**	.48**	.47**
B/C							1	.69**	.69**	.40**	.37**	.48**	.50**	.59**	.31**
ED								1	.55**	.08	.25**	.50**	.38**	.40**	.40**
E/A									1	.19**	.17**	.41**	.37**	.48**	.16**
O/A										1	.42**	.16**	.39**	.24**	.19**
C/AF											1	.15**	.43**	.40**	.32**
O/B												1	.35**	.31**	.21**
P/W													1	.46**	.32**
1														1	.27**
R/EI															1

<sup>\*</sup> p < .05 \*\* p < .001

Note. D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other Directedness, US = Unrelenting Standards, N = Normative, B/C = Belittling/Criticizing, ED = Emotionally depriving, E/A = Exploitative/Abusive, O/A = Overprotective/Anxious, C/AF = Conditional/Achievement focused, O/B = Overprotective/Boundless, P/W = Pessimistic/Worried, P = Punitive, R/EI = Restricted/Emotionally inhibited

# 3.3. Differences in Schema Domains and Parenting Styles based on Birth Order and Other Demographic Categories

Separate Multivariate Analyses of Variance were conducted to determine how Schema Domains and Parenting Styles differed based on birth order and other demographic variables including gender, age, education level of participants, parents' educational level, and familial monthly income. Demographic variables were categorized in order to analyze demographic variables as independent variables. These categorizations are given in Table 3.6.

**Table 3.6**Categorization of the Demographic Variables

Variables	n	%
Gender		
Female	210	71.4
Male	84	28.6
Age		
18-21	100	34.0
22-25	160	54.4
26-30	34	11.6
<b>Education Level of Participants</b>		
University students	199	67.7
Graduate or above	85	28.9
High school or below	10	3.4
Birth Order		
Firstborn	135	45.9
Lastborn	159	54.1
Mother Education		
Graduate of primary school or below	88	29.9
Graduate of secondary school or high	104	35.4
school	102	34.7
Graduate of college or more		
Father Education		
Graduate of primary school or below	44	15
Graduate of secondary school or high	105	35.7
school	145	49.3
Graduate of college or more		
Familial Monthly Income		
Low (0-1999 TL)	44	15
Middle (2000-3999 TL)	102	34.7
High (4000+ TL)	148	50.3

One of the main hypotheses that firstborn and lastborn siblings differ in early maladaptive schemas was not supported. For these variance analyses, only significant results were reported.

A one-way between subjects ANOVA was conducted in order to examine the age differences (18-21, 22-25, 26-30) on total schema score. There was a significant effect of age on total schema score at the p < .05,  $[F(2, 291) = 3.72, p < .05, \eta_p^2 = .03]$ . Results indicated that participants who were between 18 and 21 years old (M = 243.55, SD = 5.21) had significantly higher total schema scores than participants who were between 26 and 30 years old (M = 217.29, SD = 8.93). There were not any other significant relationship between demographic variables and total schema scores of participants.

In order to examine the gender differences, MANOVA was also conducted with 5 schema domains as dependent variables. Results demonstrated that gender had a significant main effect on schema domains [Multivariate F(5, 288) = 3.81, p < .01; Wilks' Lambda = .94;  $\eta_p^2 = .06$ ]. Univariate analyses were conducted to determine gender differences on schema domains with Bonferroni adjustment. Therefore, alpha levels lower than .01 (i.e. .05/5) were considered to be significant with this correction. A significant gender difference was found in Disconnection subscale [ $F(1, 292) = 7.29, p < .01; \eta_p^2 = .02$ ]. Accordingly, males (M = 55.07, SD = 18.31) had higher scores than females (M = 48.82, SD = 17.76) in schema domain of Disconnection (see Table 3.7).

**Table 3.7**Gender Differences on Schema Domains

	Male	Female	Multivariate F(5, 288)	<b>Univariate</b> <i>F</i> (1, 292)
Schema			3.81**	
<b>Domains</b>				
Disconnection	55.07	48.02		7.29**
Impaired	63.58	63.04		.04
Autonomy				
Immained Limite	25 50	25.70		02
Impaired Limits	25.58	25.70		.02
Other	35.79	36.00		.04
Directedness	33.17	30.00		.04
2110000011000				
Unrelenting	29.45	31.51		3.99*
Standards				

<sup>\*</sup>*p* < .05, \*\* *p* < .01

In order to examine the age differences, MANOVA was conducted with 5 schema domains as dependent variables. Results indicated that age had a significant main effect on schema domains [*Multivariate F*(10, 574) = 2.21, p < .01; Wilks' Lambda = .93;  $\eta_p^2$  = .04]. Univariate analyses were conducted to determine age differences on schema domains with Bonferroni adjustment. Alpha levels lower than .01 (i.e. .05/5) were considered to be significant with this correction. A significant age difference was found in Impaired Limits [F(2, 291) = 4.91, p < .01;  $\eta_p^2 = .03$ ]. Accordingly, people who were between 18 and 21 years old (M = 27.21, SD = .61) had higher Impaired Limit scores than people who were between 22 and 25 years old (M = 24.78, SD = .48) (see Table 3.8).

**Table 3.8**Age Differences on Schema Domains

	Ages 18-21	Ages 22-25	Ages 26-30	Multivariate F (10, 574)	Univariate F(2, 291)
Schema					
<b>Domains</b>				2.21**	
D	53.31	50.19	44.65		3.04*
IA	66.61	62.08	58.44		2.53
IL	27.21	24.78	25.32		4.91**
OD	36.88	35.51	35.21		1.09
US	31.96	30.91	27.88		3.35*

<sup>\*</sup>*p* < .05, \*\**p* < .01

*Note*. D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other Directedness, US = Unrelenting Standards

In order to examine participant's educational level differences, MANOVA was conducted with 5 schema domains as dependent variables. Before the analysis, Box's Test of Equality of Covariance Matrices were found significant; therefore, in the analysis, Pillai's Trace score was used instead of Wilks' Lambda. Results indicated that educational level had a significant main effect on schema domains [Multivariate F(10, 574) = 2.75, p < .01; Pillai's Trace = .91;  $\eta_p^2 = .05$ ]. Univariate analyses were conducted to determine educational level differences on schema domains with Bonferroni adjustment. Alpha levels lower than .01 (i.e. .05/5) were considered to be significant with this correction. A significant educational level difference was found in Disconnection schema [F(2, 291) = 9.38, p < .01;  $\eta_p^2 = .06$ ]. Accordingly, university students (M = 52.73, SD = 1.25) had higher scores than postgraduate people (M = 44.22, SD = 1.91) in schema domain of Disconnection. Moreover, participants who had high school or lower level of education (M = 62.70, SD = 5.57) had

higher scores than both university students and postgraduate people (M = 44.22, SD = 1.91) (see Table 3.9).

**Table 3.9**Educational Level Differences on Schema Domains

	High school or lower level	University students	Postgraduate	Multivariate F(10, 576)	Univariate F(2, 291)
Schema				2.71	
<b>Domains</b>					
D	62.70	52.73	44.22		9.38**
IA	71.70	65.06	57.84		4.64*
IL	27.40	26.26	24.08		4.17
OD	37.40	36.19	35.18		.66
US	33.30	30.91	.87		.49

<sup>\*</sup>p < .05, \*\*p < .01

*Note*. D = Disconnection, IA = Impaired Autonomy, IL = Impaired Limits, OD = Other Directedness, US = Unrelenting Standards

Separate Multivariate Analyses of Variance were conducted in order to demonstrate possible differences in Young Parenting Inventory (Mother and Father Forms) and the YPI subscale scores based on birth order.

In order to examine birth order differences on different styles of parenting, MANOVA was conducted with ten parenting styles of mother as dependent variables (Table 3.10). Results indicated that birth order had a significant effect on overprotective/anxious parenting of mothers  $[F(10, 283) = 1.97, p < .01; \eta_p^2 = .07]$ . Univariate analyses were conducted to determine birth order differences on overprotective/anxious parenting style of mothers with Bonferroni adjustment. Therefore, alpha levels lower than .005 (i.e. .05/10) were considered to be significant with this correction. A significant difference was found in overprotective/anxious parenting of mothers  $[F(1, 292) = 7.58, p < .005; \eta_p^2 = .03]$ . Accordingly, people who were lastborn siblings (M = 23.04, SD = .57) reported that their mothers are more overprotective and anxious than firstborn siblings (M = 20.72, SD = .62).

**Table 3.10**Birth Order Differences on Subcategories of Perceived Parenting Style of Mothers

	Firstborn	Lastborn	<b>Multivariate</b> <i>F</i> (10, 283)	<b>Univariate</b> <i>F</i> (1, 292)
Mother's Parenting			1.97*	
Normative	33.38	32.68		.22
Belittling/Criticizing	21.33	22.45		2.33
Emotionally depriving	39.28	38.79		.32
Exploitative/Abusive	9.19	8.44		1.93
Overprotective/Anxious	20.72	23.04		7.58**
Conditional/Achievement focused	16.85	17.01		.06
Overpermissive/Boundless	10.54	10.69		.06
Pessimistic/Worried	8.02	8.95		3.54
Punitive	9.73	9.49		.34
Restricted/Emotionally inhibited	8.40	8.70		.57

<sup>\*</sup>p < .005

# 3.4. Regression Analyses

Our main hypotheses were tested with MANOVA analyses. However, we could not support birth order differences in schema domains although we found significant birth order differences in perceived parenting style of mothers. Therefore, we conducted follow up regression analyses in order to investigate predictor variables of schema domains. As follow up, a simple linear regression analysis was conducted in order to predict total schema score based on birth order and perceived parenting styles of parents. Results demonstrated that birth order did not predict total schema score. However, parenting style of mother [pr = .16,  $\beta = .16 t(292) = 2.70$ , p < .05] and parenting style of father [pr = .16,  $\beta = .16 t(292) = 2.70$ , p < .05] significantly predicted total schema score and explained .43 % of the variance [F(3, 290) = 71.99, p < .001]. People who have negative parenting style from their parents tend to have higher maladaptive schema score.

Moreover, five hierarchical regression analyses were conducted in order to examine the predictors of schema domains (see Table 3.11). In each regression analysis, firstly demographic variables (gender, age, birth order, education level, mother's education, father's education, familial monthly income) were hierarchically entered into regression equation. After controlling for significant demographic variables, on the second step, perceived parenting style of mother and father were included in equation hierarchically.

Regression results predicting Disconnection schema domain yielded that gender [pr = .16,  $\beta$  = .16 t(292) = 2.88, p < .05] explained %2 of the variance [F(1, 292) = 7.29, p < .05], after that, age [pr = -.18,  $\beta$  = -.18, t(291) = -3.14, p < .05] increased the explained variance to 6% [F change (1, 291) = 9.88, p < .05]. After controlling for these variables, among the second step variables, mother's parenting style [pr = .56,  $\beta$  = .55, t(290) = 11.54, p < .001] increased the explained variance to 37% [F change (1, 290) = 133.05, p < .001]; after that father's parenting style [pr = .20,  $\beta$  = .21, t(289) = 3.48, p < .001] increased the explained variance to 39% [F change (1, 289) = 12.10, p < .001]. Therefore, results demonstrated that individuals who were male, younger, and who had parents with negative parenting style tended to develop stronger Disconnection schema.

Regression results predicting Impaired Autonomy schema domain yielded that among the demographic variables, age  $[pr = -.18, \beta = -.18, t(292) = -3.03, p < .05]$  explained 3% of the variance [F(1, 292) = 9.20, p < .05]. Among the second step variables, mother's parenting style  $[pr = .59, \beta = .58, t(291) = 12.22, p < .001]$  increased the explained variance to 35% [F(1, 291) = 149.21, p < .001]. Father's parenting style  $[pr = .19, \beta = .20, t(290) = 3.23, p < .01]$  increased the explained variance to 37%  $[F \ change \ (1, 290) = 10.40, p < .01]$ . The results indicated that younger people who had parents with more negative parenting style are more likely to develop Impaired Autonomy schema.

Regression results predicting Impaired Limits yielded that none of the demographic variables predicted Impaired Limit domain. Among the second step variables, mother's parenting style [pr = .18,  $\beta = .18$ , t(292) = 3.04, p < .01] explained 6% of the variance [F change (1, 292) = 9.22, p < .01]. Father's parenting style [pr = .16,  $\beta = .20$ , t(291) = 2.68, p < .01] increased the explained variance to 9% [F change (1, 291) = 7.20, p < .01]. The results indicated that people who had parents with more negative parenting style are more likely to develop Impaired Limits schema.

Regression results predicting Other Directedness schema yielded that mother education [pr = -.16,  $\beta = -.16$ , t(292) = -2.72, p < .01] explained 4% of the variance [F(1, 1)]

) = 7.42, p < .05]. Among the second step variables, mother's parenting style [pr = .38,  $\beta = .38$ , t(291) = 6.89, p < .001] increased the explained variance to 18% [F change (1, 291) = 47.45, p < .001]. Father's parenting style did not change the explained variance. The results demonstrated that people who had mothers with low educational level and negative parenting style tend to have higher schema scores on Other Directedness schema domain.

Regression results predicting Unrelenting Standards yielded that, among the demographic variables, gender [pr = -.12,  $\beta = -.12$ , t(292) = -2.00, p < .05] explained 1% of the variance [F(1, 292) = 3.99, p < .05], age [pr = -.15,  $\beta = -.15$ , t(291) = -2.59, p < .05] increased the explained variance to 4% [F *change* (1, 291) = 6.73, p < .05]. After controlling for gender and age, among the second step variables, mother's parenting style [pr = .37,  $\beta = .36$ , t(290) = 6.66, p < .001] increased the explained variance to 18% [F change (1, 290) = 44.40, p < .001]. However, father's parenting style did not change the variance. The results demonstrated that females and younger people who have mothers with negative parenting style tended to obtain higher scores in Unrelenting Standards schema.

**Table 3.11**Predictor Variables of Schema Domains

		df	Fchange	β	t	pr	$R^2$
A. Dis	sconnection						_
I.	Control Variables						
	Gender	1, 292	7.29*	.16	2.88*	.16	.02
	Age	1, 291	9.88*	.18	-3.14*	18	.05
II.	Sources of Parenting Style						
	Mother	1,290	133.05**	.55	11.54**	.56	.37
	Father	1,289	12.10**	.21	3.48**	.20	.39
B. Im	paired Autonomy						
I.	Control Variables						
	Age	1,292	9.20*	18	-3.03*	18	.03
II.	Sources of Parenting Style						
	Mother	1,291	149.21**	.58	12.22**	.59	.35
	Father	1,290	10.40**	.19	3.23**	.19	.37
C. Im	paired Limits						
I.	Sources of Parenting Style						
	Mother	1, 292	9.22**	.18	3.04**	.18	.06
	Father	1, 291	7.20**	.20	2.75**	.16	.09
D. Ot	her Directedness						
I.	Control Variables						
	Mother Education	1, 292	7.42*	16	-2.72*	16	.04
II.	Sources of Parenting Style						
	Mother	1, 291	47.45**	.38	6.89**	.38	.18
E. Un	relenting Standards						
I.	Control Variables						
	Gender	1, 292	3.99	12	-2.00*	12	.01
	Age	1, 291	6.73	15	-2.59*	15	.04
II.	Sources of Parenting Style						
	Mother	1, 290	44.40	.37	6.66**	.37	.18

<sup>\*</sup>*p* < .05, \*\**p* < .001

#### **CHAPTER 4**

#### **DISCUSSION**

In the present study, we investigated the relationship between birth order, parenting styles, and schema domains. First, we aimed to investigate differences in total schema scores and maladaptive schema domains based on birth order status; however, we did not support our hypothesis that firstborn and lastborn siblings differ in total maladaptive schema scores and schema domains. We also investigated birth order differences on parenting styles and found that parenting styles differ based on birth order status of individuals. According to the results, lastborn siblings reported that they have more overprotective and anxious mothers compared to firstborn siblings. However, we did not find this difference for fathers' parenting style. Possible influences and sources of these conclusions will be further discussed in this chapter.

Along with birth order differences in schema domains, we also examined the differences in total schema score and schema domains based on demographic variables (gender, age, education level, parents' education, and family income). There were age differences in total schema score. Accordingly, younger people reported higher total schema scores. As for differences in schema domains, there were gender differences in schema domains. Specifically, males had higher Disconnection schema domain score compared to females. In terms of age differences, we concluded that younger people had higher Impaired Limits schema domain scores compared to older people. Moreover, university students were found as having higher Disconnection schema score compared to people with postgraduate degrees. Also, high school or lower level graduate people had higher Disconnection schema score compared with postgraduate degrees. However, education level also did not predict Disconnection schema domain.

Despite the fact that we could not support one of the main hypotheses that there would be birth order differences in schema domains, as follow up, by regression analysis, we investigated which variables predict schema domains. In this regard, firstly, schema domains

were predicted based on birth order and parenting styles; however, we did not confirm birth order influences on schema domains. As expected, we found that negative parenting styles of both mothers and fathers predicted schema domains. In addition to parenting styles, some demographic variables also predicted schema domains. More specifically, by hierarchical regression analyses, we found that negative parenting style of both mothers and fathers significantly predicted the Disconnection schema domain. Additionally, males and younger people tend to possess maladaptive schemas under the Disconnection schema domain. We also concluded that negative parenting style of both mothers and fathers significantly predicted Impaired Autonomy schema domain. Also, younger people tend to have a more Impaired Autonomy schema domain.

Moreover, in terms of Impaired Limits, negative parenting styles of both mothers and fathers significantly predicted this schema domain. However, none of the demographic variables predicted maladaptive schemas under the Impaired Limits. We also found that negative parenting style of mothers also significantly predicted Other Directedness. However, fathers' parenting style did not predict this schema domain of individuals. In addition to negative parenting style of mothers, educational level of mothers predicted Other Directedness schema domain of individuals. Specifically, people who had mothers with low educational level tend to develop maladaptive schemas under the domain of Other Directedness. Finally, negative parenting style of mothers predicted Unrelenting Standards schema domain of individuals while father's parenting style did not predict Unrelenting Standards schema. Furthermore, gender and age predicted Unrelenting Standards schema domain, and females and younger people tend to possess more Unrelenting Standards. Although most findings were parallel across group comparison results and regression results, the effect of age on Impaired Limits was not significant in regression and yet it was significant in group comparison analysis. This may be due to using age as a categorical variable in group comparison analysis and as a continuous variable in regression.

The significant findings of the study were discussed in consideration of theoretical framework and empirical support in the literature, in addition to strengths and limitations of the study. Finally, the importance of the study, clinical implications, and suggestions for future research were mentioned.

There are some possible reasons why we could not support our main hypothesis that firstborn and lastborn siblings differ in their total schema scores and schema domains. Importantly, we used between family design, which means that firstborn and lastborn siblings were from different families. Within family dynamics would be influential for

siblings to have different characteristics and dissimilar maladaptive schemas. Therefore, if we compared firstborn and lastborn siblings from the same family, we might have supported our hypothesis that firstborn and lastborn siblings differ in their schema domains.

When it comes to birth order differences on perceived parenting style, we found that parenting style of mothers differ according to birth order status. This finding supported our hypothesis that mothers have differential treatment toward their firstborn and lastborn children even if siblings were from different families. If we included siblings within the same family, we might have also found schema domain differences based on differential parenting style toward firstborn and lastborn siblings. On the other hand, parenting style of fathers did not differ according to birth order status of individuals. In the present study, lastborn siblings considered their mothers as more protective and anxious compared to firstborn siblings.

This finding is very important for our study because we hypothesized that due to perceived differential treatment of parents according to their birth order status, individuals may develop different maladaptive schemas. Although, we could not find differences in schema domains based on birth order, this result supported the differential family treatment and interpretation of parenting styles according to birth order status (Adler, 1928; Sulloway, 1996). This finding is contrary to Adler's (1927) claim that parents are more protective toward their firstborn child; however, having more overprotective mothers of lastborn siblings can be explained and supported in several ways.

From Adler's (1927) theoretical perspective, this finding can be explained in various ways. According to Adler (1927), power struggle between siblings is crucial for the development of personality. Although Adler (1927) claimed that parents are more protective toward their first child, firstborn siblings may perceive this situation differently. For example, due to the dethronement effect firstborns have to share all the attention, love, and care of the parents. Hence, they may consider their mother's attention and protection as being less because they have to share their mother with other siblings. More precisely, before the coming of the sibling, they used to get more attention and care from their parents; however, they may feel that they lost their parents' attention or love afterwards. In this regard, overprotection may be associated with attention and caring of mothers. Therefore, firstborn siblings might have a feeling that they have lost superiority and protection, and lastborn siblings gained more attention from mothers. In parallel, when it comes to interpretation of environment by siblings, each sibling interprets the environment in reference to other siblings (Hoffman, 1991). As a demonstration, within a warm and caring

family environment, one sibling may think that her parents give more love to her sibling compared to herself, so she may not feel as loved (Hoffman, 1991). Comparison with other siblings may be an essential issue in the perception of parenting styles (Hoffman, 1991). In this respect, because of sharing the mother, compared to lastborn siblings, firstborn individuals may consider their mother as less protective.

Adler (1927) also emphasized another important point related to birth order status. According to Adler (1927), firstborn siblings tend to become more dominant and powerful. Thus, parents might consider their firstborn siblings as capable of protecting themselves due to being dominant and powerful, and mothers may feel the need to overprotect their lastborn siblings. In association with this perspective, Adler (1927) also mentioned that younger siblings have feelings of inferiority and helplessness because of having a powerful and dominant older sibling. As a consequence, these feelings of lastborn siblings may enhance protection of mothers toward them.

In line with Adler's perspective, Sulloway (1996) also provides an understanding of overprotection and anxiety of mothers toward lastborn siblings. According to Sulloway (1996), firstborn siblings are superior with respect to age, power, physical qualities, and related features. Thus, parents may regard their firstborn child as more capable of protecting themselves because they are more powerful. On the other hand, lastborn siblings are at a more disadvantaged place compared to the firstborn sibling, and the mother may have a desire to overprotect their lastborn children (Sulloway, 1996). In this regard, Sulloway (1996) claimed that lastborn siblings may become the most-loved child owing to their disadvantaged place in the family.

In parallel with this claim, and as a consequence of Turkish collectivistic cultural norms, overprotection can be regarded as a sign of love and care in Turkey (Sümer & Kağıtçıbaşı, 2010). More specifically, in contrast to individualistic cultures, overprotection may be regarded as a positive aspect of the parenting style. Mothers may have a belief that they are securely attached to their children through being overprotective and anxious in this culture (Sümer & Kağıtçıbaşı, 2010). This situation supports the notion that the mothers show more overprotection toward their lastborn children as a result of their disadvantaged place, which enables them to be the most-loved child.

In parallel, Adler (1927) also maintained that firstborn siblings are more traditional and obedient. They are more accustomed to parental values, rules, and expectations (Adler, 1927, Forer, 1976). Due to obedient and traditional lifestyles of firstborns, mothers might

change their style as being more relaxed toward firstborn siblings even though they were protective in the first years of firstborn child's life. Consequently, mothers may think that their firstborn children obey the family rules and meet the expectations anyway. On the other hand, mothers may be more anxious toward their lastborn children as a result of their disobedience to family rules. Unfortunately, there was no maladaptive schema that is precisely related to obedience to family rules. Thus, we may posit that owing to discrepancies in obedience to family rules between siblings, mothers might tend to be overprotective and anxious toward their lastborn siblings.

Consistent with this assumption, many studies (i.e. Baskett, 1985, Healey & Ellis, 2007, Pulakos, 1987) maintained that individuals including parents have a perception that firstborns are more responsible, conscientious, achievement oriented, self controlling, and rule oriented. Even though firstborn siblings do not possess these characteristics completely, mothers may still tend to believe that firstborns fulfill their responsibilities and expectations. Similarly, they become more anxious about their lastborn siblings' performance or behaviors. In line with these issues, firstborns are considered to be a leader, independent, and dominant (Nyman, 1995). Therefore, these qualities may provide firstborns specific strategies and coping mechanisms in order to protect themselves, and lastborn siblings in the family may be regarded as more needy of protection. Moreover, lastborn siblings may perceive their mothers as overprotective because they put a great emphasis on being liberal, rebellious, and social (Sulloway, 1996). As mentioned before, they are more likely to be open to new experiences; hence, they may perceive their mother as overprotective and anxious. Correspondingly, distinctive expectations and assumptions according to each sibling position may shape the mothers' differential attitudes and behaviors toward their children.

From a different perspective, when the youngest children are born, mothers are more protective towards them as they are the youngest compared to older children and they inevitably need more care as a baby. Even though the other children are also young, they are getting older compared to the new baby. Mothers may not able to change their behaviors according to children's developmental level and age, and continue being protective towards the youngest, because they are always younger than the other children in the family. To illustrate, when the older child is 6 years old, the mother may perceive him as the old and mature child. Yet, when the younger child is 6 years old, mother perceives him as not matured enough, because when compared his older brother, he is still young. Consequently, the mothers may continue to be protective and anxious toward their younger children.

As an empirical support from the literature, when mothers' intrusive behaviors toward their children were investigated, it was found that mothers are more intrusive toward lastborn children than to the firstborn children (Hallers-Haalboom et al., 2014). Hallers-Haaboom et al. (2014) explained different treatment of mothers toward their firstborn and lastborn children with similar concepts of relativity. According to Hallers-Haaboom et al. (2014), mothers have to split their affection and love between each child. Yet, firstborns may expect their mothers to be caring as much as they were before. On the other hand, lastborn siblings do not have any previous experiences as being the center of attention (Hallers-Haalboom et al., 2014). This situation may cause different expectations and different demands of each sibling. As a result of different demands, firstborns may consider their mothers to be less protective (Hallers-Haalboom et al., 2014). This study supported our finding that lastborn siblings perceive their mothers as overprotective and anxious.

Based on all these issues, we supported that firstborn and lastborn individuals experience differential family treatment from their mothers while fathers' style did not affect siblings differently. Related to this issue, Barnet et al. (2008) emphasized that both mothers and fathers should be considered in terms of understanding the influences of parenting styles on children. Nevertheless, Lamb (2010, as cited in Hallers-Haaboom et al., 2014) pointed out that mothers are viewed as the main and essential caregiver. Furthermore, mothers are more likely to invest more time and energy in their children (Lamb, 2010). On the other hand, fathers are viewed as the breadwinner, and fathers are expected to set rules in the family (Lamb, 2010, as cited in Hallers-Haaboom et al., 2014). Despite the fact that social roles have changed, findings supported that mothers still have greater influence on children than fathers.

As theoretical framework (Young et al., 2003) suggested, perceived parenting styles significantly predicted schema domains. Parenting style of both mothers and fathers significantly predicted Disconnection, Impaired Autonomy, and Impaired Limits schema domains. As Young et al (2003) claimed, negative parenting style of parents has a great influence on children's maladaptive schemas.

However, fathers' parenting style did not significantly predict Other Directedness and Unrelenting Standards schema domains while mothers' parenting style significantly predicted these schema domains. This finding may be associated with social roles (Lamb, 2010, as cited in Hallers-Haaboom et al., 2014). In Turkish culture, caring of the child is mostly associated with mothers; hence, the relationship between fathers and children may not affect children's personality as much as mother-child interaction. Consequently,

relationship between mothers and children become crucial for experiences and personality development of children.

More specifically, in terms of Disconnection schema domains, gender, age, and negative parenting styles of both mothers and fathers significantly predicted Disconnection schema domain. Disconnection schema domain includes Emotional Deprivation, Emotional Inhibition, Social Isolation, and Defectiveness schemas (Soygüt et al., 2009). As the name suggests, this domain is related to receiving emotional affinity from significant others, having warmer attachment, and expressing and sharing of emotions.

In line with theoretical construct, negative parenting style of both mothers and fathers predicted maladaptive schemas under the Disconnection schema domain. As Young et al. (2003) claimed, negative styles of parents have a great influence on individuals' acquisition of maladaptive schemas. Consistent with Young et al. (2003), negative style of both mothers and fathers significantly predicted Disconnection schema domain. This finding supported that interaction of parents with their children have a great influence on children's feelings that are related to lack of emotional affinity and affection.

In addition to the influences of negative parenting style on Disconnection, gender also predicted this schema domain. Accordingly, males had higher scores in Disconnection schema domain compared to females. This situation may be associated with many factors. Firstly, gender roles and stereotypes may play a role in development of Disconnection schema domain in males (Brody, 1997). Males, compared to females, are expected to express their feelings and emotions less (Brody & Hall, 1993; Fabes & Martin, 1991). Briton and Hall (1995) also stated that women are more likely to reveal affection, affinity, warmth, and intimacy compared to males. Women also tend to demonstrate their vulnerabilities, unhappiness, and fears more (Briton & Hall, 1995). As for dealing with social problems, women are more likely to express their emotions; however, men tend to find a more logical solution instead of expressing their emotions (Kelley et al., 1978). For example, women tend to cry and display their sadness; whereas, men avoid eye contact and facial expressions about their emotions (Kelley et al., 1978). In addition, women are more expressive when they encounter problems with their parents, spouses, or friends (Blier & Blier-Wilson, 1989). Consistent with this finding, Brody (1997) emphasized that women are more likely to focus on interpersonal relations and they have a desire to express their feelings to their parents and partners. However, men have more difficulty in expressing their feelings in their interpersonal relations (Brody, 1997). Moreover, according to Brody (1997), women invest

more time and energy in their interpersonal relations compared to men. As a consequence of all these patterns, males may have more disconnection feelings compared to females.

Gender differences in Disconnection schema might also reflect the cultural framework in Turkey. Brody (1997) claimed that expression of emotions is a culturally specific issue. In other words, according to Brody (1997), gender roles in different cultures show variability, and emotional expression may change across different cultures. Although there was no known study that specifically investigated the gender differences in emotional expression in Turkish culture, Brody (1997) maintained that women have a more wish to verbalize their sadness and fears in Asian cultures as well as American culture. Similarly, in Turkish culture, males may be regarded as less expressive of emotions and feelings in their interpersonal relations with their parents or romantic partners. This assumption may lead males to feel disconnected from other people. Moreover, inhibition of emotions by males may be reinforced by other people (Brody, 1997). Men may try to gain social acceptance by inhibiting their emotions (Brody, 1997); however, such inhibition may also contribute to the development of Disconnection schema. Brody (1997) maintained that expression of emotions is crucial because other people meet the needs and expectations of individuals if they express their needs and feelings. These ideas give a support that males feel more disconnected compared to females.

In support of these findings and claims, Ashmore and Del Boca (1979) mentioned: "sex stereotypes which refers to structured sets of inferential relations that link personal attributes to the social categories [as] female and male" (Ashmore & Del Boca, 1979, p. 219). In association with sex stereotypes, women are considered as more emotional compared to men (Hutson-Comeaux & Kelly, 2002). Interestingly, Birnbaum, Nosanchuk, and Croll (1980) studied preschool age children's view about sex stereotypes and found that children perceived anger as a male emotion. On the other hand, they attributed "fear, sadness, and happiness" emotions to the females (Birnbaum, et al., 1980). Birnbaum et al. (1980) asserted that these stereotypes may stem from stereotypes of parents, reinforcement of stereotypes in parenting style, or media exposure. This study demonstrated that from childhood, individuals are exposed to sex related stereotypes and shape their personality under the influence of these stereotypes. People may believe that otherwise, they will face social rejection (Brody, 1997).

Also, parenting style may be affected by gender roles and cultural aspects (Brody, 1997). For example, parents may display less emotional expression and affinity to their sons (Adams, Kuebli, Boyle, & Fivush, 1995; Dunn, Bretherton, & Munn, 1987). Parents may

force their sons to be strong and powerful; hence, males tend to not express their feelings in order to gain acceptance from their parents (Brody, 1997). However, inhibition of emotions may contribute to the disconnection feelings of males.

Consistent with this issue, Larson and Richards (1994) pointed out that the emotions of adolescents display similarity with their parents' emotional states. According to Larson and Richards (1994), girls are more likely to observe their mothers and take them as role models in terms of emotional expression. On the other hand, boys tend to observe their fathers and take them as role models (Larson & Richards, 1994). Therefore, it seems similar that fathers tend to become less emotionally expressive and their boys continue to be like their fathers. Consequently, males may feel as more disconnected and emotionally inhibited.

From developmental view, Brody and Hall (2000) claimed that mothers are more likely to use emotional words and express their emotions in their communication with their daughters compared to their sons. Moreover, Brody and Hall (2000) maintained that girls' communication style is highly linked with interpersonal relations. Such findings provide an understanding of males' higher level of disconnection feelings and schemas compared to females.

All these findings provide an understanding of gender differences in emotionality and affinity. Therefore, from the early years of life, individuals might be exposed to gender related stereotypes. Males may be reinforced to not to express feelings and emotions; hence, they are more likely to experience emotional deprivation and inhibit their emotions. In other words, socio-cultural factors may play a role in Disconnection schema of males.

In addition to having more Disconnection schema domain of males, younger individuals had also higher Disconnection schema score. This finding may be linked with transition from adolescence to young adulthood. As mentioned, Disconnection schema domain essentially includes Emotional Deprivation, Emotional Inhibition, Social Isolation, and Defectiveness schemas (Soygüt, et al., 2009). All these themes may emerge or rise as a result of going through a transition period in life. Adolescence and young adulthood may involve significant life events. Individuals in this age range may encounter various difficulties in their lives. For example, most people start to live separately from their parents, which may result in difficulties (Andrew, Eggerling-Boeck, Sandefur, & Smith, 2006). Also, negative experiences in university life or social environment may trigger emotional inhibition, social isolation, and therefore disconnection feelings (Andrew, et al. 2006). Based on all these arguments, changing roles and having more responsibility as a result of

maturation and transition from adolescence to young adulthood may lead to more psychological difficulties (Andrew et al., 2006). According to Andrew et al (2006), adolescents regarded this period as "isolation and separation from their families, taking responsibility for their lives, cleavage, and forging an identity" (pp. 234-235). These reports give an idea that transition from adolescence to adulthood is a critical period which brings several psychological difficulties.

Another important finding of the present study was that younger people had higher Impaired Autonomy schema domain score. Impaired Autonomy schema domain includes Enmeshment, Abandonment, Failure, Pessimism, and Vulnerability to harm schemas (Soygüt et al., 2009). This conclusion may also be connected to transition from adolescence to young adulthood. Development of autonomy may be related to maturation (Andrew et al., 2006; Gök, 2012). As mentioned before, starting an individual life, and experiencing significant life events may destroy autonomy (Andrew et al., 2006).

Although Young et al. (2003) claimed that schemas are acquired in early years of life, they also emphasized that these schemas can change or can be obtained during adolescence or later life because significant life events may trigger maladaptive patterns (Young et al., 2003). Therefore, life crisis and significant events in this age range may lead to acquiring higher Disconnection and Impaired Autonomy schema domain scores.

In addition to age, negative parenting style of both mothers and fathers predicted Impaired Autonomy schema domain. This finding supported Young et al.'s (2003) claim that negative parenting style have a great influence on impairment of autonomy of individuals. Young et al. (2003) claimed that if parents have a tendency to have a pessimistic world view or discourage their children from having autonomy, children are more prone to having Impaired Autonomy.

As for Impaired Limits schema domain, negative parenting style of both mothers and fathers predicted this maladaptive schema domain. As mentioned, Impaired Limits include Entitlement and Insufficient Self Control (Soygüt et al., 2009). If parents do not encourage limits, respect for other people's rights, and responsibility, people tend to develop maladaptive schemas under the Impaired Limits schema domain (Young et al., 2003). This finding may also support the notion that early maladaptive schemas are mostly formed as a result of early interaction with significant others (Young et al., 2003).

In terms of Other Directedness schema domain, mothers' low educational level predicted Other Directedness in addition to negative parenting style of mothers. Other

Directedness schema domain includes Self Sacrifice and Punitiveness schemas (Soygüt et al., 2009). As Young et al. (2003) maintained, negative parenting of mothers has a great influence on children's acquisition and maintenance of maladaptive schemas under the Other Directedness schema domain. When mothers do not value their children's needs and feelings, children have a tendency to become other directed in order to gain approval. Interestingly, father's parenting style did not predict this schema domain.

As related to low educational level of mothers, McCarthy et al. (2016) maintained that mothers with low educational level used more physical and psychological punishment toward their children. Therefore, children who had mothers with low educational level may develop a sense that they deserve punishment if they make a mistake (McCarthy et al., 2016). As a result of this situation, they may rather focus on people's attitudes toward themselves. In order to avoid the punishment, they may become other directed (McCarthy et al., 2016).

From another view, mothers with low educational level might have more collectivistic and traditional child rearing styles and practices (Kağıtçıbaşı, 2005); hence, their children may have more maladaptive schemas under the Other Directedness schema domain. According to Kağıtçıbaşı (2005), socioeconomic status has a great influence on parents' perspective considering their children. More specifically, people with higher income and higher educational level give more importance to separation and autonomy of their children, which are related to individualistic culture. On the other hand, Kağıtçıbaşı (2005) maintained that mothers with low education level emphasize more group rules and values, and they give more importance to relatedness rather than autonomy and individuation. Therefore, mothers with low educational level have a more collectivistic framework (Kağıtçıbaşı, 2005). As an empirical support, mothers with low educational level and low income were found as having more collectivistic attitudes and behaviors toward their children in Turkey (Özdikmenli-Demir & Sayıl, 2009). Thus, the themes of self sacrifice and punitiveness under the Other Directedness may be related to mothers' traditional and collectivistic child rearing attitudes as a result of low education level.

Lastly, gender, age, and negative parenting style of mothers predicted Unrelenting Standards schema domain. Unrelenting Standards include High Standards and Approval Seeking (Soygüt et al., 2009). As expected, negative parenting style of mothers predicted Unrelenting Standards schema domain; however, fathers' style did not affect the Unrelenting Standards of people. Young et al. (2003) pointed out that conditional acceptance of mothers and giving extreme importance to achievement may lead children to acquire Unrelenting

Standards schema domain. In order to gain approval, children need to be approved by other people (Young et al., 2003). Moreover, they set high standards in order gain their mothers' love and care (Young et al., 2003).

In line with our findings, previous research showed that parents tend to expect more achievement from their daughters compared to their sons (Bhanot & Jovanovic, 2005). Melillo and College (1983) emphasized that gender roles and high expectations of the parents may play a role in the achievement orientation of females. Therefore, it may trigger Unrelenting Standards of females.

Additionally, as a result of competition in life, younger individuals might have more Unrelenting Standards schema. In this age range, people may desire higher achievement. For example, Oberle and Schonert-Reicl (2013) found that adolescents have more desire for achievement in order to be accepted by their friends. On the other hand, in the present study, most of the younger people were university students, which may have confounded the results.

In summary, we did not find differences in schema domains based on birth order; however, there were differences in parenting style of mothers according to birth order status. In addition to these conclusions, negative parenting styles of both mothers and fathers significantly predicted Disconnection, Impaired Autonomy, and Impaired Limits schema domains. Notwithstanding that, only mothers' parenting style predicted Other Directedness and Unrelenting Standards schema domains. Furthermore, some demographic variables also predicted schema domains. More specifically, males and younger people have more Disconnection schema domain. Younger individuals have higher Impaired Autonomy schema domain. Individuals who had mothers with low education level had higher Other Directedness. Finally, younger individuals and females had higher Unrelenting Standards schema domain. All these findings also supported Adler's (1927) claim that the first group which the individual encounters is the family. Thus, the individual's interaction style with each family member is crucial with respect to aspiration of different characteristics and maladaptive schemas (Adler, 1927). In this respect, both Adler and Young emphasized the parenting style influences on child development and personality. Differential treatments according to birth order status have a significant place for understanding the influences of parenting styles on children's development. Besides all these, socio-cultural factors also play an essential role in development of personality.

### 4.1. The Importance of the Study

First of all, there was no known study that specifically investigates the relationship between maladaptive schemas (Young et al. 2003), perceived parenting style of parents based on Young's (1994) inventory, and birth order status. Despite the fact that we could not support our hypothesis about differences in schema domains based on birth order, this study contributed to the literature by investigating a new research question. In this regard, the relationship between birth order and parenting style of mothers may open lead to new research questions. From another view, although early maladaptive schemas have become a popular research area, there was a lack of research projects using Young's (1994) parenting style inventory to examine the influences of parenting on maladaptive schemas. This study provided support for the relationship between maladaptive schemas and perceived parenting styles using schema theory constructs and instruments. This study may particularly contribute to the Turkish literature as to how individuals perceive their parents and regarding the most common schemas and parenting styles in this culture. For example, the most common parenting styles of mothers were normative, overprotective/anxious, and belittling/criticizing styles. In addition, the most common parenting styles of fathers were normative, emotionally depriving, and belittling/criticizing styles. Regarding schema domains, participants scored highest in Impaired Autonomy and Disconnection. Although the sample was mostly university students, and therefore the results may not be generalized to older adults or individuals with lower levels of education, results may still give an understanding about the issue. In this manner, this study may contribute to the schema theory studies in Turkey.

### 4.2. Strengths and Limitations of the Study

First of all, in order to investigate the effects of birth order differences on schema domains and parenting styles, we controlled many variables including age differences between participants and their siblings, and the number of siblings. Also, only participants whose parents were still married were included in the study. Participants were excluded if their parents had died and if they had adopted siblings. All these restrictions can be considered important strengths of the study.

As mentioned before, using inventories that were constructed under the Schema Theory framework can be regarded as one of the main strengths of the study. As theoretical constructs suggested, incorporating fathers' parenting style along with mothers' parenting style can be considered as another powerful facet of the study. Furthermore, integrating the

birth order phenomena to the schema theory is another important aspect of the study. In a similar manner, combining different theories from developmental and clinical perspective yielded an important point of view for literature.

As for the limitations of the study, despite the fact that we controlled many variables, our sample was not too large. In this regard, cell sizes for gender, age, and education level of participants were not equal. Moreover, we used between study design. In other words, firstborn and lastborn siblings were from different families, as a result of which our hypothesis about birth order differences on schema domains may not be supported.

As regards using between family design, it is possible that we might have missed the data from special dynamics of siblings within the same family environment. In addition, within family dynamics would be important in understanding the view of firstborn and lastborn siblings in comparison to each other.

On the other hand, there may be a need for the readjustment of schema inventories in order to measure maladaptive schemas and parenting styles in Turkey. For example, in some schemas, there are very few questions. Also, the content of the instruments may be reviewed according to this culture. Some participants gave feedback about vagueness of some questions. Adaptation of these inventories according to Turkish culture may be more appropriate for better understanding the maladaptive schemas and parenting styles of individuals in this culture.

### 4.3. Clinical Implications and Future Suggestions

Schema Theory has utmost significance in understanding of how parenting style affect the development of personality and maladaptive patterns of children (Young et al., 2003). In this regard, this study contributed to psychology literature by supporting that negative parenting style plays a major role in forming maladaptive schemas of individuals.

Schema therapy is an effective clinical application of schema theory (Young et al., 2003). The studies that investigate maladaptive schemas, parenting styles, and differential family treatment according to birth order are very beneficial for clinical practice and conceptualization of patients based on schema theory. In this manner, understanding the parenting styles of both mothers and fathers and maladaptive schemas as a result of these interaction styles plays an essential role in determining clinical interventions and suitable methods.

The main aim of schema therapy is the understanding of unmet needs of the patients when they were children. Thus, schema therapists arrange therapy sessions according to needs of the patients. To illustrate, therapist tries to create *limited reparenting* which refers to "fulfillment of unmet needs of individuals when they were children" (Young et al., 2003, p. 71). Therefore, through the therapeutic relationship, therapist makes an effort to meet unmet needs of individuals by *empathic confrontations*. In this sense, our study may provide an understanding of parenting styles of individuals and their maladaptive patterns, which provide a useful way for attainment of more healthy behaviors. For example, for a patient who has more Disconnection schema domain as a result of emotionally depriving mother or father, the therapist validates his or her feelings and encourages expression of needs, desires, emotions, and feelings. Moreover, schema therapists may benefit from our study as related to the information of differential treatment of mothers toward firstborn and lastborn siblings when determining suitable interventions.

In this regard, schema therapy aims to gaining awareness about influences of these experiences on their personality and maladaptive coping mechanisms. Schema therapists use several methods such as limited reparenting, guided imagery techniques, data collection, reframing, and role plays in order to understand unmet needs of the patient and determine suitable interventions (Young et al., 2003). Therefore, schema theory studies contribute to the improvement of schema therapy. In this regard, our study particularly contributes to the conceptualization of differential treatment of mothers based on birth order status. To illustrate, the patient may gain awareness about negative effects of her parents' style and differential parenting style compared to other siblings. If the patient has memories related to inferior feelings compared to other siblings, this information become crucial for working for internalization of healthy patterns. All these schema therapy methods are considered, our study may contribute to the schema therapy in terms of understanding the influences of differential parenting styles on maintenance of maladaptive schemas.

All in all, schema theory studies have utmost significance for improvement and development of the framework of schema therapy including its specific techniques. Our study provided a sense about formulation a patient and making hypothesis about the experiences of patients. Empirical and culturally specific schema theory studies provide an understanding and conceptualization regarding of how early undesirable experience set the stage for acquisition of maladaptive schemas and patterns. Also, the most common maladaptive schemas and parenting styles may provide knowledge about child rearing

attitudes in Turkish culture. However, it should be noted that culture specific instruments and intervention strategies are also needed.

From another point, birth order status may play a great role in formulation of a patient in therapy. Even though we could not find birth order differences in schemas, differential family treatment toward firstborn and lastborn siblings may provide an understanding of the family environment and experiences of people. In therapy, the experiences of individuals according to birth order in their family context have a great influence on conceptualization of the patient due to the fact that differential family treatment according to their birth order may lead to several feelings such as hostility, anger, or sadness (Whiteman et al., 2007). It does not mean that people have certain characteristics based on their birth order; rather this information allows making hypothesis about the formulation of the patient. For example, through guided imagery, a patient may talk about their inferior feelings owing to having a superior and dominant sibling. In addition, a patient may have unmet needs by their parents and he may think that his sibling gained more attention and love from their parents. These aspects may be crucial for limited reparenting by therapists. On the other hand, patient becomes conscious of sibling relations and differential family treatment based on birth order by empathic confrontations. As a consequence, they may have a desire to change their maladaptive patterns due to their undesirable experiences with family members. Therefore, schema therapists should be aware of the effects of birth order status of individuals on differential parenting styles of mothers. All these guidelines may contribute to the schema therapy.

As related to schema theory, Adlerian therapy also emphasizes the experiences and differential family treatment which stem from birth order position in the family. Similar to schema therapy, interpretation of vivid memories, transference, and role play are important aspects of Adlerian therapy. Therefore, knowledge about early experiences shapes the therapeutic intervention. Moreover, our study in relation to parenting styles and birth order status may provide significant information to guide interventions.

As mentioned, early experiences with family members play a major role in therapeutic interventions. In the present study, we integrated clinical and developmental constructs, which may provide guidelines for formulation of patients in therapy because, as therapists, we consider how developmental issues are related to the psychopathology of patients. In this regard, understanding parenting style of individuals, experiences and challenges based on their birth order status, and sibling relations become crucial for

therapeutic formulation and treatment. Based on all these aspects, this study has several clinical implications and future suggestions.

The results of the present study may also guide practitioners when helping or educating parents. Educational programs can be developed in order to inform parents about their children's needs. The results showed that mothers' parenting have more influence on individuals' maladaptive schemas; however, fathers' parenting style also play a major role in acquisition of maladaptive schemas of individuals. Some programs can be arranged in order to involve the fathers for more communication with their children. Moreover, training programs can be organized to inform parents about how different styles of parenting influence children.

As for future suggestions, there is still a need to examine the differences in schemas and parenting styles using different methods. For example, including siblings from the same family may provide a better understanding. Also, these issues can be investigated in a more efficient way through interviews and the qualitative methods. Moreover, the differences in schema domains and parenting style including only siblings and middle born siblings, may be another important research question for future studies. In addition to this, future studies may involve whose parents were divorced or had died, in order to investigate the effects of these significant events on individuals' maladaptive patterns. Future studies may expand these research questions and contribute to the literature in different ways. Finally, cultural studies that adapt schema theory inventories according to Turkish culture are needed.

As a conclusion, we investigated the differences in schema domains and parenting styles based on birth order in the present study. Even though we could not support our hypothesis that firstborn and lastborn individuals differ in schema domains, we supported that firstborn and lastborn individuals differ in perceived parenting styles of their mothers. Accordingly, lastborn individuals reported that they have more overprotective and anxious mothers compared to firstborn siblings. This study supported that parenting styles can show variability according to birth order position. This information may become very crucial for clinical applications.

### **REFERENCES**

- Adams, S., Kuebli J., Boyle, P. A., & Fivush, R. (1995). Gender differences in parent-child conversations about past emotions: A longitudinal investigation. *Sex Roles*, *33*, 309-323.
- Adler (1924). *The practice and theory of Individual Psychology*. London: Harcourt and Brace.
- Adler A. (1927). Understanding human nature. New York: Greenberg.
- Adler A. (1928). Characteristics of the first, second, and third child. Children, 3, 14-52.
- Adler (1932). What life should mean to you. London: George Allen and Uwin.
- Adler (1937). How position in the family constellation influences life-style. *International Journal of Individual Psychology*, *3*, 211-227.
- Adler (1956). The Individual Psychology of Alfred Adler: A systematic presentation in selections from his writings. In H. L. Ansbacher & R.R. Ansbacher (Eds). New York: Basic Books.
- Amanat, E. & Butler, C. (1984). *Family psychology. The art of the science*. Oxford University Press.
- Andrew, M., Eggerling-Boek, J., Sandefur, G. D., & Smith, B. (2006). The "inner side" of the transition to adulthood: How young adults see the process of becoming an adult. *Advances in Life Course Research*, 11, 225-251.
- Ansbacher, H. L. & Ansbacher, R.R. (1956). *The individual psychology of Alfred Adler*. New York City: Harper Torch.

- Ashby, J. S., LoCicero, K. A. & Kenny, M. C. (2003). The relationship of multidimensional perfectionism to psychological birth order. *Journal of Individual Psychology*, *59*, 43-51.
- Ashmore, R. D., & Del Boca, F. K. (1979). Sex stereotypes and implicit personality theory:

  Toward a cognitive-social psychological conceptualization. *Sex Roles*, *5*, 219-248.
- Barnett, M. A., Deng, M., Mills-Kooence, W. R., Willoughby, M., & Cox, M. (2008). Interdependence of parenting of mothers and fathers of infants. *Journal of Family Psychology*, 22, 561-573.
- Barry, J. A. (2012). Treating relationship problems in adulthood by using guided imagery to modify the influences of childhood attachment schemas. *Australian Journal of Clinical Hypnotherapy and Hypnosis*, 34(1), 15-25.
- Baskett, L. M. (1985). Sibling status: Adult expectations. *Developmental Psychology*, 21, 441-445.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4, 1-103.
- Beck, E., Burnet, K. L. & Vosper, J. (2006). Birth-order effects on facets of extraversion. *Personality and Individual Differences*, 40, 953–959.
- Beer, J. M., & Horn, J. M. (2000). The influence of rearing order on personality development within two adoption cohorts. *Journal of Personality*, 68, 769–819.
- Bhanot, R. & Jovanovic, J. (2005). Do parents' academic gender stereotypes influence whether they intrude on their children's homework? *Sex Roles*, 52(9), 597-607.
- Birnbaum, D.. Nosanchuk, T, & Croll, W. (1980). Children's stereotypes about sex differences in emotionality. *Sex Roles*, *6*, 435-443.
- Bjerkedal, T., Kristensen, P., Skjeret, G. A., & Brevik, J. I. (2007). Intelligence test scores and birth order among young Norwegian men (conscripts) analyzed within and between families. *Intelligence*, *35*(5), 503-514.

- Blake, J. (1989). Family size and achievement. Berkeley: University of California Press.
- Bleske-Rechek, A. & Kelley, J. A. (2014). Birth order and personality. A within-family test using independent self reports from both firstborn and laterborn siblings. *Personality and Individual Differences*, 56, 15-18.
- Blier, M. J. & Blier-Wilson, L. A. (1989). Gender differences in self rated emotional expressiveness. *Sex Roles*, 21(3/4), 287-295.
- Bowlby, J. (1988). A secure base: Parent child attachment and healthy human development. New York: Basic Books.
- Briton, N. J & Hall, J. A. (1995). Beliefs about female and male nonverbal communication. *Sex Roles*. 32(1), 79-90.
- Brody, L. R. & Hall, J. A. (1993). Gender and emotion. M. Lewis and J. Haviland (Eds), *Handbook of Emotions*. (pp. 447-460). N.Y.: Guilford Press.
- Brody, L. R. (1997). Gender and emotion: Beyond stereotypes. *Journal of Social Issues*, 53(2), 369-394.
- Brody, L. R., & Hall, J. A. (2000). Gender, emotion, and expression. In M. Lewis, & J. M. Haviland-Jones (Eds.), (2nd ed.). *Handbook of emotions*. (pp. 338–349) New York: Guilford.
- Campbell, L., White, J. & Stewart, A. (1991). The relationship of psychological birth order to actual birth order. *Individual Psychology*, 47(3), 380-391.
- Carey, G. (1986). Sibling imitation and contrast effects. Behavior Genetics, 16(3), 319-341.
- Carlson, J., Watts, R. E., & Maniacci, M. P. (2006). *Adlerian therapy: Theory and practice*: Washington: American Psychological Association.
- Chalfant, D. (1994). Birth order, perceived parental favoritism, and feelings towards parents. *Individual Psychology*, 50(1), 52-57.
- Cicirelli, V. (1978). Effects of sibling presence on mother-child interaction. *Developmental Psychology*, *14*, 315-316.

- Damian, R. I. & Roberts, B. W. (2015). The associations of birth order with personality and intelligence in a representative sample of U.S. high school students. *Journal of Research in Personality*, 58, 96-105.
- Darwin, C. R. (1859). On the origin of species by means of natural selection. London: John Murray.
- Davis, J. N. (1996). Birth order, sibship size, and status in Modern Canada. *Human Nature*, 8(3), 205-230.
- Dixon, M. M., Reyes, C. J., Leppert, M. F., & Pappas, L. M. (2008). Personality and birth order in large families. *Personality and Individual Differences*, 44, 953–959.
- Dunkel, C. S., Harbke, C. R. & Papini, D. R. (2009). Direct and indirect effects of birth order on personality and identity: Support for the null hypothesis. *The Journal of Genetic Psychology*, 170(2), 159-175.
- Dunn, J. & Kendrick, C. (1981). Interaction between young siblings: Association with the interaction between mother and firstborn child. *Developmental Psychology*, 17(1), 336-343.
- Dunn, J., Bretherton, I., & Munn, P (1987). Conversations about feeling states between mothers and their young children. *Developmental Psychology*, 23(1), 132-139.
- Dunn, J. & Plomin, R. (1991). Why are siblings so different? The significance of differences in sibling experiences within the family. *Family Process*, 30, 271-283.
- Eckstein, D. (2000). Empirical studies indicating significant birth-order-related personality difference. *Journal of Individual Psychology*, *56*(4), 481-494.
- Eckstein, D., Sperber, M. A., & Miller, K. A. (2009). A couple's activity for understanding birth order effects: Introducing the Birth Order Research-Based Questionnaire(BORQ). *The Family Journal*, *17*(4), 342-349.
- Ellis, A. (1994). Reason and emotion in psychotherapy (2nd ed.). Secaucus, NJ: Birch Lane.
- Ergüner-Tekinalp, B. & Terzi, Ş. (2014). Coping, social interest, and psychological birth order as predictors of resilience in Turkey. *Applied Research Quality Life*, 1-16.
- Ernst, C., & Angst, J. (1983). *Birth order: Its influence on personality*. Berlin, Germany: Springer-Verlag.

- Fabes, R. & Martin, C. (1991). Gender and age stereotypes of emotionality. *Personality & Social Psychology Bulletin.* 17, 532-541.
- Fagot, B. I. (1978). The influence of sex of child on parental reactions to toddler children. *Child Development*, *49*, 459-465.
- Falbo, T. (1981). Relationships between birth category, achievement, and interpersonal orientation. *Journal of Personality and Social Psychology*, *41*(1), 121-131.
- Feinberg, M. E., Neiderhiser, J. M., Simmens, S., Reiss, D., & Hetherington, E. M. (2000). Sibling comparison of differential parental treatment in adolescence: Gender, self esteem, and emotionality as mediators of the parenting-adjustment association. *Child Development*, 71, 1611-1628.
- Forer, L. K. (1976). The birth order factor. New York: David McKay.
- Fraser, R. & Nystul, M. S. (1983). The effects of birth order and sex on locus of control. *Individual Psychology*, *39*, 63-65.
- Gfroerer, K. P., Gfroerer, C. A., Curlette, W. L., White, J., & Kern, R. M. (2003). Psychological birth order and the BASIS-A inventory. *The Journal of Individual Psychology*, *59*, 30-41.
- Giesen-Bloo, J., van Dyck, R., Spinhoven, P., van Tilburg, W., Dirksen, C., & van Asselt, T. (2006). Outpatient psychotherapy for borderline personality disorder randomized trial of schema-focused therapy vs. transference-focused psychotherapy. *Archives of General Psychiatry*, 63(6), 649–659.
- Goldberg, L. R. (1990). An alternative description of personality: The big-five factor structure. *Journal of Personality and Social Psychology*, *59*, 1216-1229.
- Gök, A. C. (2012). Associated factors of psychological well being: Early maladaptive schemas, schema coping processes, and parenting styles. Unpublished master's thesis (M.S.). Middle East Technical University, Ankara, Turkey.
- Greene, R. L. & Clark, J. R. (1970). Adler's theory of birth order. *Psychological Reports*, 26(2), 387-390.

- Hallers-Haalboom, E. T., Mesman, J., Marlaen, Groenavald, M. G., Endandijk, J. J., van Berkel, S. R., van der Pol, L. D., & Bakermans-Krananburg, M. J. (2014). Mothers, fathers, sons, and daughters: Parental sensitivity in families with two children. *Journal of Family Psychology*, 28(2), 138-147.
- Hao, L., Hotz, V. J., & Jin, G. Z. (2008). Games parent and adolescent play: Risky behavior, parental reputation and strategic transfers. *The Economic Journal*, 118, 515-555.
- Harris, A. E. & Curtin, L. (2002). Parental perceptions, early maladaptive schemas, and depressive symptoms in young adults. *Cognitive Therapy and Research*, 26(3), 405-416.
- Harris, I. D. & Howard, K. I. (1985). Correlates of perceived parental favoritism. *The Journal of Genetic Psychology*, 146(1), 45-56.
- Harris, K. A. & Morrow, K. B. (1992). Differential effects of birth order and gender on perceptions of responsibility and dominance. *Individual Psychology*, 48(1), 109-118.
- Harris, J. R. (1998). *The nurture assumption: why children turn out the way they do.* New York: The Free Press.
- Hartshorne, J. K., Hartshorne, N. S., & Hartshorne, T. S. (2009). Birth order effects in the formation of long-term relationships, *Journal of Individual Psychology*, 65(2), 156-175.
- Healey, M. D., & Ellis, B. J. (2007). Birth order, conscientiousness, and openness to experience tests of the family-niche model of personality using a within-family methodology. *Evolution and Human Behavior*, 28, 55-59.
- Helmreich, R., Kuiken, D., & Collins, B. (1968). Effects of stress and birth order on attitude change. *Journal of Personality*, *36*, 38-44.
- Herrera, N. C., Zajonc, R. B., Wieczorkowska, G., & Cichomski, B. (2003). Beliefs about birth rank and their reflection in reality. *Journal of Personality and Social Psychology*, 85, 142-150.
- Hilton, I. (1967). Differences in the behavior of mothers toward first and later born children. *Journal of Personality and Social Psychology*, 7, 282-290.
- Hoffman L. W. (1991). The influence of the family environment on personality: accounting for sibling differences. *Psychology Bulletin*, *l* 10(2), 187-203.

- Hogan, R. & Roberts, B. W. (2004). A socio-analytical model of maturity. *Journal of Career Assessment*, 12(2), 207-217.
- Hutson-Comeaux, S. L. & Kelly, J. R. (2002). Gender stereotypes of emotional reactions: How we judge an emotion as valid. *Sex Roles*, 47(1), 1-10.
- Jang, K. L., Livesley, W. J., & Vernon, P. A. (1996). Heritability of the big five personality dimensions and their facets: A twin study. *Journal of Personality*, 64, 577-591.
- Jefferson, T., Herbst, J. H., & McCrae, R. R. (1998). Associations between birth order and personality traits: Evidence from self-reports and observer ratings. *Journal of Research in Personality*, 32, 498–509.
- Jensen, A. C. & Mchale, S. M. (2015). What makes sibling different? The development of sibling differences in academic achievement and interests. *Journal of Family Psychology*, 29(3), 469-478.
- Jordan, E. W., Whiteside, M. M., & Manaster, G. J. (1982). A practical and effective measure of birth order. *Individual Psychology: The Journal of Adlerian Theory, Research, and Practice, 38*(3), 253-260.
- Kağıtçıbaşı, Ç. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-cultural Psychology*, 36(4), 403-422.
- Kahneman, D., Slovic, P. & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge University Press.
- Kalkan, M. & Koç, H. E. (2008). Do psychological birth orders predict individuals' stress coping strategies? *Turkish Psychological Counseling and Guidance Journal*, 30(3), 57-59.
- Kammeyer, K. (1967). Birth order as a research variable. Social Forces, 46, 71-80.
- Keller, H. & Zach, U. (2002). Gender and birth order as determinants of parental behavior. *International Journal of Behavioral Development*, 26(2), 177-184.
- Kelley, H, H., Cunningham, J, D., Grisham, I, S., Lefebvre, L., Sink, C, & Yabion.G, (1978), Sex differences in comments made during conflict within close heterosexual pairs. *Sex Roles*, *4*(4), 7473-7491.

- Kellogg, S. (2004). Dialogical encounters: Contemporary perspectives on chairwork in psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, *41*, 310-320.
- Kiracofe, N. M. & Kiracofe, H. N. (1990). Child-perceived favoritism and birth order. Individual Psychology: The Journal of Adlerian Theory, Research, and Practice, 46, 74-81.
- Kitamura, T., Sugawara, M., Shima, S. & Toda, M. A. (1998). Relationship of order and number of siblings to perceived parental attitudes in childhood. *The Journal of Social Psychology*, *138*(3), 342-350.
- Larson, R. W. & Richard, M. H. (1994). Family emotions: Do young adolescents and their parents experience the same states. *Journal of Research on Adolescence*, 4(4), 567-583.
- Lasko, J. K. (1954). Parent behavior toward first and second children. *Genetic Psychology Monographs*, 49, 97-137.
- Lee, C. W., Taylor, G., & Dunn, J. (1999). Factor structure of the Schema Questionnaire in a large clinical sample. *Cognitive Therapy and Research*, *23*, 441-451.
- Leman (1985). *The birth order book. Why you are the way you are.* Grand Rapids. MI: Spire Books.
- Loehlin, J. C. (1992). *Genes and environment in personality development*. Newbury Park, CA: Sage.
- Lohman, J. F., Lohman, T. G. & Christensen, O. (1985). Psychological position and perceived sibling differences. *Individual Psychology: The Journal of Adlerian Theory, Research, and Practice, 41,* 313-327.
- Manaster, G. J. (1977). Birth order: An overview. *Journal of Individual Psychology*, 33(1), 3-8.
- Marini, V. A. & Kurtz, J. E. (2011). Birth order differences in normal personality traits: Perspectives from within and outside the family. *Personality and Individual Differences*, *51*(8), 910-914.
- McCarthy, R. J., Crouch, J. L., Basham, A. R., Milner, J. S., & Skowronski, J. J. (2016). Validating the voodoo doll task as a proxy for aggressive parenting behavior. *Psychology of Violence*, 6(1), 135-144.

- Melillo, D. & College, B. (1983). Birth order, Perceived birth order, and family position of academic women. *The Journal of Adlerian Theory, Research, & Practice*, 57-62.
- Michalski, R. L. & Schakelford, T. K. (2001). Methodology, birth order, intelligence, and personality. *American Psychologist*, *56*, 520-521.
- Moore, G. A., Cohn, J. F., & Campbell, S. B. (1997). Mothers' affective behavior with infant siblings: Stability and change. *Developmental Psychology*, *33*(5), 856-860.
- Muris, P. (2006). Maladaptive schemas in non-clinical adolescents: Relations to perceived parental rearing behaviors, big five personality factors, and psychological symptoms. *Clinical Psychology and Psychotherapy*, *13*, 405-413.
- Nyman, L. (1995). The identification of birth order personality attributes. *The Journal of Psychology*, 129, 51-59.
- Oberle, E. & Schonert- Reicl, K. A. (2013). Relations among peer acceptance, inhibitory control, and math achievement in early adolescence. *Journal of Applied Developmental Psychology*, 34(1), 45-51.
- Okudaira, H., Kinari, Y., Mizutani, N., Ohtake, P., & Kawaguchi, A. (2015). Older sisters and younger brothers: The impact of siblings on preference for competition. *Personality and Individual Differences*, 82, 81-89.
- Paulhus, D. L., Trapnell, P. D., & Chen, D. (1999). Birth order effects on personality and achievement within families. *Psychological Science*, *10*(6), 482-488.
- Perlin, M. & Grater, H. (1984). The relationship between birth order and reported interpersonal behavior. *Journal of Individual Psychology*, 40(1), 2-28.
- Plomin, R., Asbury, K. & Dunn, J. (2001). Why are children in the same family so different? Nonshared environment a decade later. *The Canadian Journal of Psychiatry*, 46(3), 225-233.
- Pollet, T. V., & Nettle, D. (2007). Birth order and face-to-face contact with a sibling: Firstborns have more contact than laterborns. *Personality and Individual Differences*, 43, 1796–1806.
- Pulakos, J. (1987). The effects of birth order on perceived family roles. *Journal of Individual Psychology*, 43(3), 319-328.

- Rohde, P. A., Atzwanger, K., Butovskaya, M., Lampert, A., Mysterud, I., Sanchez-Andres, A., & Sulloway, F. (2003). Perceived parental favoritism, closeness to kin, and the rebel of the family. The effects of birth order and sex. *Evolution and Human Behavior*, 24, 261–276.
- Salmon, C. A., & Daly, M. (1998). Birth order and familial sentiment: Middle borns are different. *Evolution and Human Behavior*, *19*, 299–312.
- Sampson, E. E., & Hancock, F. R. (1967). An examination of the relationship between ordinal position, personality and conformity: An extension, replication and partial verification. *Journal of Personality and Social Psychology*, *5*, 398-407.
- Sarıtaş, D. & Gençöz, T. (2011). Psychometric properties of "Young Schema Questionnaire-Short Form 3 in a Turkish adolescent sample. *Journal of Cognitive and Behavioral Psychotherapies*, 11(1), 83-96.
- Sava, F. A. (2009). Maladaptive schemas, irrational beliefs, and their relationship with the five factor personality model. *Journal of Cognitive Behavioral Psychotherapies*, 9(2), 135-147.
- Schmidt, N. B., Joiner, T. E., Young, J. E., & Telch, M. J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. *Cognitive Therapy and Research*, 19(3), 295-321.
- Schooler, C. (1972). Birth order effects: Not here, not now. Psychological Bulletin, 78, 161-175.
- Shulman, B. H., & Mosak, H. M. (1977). Birth order and ordinal position: Two Adlerian views. *Journal of Individual Psychology*, *33*, 114-121.
- Siennick, S. E. (2013). Still the favorite? Parents' differential treatment of siblings entering young adulthood. *Journal of Marriage and Family*, 75, 981-994.
- Simonton, D. K. (2008). Gender differences in birth order and family size among 186 eminent psychologists. *Journal of Psychology of Science and Technology*, 1(1), 15-22.
- Slaney, R. B., Ashby, J. S., & Tripp, J. (1995). Perfectionism: Its measurement and career relevance. *Journal of Career Assessment*, *3*(3), 279-297.
- Solomon (1998). Frank Sulloway's Born to Rebel. Philosophy of Science, 65, 171-181.

- Someya, T., Uehara, T., Kadowaki, M., Tang, S. & Takahashi, S. (2000). Effects of gender difference and birth order on perceived parenting styles, measured by the EMBU scale, in Japanese two-sibling subjects. *Psychiatry and Clinical Neurosciences*, 54, 74-81.
- Soygüt, G. Çakır, Z. & Karaosmanoğlu, A. (2008). Ebeveynlik biçimlerinin değerlendirilmesi: Young ebeveynlik ölçeği'nin psikometrik özelliklerine ilişkin bir inceleme. *Türk Psikoloji Yazıları*, 11(22), 17-30.
- Soygüt, G., Karaosmanoğlu, A., & Çakır, Z. (2009). Erken yaş dönemi uyumsuz şemaların değerlendirilmesi: Young şema ölçeği-kısa form 3'ün psikometrik özelliklerine ilişkin bir inceleme. *Türk Psikiyatri Dergisi*, 20(1), 75-84.
- Stewart, A. E. (2004). Can knowledge of client birth order bias clinical judgment? *Journal of Counseling and Development*, 82(2), 167-176.
- Stewart, A. E., & Stewart, E. A. (1995). Trends in birth-order research: 1976-1993. *The Journal of Individual Psychology*, 51(1), 21-36.
- Stewart, A. E. (2012). Issues in birth order research methodology: Perspectives from individual psychology. *The Journal of Individual Psychology*, 68(1), 76-106.
- Stewart, A. E. & Eckstein, D. (2012). Birth order within individual psychology. *The Journal of Individual Psychology*, 68(1), 7813-7819.
- Suitor, J. J. & Pillemer, K. (2007). Mothers' favoritism in later life. The role of children's birth order. *Research on Aging*, 29(1), 32-55.
- Sullivan, B. F. & Schwebel, A. I. (1996). Birth order position, gender, and irrational relationship beliefs. *Individual Psychology: The Journal of Adlerian Theory, Research, and Practice, 52*, 54-64.
- Sulloway, F. J. (1995). Birth order and evolutionary psychology: A meta-analytic overview. *Psychological Inquiry*, *6*(1), 75–80.
- Sulloway, F. J. (1996). *Born to rebel*. New York: Pantheon Books.
- Sümer, N. & Kağıtçıbaşı, Ç. (2010). Culturally relevant parenting predictors of attachment security: Perspectives from Turkey. Attachment: Expanding the cultural connections. Erdman, Phyllis (Ed); Ng, Kok-Mun (Ed); pp. 157-179. New York, NY, US: Routledge/Taylor & Francis Group

- Tamrouti-Makkink, I. D., Dubas, J. S., Gerris, J. R. M. & van Aken, M. A. G. (2004). The relation between the absolute level of parenting and differential parental treatment with adolescent sibings' adjustment. *Journal of Child Psychology and Psychiatry*, 45(8), 1397-1406.
- Thimm, J. C. (2010). Mediation of early maladaptive schemas between perceptions of parental rearing style and personality disorder symptoms. *Journal of Behavior Therapy and Experimental Psychiatry*, 41, 52-59.
- Toman, W. (1971). The duplication theorem of social relationships as tested in the general population. *Psychological Review*, 78, 380-390.
- Travis, R. & Kohli, V. (1995). The birth order factor: Ordinal position, social strata, and educational achievement. *The Journal of Social Psychology*, *135*(4), 499-507.
- Van den Broek, E., Keulen-de Vos, M., Bernstein, D. P. (2011). Arts therapies and Schema focused therapy: A pilot study. *The Arts in Psychotherapy*, 38(5), 325-332.
- Vandell D. (2000). Parents, peers, and others. *Developmental Psychology*, 699-710.
- Watkins, C. E. Jr. (1992). Birth-Order Research and Adler's Theory: A Critical Review. *Individual Psychology: The Journal of Adlerian Theory, Research, and Practice*, 48(3), 357-368.
- Whiteman, S. D., McHale, S. M. & Crouter, A. C. (2007). Competing process of sibling influence: Observational learning and sibling deidentification. *Journal of Youth and Adolescence*, 16(4), 644-661.
- Wichman, A. L., Rodgers, J. L., & MacCallum, R. C. (2006). A multilevel approach to the relationship between birth order and intelligence. *Personality and Social Psychology Bulletin*, 32(1), 117-127.
- Young, J. E. (1990). Cognitive therapy for personality disorders: A schema-focused approach. Sarasota FL: Professional Resource Press.
- Young, J. E. (1994). *Cognitive therapy for personality disorders: A schema focused approach*. Sarasota: Professional Resource Press.
- Young, J. E. (1999). Cognitive therapy for personality disorders: A schema-focused approach. Sarasota FL: Professional Resource Press.

Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). Schema therapy: A practitioner's guide. New York, NY: The Guilford Press.

### **APPENDICES**

### APPENDIX A

### INFORMED CONSENT/GÖNÜLLÜ KATILIM FORMU

Bu çalışma, Orta Doğu Teknik Üniversitesi Klinik Psikoloji Yüksek Lisans programına bağlı olarak Doç. Dr. Deniz Canel Çınarbaş danışmanlığı altında, klinik psikoloji öğrencisi Gözde Nilüfer tarafından yürütülmekte olup, doğum sırasının ve ebeveynlik tutumlarının uyumsuz şemalarla ilişkisini anlamak amacıyla yapılmaktadır. Çalışmaya katılım tamamıyla gönüllülük esasına dayanmaktadır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır. Anket, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakmakta serbestsiniz.

Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Psikoloji Bölümü Klinik Psikoloji öğrencisi Gözde Nilüfer (Tel: 0534 385 5613; Eposta: gozde.nilufer@metu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum.

## APPENDIX B

# DEMOGRAPHIC FORM/DEMOGRAFIK BİLGİ FORMU

1)	Kaç yaşındasınız?
2)	Cinsiyetiniz?
3)	Eğitim seviyeniz: Üniversite öğrencisi ( ) Kaçıncı sınıftasınız?
	Okuma yazmam var ama ilkokuldan mezun olmadım ( )
	İlkokul mezunu ( ) Ortaokul mezunu ( ) Lise mezunu ( )
	Üniversite mezunu ( ) Yüksek Lisans ( ) Doktora ( )
4)	Kaç kardeşsiniz?
5)	Siz kaçıncı kardeşsiniz?
6)	Diğer kardeşlerin yaşı?
7)	Diğer kardeşlerinizin cinsiyeti?
8)	Üvey kardeşiniz var mı? Evet ( ) Hayır ( )
9)	Anneniz sağ mı? Evet ( ) Hayır ( ) Vefat ettiyse, hangi tarihte vefat etti?
	Babanız sağ mı? Evet ( ) Hayır ( ) Vefat ettiyse, hangi tarihte vefat etti?
11)	Anne ve babanız birlikte mi? Evet ( ) Hayır ( )
12)	Annenizin en son mezun olduğu okul: Okur-yazar ( ) İlkokul ( ) Lise ( )
	Üniversite ( ) Yüksek Lisans ( ) Doktora ( )
13)	Babanızın en son mezun olduğu okul: : Okur-yazar ( ) İlkokul ( ) Lise ( )
	Üniversite ( ) Yüksek Lisans ( ) Doktora ( )
14)	Ailenizin aylık geliri: 0- 999 TL () 3000-3999 TL ()
	1000-1999 TL ( ) 4000-4999 TL ( )
	2000-2999 TL ( ) 5000 TL ve jizeri ( )

### APPENDIX C

## YOUNG SCHEMA QUESTIONNAIRE/ YOUNG ŞEMA ÖLÇEĞİ

Aşağıda, kişilerin kendilerini tanımlarken kullandıkları ifadeler sıralanmıştır. Lütfen her bir ifadeyi okuyun ve sizi ne kadar iyi tanımladığına karar verin. Emin olamadığınız sorularda neyin doğru olabileceğinden çok, sizin duygusal olarak ne hissettiğinize dayanarak cevap verin.

Bir kaç soru, anne babanızla ilişkiniz hakkındadır. Eğer biri veya her ikisi şu anda yaşamıyorlarsa, bu soruları o veya onlar hayatta iken ilişkinizi göz önüne alarak cevaplandırın.

1 den 6'ya kadar olan seçeneklerden sizi tanımlayan en yüksek şıkkı seçerek her sorudan önce yer alan boşluğa yazın.

### Derecelendirme:

- 1- Benim için tamamıyla yanlış
- 2- Benim için büyük ölçüde yanlış
- 3- Bana uyan tarafi uymayan tarafından biraz fazla
- 4- Benim için orta derecede doğru
- 5- Benim için çoğunlukla doğru
- 6- Beni mükemmel şekilde tanımlıyor

Bana bakan, benimle zaman geçiren, başıma gelen olaylarla gerçekten ilgilenen cimsem olmadı.
2 Beni terkedeceklerinden korktuğum için yakın olduğum insanların peşini bırakmam.
insanların beni kullandıklarını hissediyorum
Uyumsuzum.
5 Beğendiğim hiçbir erkek/kadın, kusurlarımı görürse beni sevmez.
5 İş (veya okul) hayatımda neredeyse hiçbir şeyi diğer insanlar kadar iyi vapamıyorum
7 Günlük yaşamımı tek başıma idare edebilme becerisine sahip olduğumu issetmiyorum.
8 Kötü bir şey olacağı duygusundan kurtulamıyorum.
D Anne babamdan ayrılmayı, bağımsız hareket edebilmeyi, yaşıtlarım kadar, başaramadım.
0 Eğer istediğimi yaparsam, başımı derde sokarım diye düşünürüm.
1 Genellikle yakınlarıma ilgi gösteren ve bakan ben olurum.
2 Olumlu duygularımı diğerlerine göstermekten utanırım (sevdiğimi, önemsediğimi göstermek gibi).
3 Yaptığım çoğu şeyde en iyi olmalıyım; ikinci olmayı kabullenemem.
4 Diğer insanlardan bir şeyler istediğimde bana "hayır" denilmesini çok zor tabullenirim.
5 Kendimi sıradan ve sıkıcı işleri yapmaya zorlayamam.
6 Paramın olması ve önemli insanlar tanıyor olmak beni değerli yapar.
7 Her şey yolunda gidiyor görünse bile, bunun bozulacağını hissederim.
8 Eğer bir yanlış yaparsam, cezalandırılmayı hak ederim.
9 Çevremde bana sıcaklık, koruma ve duygusal yakınlık gösteren kimsem yok.
20 Diğer insanlara o kadar muhtacım ki onları kaybedeceğim diye çok endişeleniyorum.
21 İnsanlara karşı tedbiri elden bırakamam yoksa bana kasıtlı olarak zarar vereceklerini hissederim.
7 Temel olarak diğer insanlardan farklıyım

23	Gerçek beni tanırlarsa beğendiğim hiç kimse bana yakın olmak istemez.
24	İşleri halletmede son derece yetersizim.
25	Gündelik işlerde kendimi başkalarına bağımlı biri olarak görüyorum.
26	Her an bir felaket (doğal, adli, mali veya tıbbi) olabilir diye hissediyorum.
27eğilimliyiz	Annem, babam ve ben birbirimizin hayatı ve sorunlarıyla aşırı ilgili olmaya
	Diğer insanların isteklerine uymaktan başka yolum yokmuş gibi hissediyorum; yapmazsam bir şekilde beni reddederler veya intikam alırlar.
29	Başkalarını kendimden daha fazla düşündüğüm için ben iyi bir insanım.
30	Duygularımı diğerlerine açmayı utanç verici bulurum.
31	En iyisini yapmalıyım, "yeterince iyi" ile yetinemem.
	Ben özel biriyim ve diğer insanlar için konulmuş olan kısıtlamaları veya sınırları ek zorunda değilim.
33	Eğer hedefime ulaşamazsam kolaylıkla yılgınlığa düşer ve vazgeçerim.
34	Başkalarının da farkında olduğu başarılar benim için en değerlisidir.
35	İyi bir şey olursa, bunu kötü bir şeyin izleyeceğinden endişe ederim.
36	Eğer yanlış yaparsam, bunun özrü yoktur.
37	Birisi için özel olduğumu hiç hissetmedim.
38	Yakınlarımın beni terk edeceği ya da ayrılacağından endişe duyarım
39	Herhangi bir anda birileri beni aldatmaya kalkışabilir.
40	Bir yere ait değilim, yalnızım.
41	Başkalarının sevgisine, ilgisine ve saygısına değer bir insan değilim.
42	İş ve başarı alanlarında birçok insan benden daha yeterli.
43	Doğru ile yanlışı birbirinden ayırmakta zorlanırım.
44	Fiziksel bir saldırıya uğramaktan endişe duyarım.
	Annem, babam ve ben özel hayatımız birbirimizden saklarsak, birbirimizi isseder veya suçluluk duyarız
46	İlişkilerimde, diğer kişinin yönlendirici olmasına izin veririm.
47	Yakınlarımla o kadar meşgulüm ki kendime çok az zaman kalıyor.

48	İnsanlarla beraberken içten ve cana yakın olmak benim için zordur.
49	Tüm sorumluluklarımı yerine getirmek zorundayım.
50	İstediğimi yapmaktan alıkonulmaktan veya kısıtlanmaktan nefret ederim.
51etmekte zo	Uzun vadeli amaçlara ulaşabilmek için şu andaki zevklerimden fedakarlık orlanırım
52	Başkalarından yoğun bir ilgi görmezsem kendimi daha az önemli hissederim.
53	Yeterince dikkatlı olmazsanız, neredeyse her zaman bir şeyler ters gider.
54	Eğer işimi doğru yapmazsam sonuçlara katlanmam gerekir.
	Beni gerçekten dinleyen, anlayan veya benim gerçek ihtiyaçlarım ve duygularımı kimsem olmadı.
56	Önem verdiğim birisinin benden uzaklaştığını sezersem çok kötü hissederim.
57	Diğer insanların niyetleriyle ilgili oldukça şüpheciyimdir.
58	Kendimi diğer insanlara uzak veya kopmuş hissediyorum.
59	Kendimi sevilebilecek biri gibi hissetmiyorum.
60	İş (okul) hayatımda diğer insanlar kadar yetenekli değilim.
61	Gündelik işler için benim kararlarıma güvenilemez.
62	Tüm paramı kaybedip çok fakir veya zavallı duruma düşmekten endişe duyarım.
	Çoğunlukla annem ve babamın benimle iç içe yaşadığını hissediyorum-Benim it bir hayatım yok.
	Kendim için ne istediğimi bilmediğim için daima benim adıma diğer insanların tesine izin veririm.
65	Ben hep başkalarının sorunlarını dinleyen kişi oldum.
66	Kendimi o kadar kontrol ederim ki insanlar beni duygusuz veya hissiz bulurlar.
67	Başarmak ve bir şeyler yapmak için sürekli bir baskı altındayım.
68	Diğer insanların uyduğu kurallara ve geleneklere uymak zorunda olmadığımı um.
69 zorlayama	Benim yararıma olduğunu bilsem bile hoşuma gitmeyen şeyleri yapmaya kendimi m.
	Bir toplantıda fikrimi söylediğimde veya bir topluluğa tanıtıldığımda nayı ve takdir görmeyi isterim.

71 Ne kadar çok çalışırsam çalışayım, maddi olarak iflas edeceğimden ve neredeye her şeyimi kaybedeceğimden endişe ederim.	se
72 Neden yanlış yaptığımın önemi yoktur; eğer hata yaptıysam sonucuna da katlanmam gerekir.	
73 Hayatımda ne yapacağımı bilmediğim zamanlarda uygun bir öneride bulunacak veya beni yönlendirecek kimsem olmadı.	ζ.
74 İnsanların beni terk edeceği endişesiyle bazen onları kendimden uzaklaştırırım.	
75 Genellikle insanların asıl veya art niyetlerini araştırırım.	
76 Kendimi hep grupların dışında hissederim.	
77 Kabul edilemeyecek pek çok özelliğim yüzünden insanlara kendimi açamıyoru veya beni tam olarak tanımalarına izin vermiyorum.	m
78İş (okul) hayatımda diğer insanlar kadar zeki değilim.	
79 Ortaya çıkan gündelik sorunları çözebilme konusunda kendime güvenmiyorum	l.
80 Bir doktor tarafından herhangi bir ciddi hastalık bulunmamasına rağmen bende ciddi bir hastalığın gelişmekte olduğu endişesine kapılıyorum.	:
81 Sık sık annemden babamdan ya da eşimden ayrı bir kimliğimin olmadığını hissediyorum.	
82 Haklarıma saygı duyulmasını ve duygularımın hesaba katılmasını istemekte çol zorlanıyorum.	k
83 Başkaları beni, diğerleri için çok, kendim için az şey yapan biri olarak görüyorl	lar.
84 Diğerleri beni duygusal olarak soğuk bulurlar.	
85 Kendimi sorumluluktan kolayca sıyıramıyorum veya hatalarım için gerekçe bulamıyorum.	
86 Benim yaptıklarımın, diğer insanların katkılarından daha önemli olduğunu hissediyorum.	
87 Kararlarıma nadiren sadık kalabilirim.	
88 Bir dolu övgü ve iltifat almam kendimi değerli birisi olarak hissetmemi sağlar.	
89 Yanlış bir kararın bir felakete yol açabileceğinden endişe ederim.	
90 Ben cezalandırılmayı hak eden kötü bir insanım	

\*Ölçek makale künyesi: Soygüt, G., Karaosmanoğlu, A., Çakır, Z. (2009). Erken Dönem Uyumsuz Şemaların Değerlendirilmesi: Young Şema Ölçeği Kısa Form-3'ün Psikometrik Özelliklerine İlişkin Bir İnceleme. *Türk Psikiyatri Dergisi*, 20 (1), 75-84.

### APPENDIX D

## YOUNG PARENTING INVENTORY/YOUNG EBEVEYNLİK ÖLÇEĞİ

Aşağıda anne ve babanızı tarif etmekte kullanabileceğiniz tanımlamalar verilmiştir. Lütfen her tanımlamayı dikkatle okuyun ve ebeveynlerinize ne kadar uyduğuna karar verin. 1 ile 6 arasında, <u>çocukluğunuz sırasında</u> annenizi ve babanızı tanımlayan en yüksek dereceyi seçin. Eğer sizi anne veya babanız yerine başka insanlar büyüttü ise onları da aynı şekilde derecelendirin. Eğer anne veya babanızdan biri hiç olmadı ise o sütunu boş bırakın.

- 1 Tamamı ile yanlış
- 2 Çoğunlukla yanlış
- 3 Uyan tarafı daha fazla
- 4 Orta derecede doğru
- 5 Çoğunlukla doğru
- 6 Ona tamamı ile uyuyor

	Anne	Baba
1.		Beni sevdi ve bana özel birisi gibi davrandı.
2.		Bana vaktini ayırdı ve özen gösterdi.
3.		Bana yol gösterdi ve olumlu yönlendirdi.
4.		Beni dinledi, anladı ve duygularımızı karşılıklı paylaştık.
5.		Bana karşı sıcaktı ve fiziksel olarak şefkatliydi.
6.		Ben çocukken öldü veya evi terk etti.
7.		Dengesizdi, ne yapacağı belli olmazdı veya alkolikti.
8.		Kardeş(ler)imi bana tercih etti.
9.		Uzun süreler boyunca beni terk etti veya yalnız bıraktı.
10.		Bana yalan söyledi, beni kandırdı veya bana ihanet etti.
11.		Beni dövdü, duygusal veya cinsel olarak taciz etti.
12.		Beni kendi amaçları için kullandı.
13.		İnsanların canını yakmaktan hoşlanırdı.
14.		Bir yerimi inciteceğim diye çok endişelenirdi.
15.		Hasta olacağım diye çok endişelenirdi.
16.		Evhamlı veya fobik/korkak bir insandı.
17.		Beni aşırı korurdu.
18.		Kendi kararlarıma veya yargılarıma güvenememe neden oldu.
19.		İşleri kendi başıma yapmama fırsat vermeden çoğu işimi o yaptı.
20.		Bana hep daha çocukmuşum gibi davrandı.
21.		Beni çok eleştirirdi.
22.	hissetti	Bana kendimi sevilmeye layık olmayan veya dışlanmış bir gibi rdi.
23.		Bana hep bende yanlış bir şey varmış gibi davrandı.
24.		Önemli konularda kendimden utanmama neden oldu.
25.		Okulda başarılı olmam için gereken disiplini bana kazandırmadı.

26. \_\_\_\_\_ Bana salakmışım veya beceriksizmişim gibi davrandı.

27.		Başarılı olmamı gerçekten istemedi.
28.		Hayatta başarısız olacağıma inandı.
29.		Benim fikrim veya isteklerim önemsizmiş gibi davrandı.
30.		Benim ihtiyaçlarımı gözetmeden kendisi ne isterse onu yaptı.
31.	oldu.	Hayatımı o kadar çok kontrol altında tuttu ki çok az seçme özgürlüğüm
32.		Her şey onun kurallarına uymalıydı.
33.		Aile için kendi isteklerini feda etti.
34.		Günlük sorumluluklarının pek çoğunu yerine getiremiyordu ve ben her i payıma düşenden fazlasını yapmak zorunda kaldım.
35.		Hep mutsuzdu; destek ve anlayış için hep bana dayandı.
36.	hissettirdi.	Bana güçlü olduğumu ve diğer insanlara yardım etmem gerektiğini
37.	zorlardı.	Kendisinden beklentisi hep çok yüksekti ve bunlar için kendini çok
38.		Benden her zaman en iyisini yapmamı bekledi.
39.	gibi olmalıy	Pek çok alanda mükemmeliyetçiydi; ona göre her şey olması gerektiği dı.
40.		Yaptığım hiçbir şeyin yeterli olmadığını hissetmeme sebep oldu.
41.		Neyin doğru neyin yanlış olduğu hakkında kesin ve katı kuralları vardı
42.		Eğer işler düzgün ve yeterince hızlı yapılmazsa sabırsızlanırdı.
43.	fazla önem v	İşlerin tam ve iyi olarak yapılmasına, eğlenme veya dinlenmekten daha verdi.
44.		Beni pek çok konuda şımarttı veya aşırı hoşgörülü davrandı.
45.		Diğer insanlardan daha önemli ve daha iyi olduğumu hissettirdi.
46.		Çok talepkardı; her şeyin onun istediği gibi olmasını isterdi.
47.		Diğer insanlara karşı sorumluluklarımın olduğunu bana öğretmedi.
48.		Bana çok az disiplin veya terbiye verdi.
49.		Bana çok az kural koydu veya sorumluluk verdi.
50.		Aşırı sinirlenmeme veya kontrolümü kaybetmeme izin verirdi.

51.		Disiplinsiz bir insandı.
52.		Birbirimizi çok iyi anlayacak kadar yakındık.
53.		Ondan tam olarak ayrı bir birey olduğumu hissedemedim veya ni yeterince yaşayamadım.
54.	belirleyemiy	Onun çok güçlü bir insan olmasından dolayı büyürken kendi yönümü ordum.
55.		İçimizden birinin uzağa gitmesi durumunda, birbirimizi nizi hissederdim.
56.		Ailemizin ekonomik sorunları ile ilgili çok endişeli idi.
57.	hissettirirdi.	Küçük bir hata bile yapsam kötü sonuçların ortaya çıkacağını
58.		Kötümser bir bakışı açısı vardı, hep en kötüsünü beklerdi.
59.		Hayatın kötü yanları veya kötü giden şeyler üzerine odaklanırdı.
60.		Her şey onun kontrolü altında olmalıydı.
61.		Duygularını ifade etmekten rahatsız olurdu.
62.		Hep düzenli ve tertipliydi; değişiklik yerine bilineni tercih ederdi.
63.		Kızgınlığını çok nadir belli ederdi.
64.		Kapalı birisiydi; duygularını çok nadir açardı.
65.	olurdu.	Yanlış bir şey yaptığımda kızardı veya sert bir şekilde eleştirdiği
66.		Yanlış bir şey yaptığımda beni cezalandırdığı olurdu.
67.	olurdu.	Yanlış yaptığımda bana aptal veya salak gibi kelimelerle hitap ettiği
68.		İşler kötü gittiğinde başkalarını suçlardı.
69.		Sosyal statü ve görünüme önem verirdi.
70.		Başarı ve rekabete çok önem verirdi.
71.	ile çok ilgiliy	Başkalarının gözünde benim davranışlarımın onu ne duruma düşüreceği ydi.
72.	gösterirdi.	Başarılı olduğum zaman beni daha çok sever veya bana daha çok özen

Türkçe' ye uyarlayanlar: Karaosmanoğlu ve Soygüt, 2004. Telif hakları yazarlara aittir. Yazarların izni olmadan çoğaltılamaz, kullanılamaz.

# APPENDIX E

# ETHICS COMMITTEE APPROVAL

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ



DUMLUPINAR BULVARI 06800 ÇANKAYA ANKARA/TURKEY T: +90 312 210 22 91 F: +90 312 210 79 59 ueam@metu.edu.tr www.ueam.metu.edu.tr

Sayı: 28620816 /03

06 OCAK 2016

Gönderilen: Doç.Dr. Deniz Canel ÇINARBAŞ

Psikoloji Bölümü

Gönderen: Prof. Dr. Canan SÜMER

İnsan Araştırmaları Komisyonu Başkanı

İlgi: Etik Onayı

Sayın Doç.Dr. Deniz Canel ÇINARBAŞ danışmanlığını yaptığınız Psikoloji Bölümü yüksek lisans öğrencisi Gözde NİLÜFER'in in "The relationship between birth order, parenting styles and early maladaptive schemas (Doğum sırası, ebeveynlik stilleri ve erken dönem uyumsuz şemalar arasındaki ilişki)"başlıklı araştırması İnsan Araştırmaları Komisyonu tarafından uygun görülerek gerekli onay 2015-SOS-191 protokol numarası ile 21.01.2016 – 30.04.2016 tarihleri arasında geçerli olmak üzere verilmiştir.

Prof. Dr. Canan SÜMER

Uygulamalı Etik Araştırma Merkezi

İnsan Araştırmaları Komisyonu Başkanı

# APPENDIX F

# EARLY MALADAPTIVE SCHEMAS IN DIFFERENT STUDIES

# Early Maladaptive Schemas

Young (1990)	Schmidt, Joiner,	Lee, Taylor, &	Young, Weishaar, &	Soygüt,	Sarıtaş & Gençöz
	Young, & Telch	Dunn (1999)	Klosko (2003)	Karaosmanoğlu,	(2011)
	(1995)			&Çakır (2009)	
Instability &	Disconnection	Disconnection	Disconnection/Rejec	Disconnection	Disconnection/Rejec
Disconnection			tion		tion
Abandonment	Abandonment	Abandonment/	Abandonment/	Emotional	Emotional
		Instability	Instability	Deprivation	Deprivation
Emotional	Emotional	Emotional	Emotional	Emotional Inhibition	Emotional Inhibition
Deprivation	Deprivation	Deprivation	Deprivation		
Abuse/Mistrust	Mistrust	Mistrust/Abuse	Mistrust/Abuse	Social	Mistrust/Abuse
				Isolation/Mistrust	
Impaired	Defectiveness	Defectiveness	Defectiveness/Shame	Defectiveness	Defectiveness/Shame
Autonomy					

$\vdash$
_
+

	Dependence	Emotional Inhibition	Social Isolation/Alienation	Social Isolation/Alienation	Impaired Autonomy	Social Isolation
	Vulnerability to harm	Fear of losing control	Emotional Inhibition	<b>Impaired Autonomy</b> and Performance	Enmeshment	Impaired Limits- Exaggerated Standards
	Enmeshment	Overconnection	Impaired Autonomy	Dependence/Incompe tence	Abandonment	Entitlement
	Undesirability	Dependency	Dependence/Incomp tence	Enmeshment/Undeve loped Self	Failure	Unrelenting Standards
104	Defectiveness	Enmeshment	Subjugation	Failure	Pessimism	Approval seeking
+	Social Undesirability	Vulnerability to harm or illness	Vulnerability to harm	Vulnerability to harm	Vulnerability to harm	Pessimism
	Failure to achieve	Incompetence/Inferiority	Failure	Impaired Limits	Impaired Limits	Punitiveness
	Restricted Self Expression	Exaggerated Standards	Exaggerated Standards	Entitlement/Grandios ity	Entitlement/Insuffici ent self control	Insufficient self control
	Subjugation	Self sacrifice	Self sacrifice	Insufficient self control/Self discipline	Other Directedness	Impaired Autonomy- Other Directedness
	Emotional Inhibition	Unrelenting standards	Unrelenting standards	Other Directedness	Self sacrifice	Self sacrifice

•	
(	_
(	J

	Restricted Gratification	Hypercriticalness	Subjugation	Punitiveness	Subjugation
	Self sacrifice	Impaired Limits	Self sacrifice	Unrelenting Standards	Dependency
	Unrelenting standards	Entitlement	Approval seeking/Recognition seeking	Unrelenting Standards	Enmeshment
	Negativity/Pessimis m	Fear of losing control	Overvigilance/Inhib ition	Approval seeking	Abandonment
105	Impaired Limits		Negativity/Pessimis m		Vulnerability to harm
	Entitlement		Emotional Inhibition		
	Insufficient self control		Unrelenting Standards/Hypercriti calness		
			Punitiveness		

### APPENDIX G

### **TURKISH SUMMARY**

Bu çalışma, doğum sırası, algılanan ebeveynlik biçimleri ve erken dönem uyumsuz şemalar arasındaki ilişkiyi incelemek amacıyla yapılmıştır. Psikoloji literatüründe doğum sırası ve kişilik ilişkisini araştıran birçok çalışma olsa da doğum sırası ve erken dönem uyumsuz şemalar arasındaki ilişkiye bakan çalışmaya rastlanmamıştır.

### 1.1. Adler'in Teorisi

Adler (1927), insanların hayatta özellikle "güç ve rekabet" için çabaladıklarını savunmuştur. Adler'e (1937) göre insanlar üstünlük kurma mücadelesi verirler. Ailedeki çocukların doğum sırasının da bu üstünlük kurma duyguları ile ilişkili olduğunu savunmuştur (Adler, 1927). Bu bağlamda, Adler hayatın anlamını "bir gruba ait olma, o grupta kendine önemli bir yer edinme" olarak tanımlamıştır (Ansbacher & Ansbacher, 1956). Bireylerin karşılaştıkları ve ait oldukları ilk sosyal grup ise ailedir. Bu bağlamda, anne ve babayla deneyimler kişilerin kişilik oluşumunda çok önemli bir yere sahiptir. Ancak Adler, bu ilişkilerin yanında, kardeşlerin, büyük ya da küçük kardeş olmanın da önemine dikkat çekmiştir. Çünkü insanlar güç ve rekabet için çalışırlar, anne ve babanın ilgisini kazanmak için de kardeş rekabeti önemli bir noktadır. Doğum sırası, kişinin birçok alanında, kişiliğinde, düşünce biçimlerinde, hayattaki amaçlarında ve davranışlarında etkisini gösterebilir. Bu yüzden Adler'e göre, ailedeki her kardeşin anne babasıyla tecrübesi, iletişimi kendine has ve birbirinden farklıdır (Adler, 1927). Kardeşlerin birbirinden farklı özellikler geliştirmesi de rekabeti azaltarak aile için önemli bir yere sahip olma arzuları ile ilişkilidir.

İlk çocuklar, anne ve babalarının ilgi odağı oldukları ve tek oldukları bir zaman dilimine sahiptirler (Adler, 1928). Ancak kardeşlerin gelmesiyle birlikte Adler'in ifadesiyle "tahttan indirilme" durumun tecrübe ederler (Adler, 1956). Bu tahttan indirilme durumu, büyük çocukların kişiliklerinin oluşmasında önemli bir etkiye sahiptir. Ortanca ve son çocuklar açısından, doğdukları andan itibaren anne ve babalarını paylaştıkları kardeşleri vardır ve büyük kardeşlerini lider olarak görebilirler. Büyük kardeşler kaybettikleri konumlarını geri kazanmaya çalışırken, küçük kardeşler de büyük kardeşlerine yetişmek ve kendilerine ait bir yer edinebilmek için çaba gösterirler (Adler, 1956).

Adler, büyük çocukları tahttan indirilme durumu ile ilişkili olarak daha problematik görür. Büyük çocukları daha sorumluluğu üstlenen, uyumlu, itaatkar, mükemmeliyetçi ve aile değerlerine bağlı olarak tanımlar. Ailelerin ilk çocuklarından daha fazla beklenti içinde olmaları dolayısıyla büyük çocukların kendilerini yetersiz ya da kusurlu hissedebileceğini öne sürmektedir. Onaylanma motivasyonu da büyük kardeşler için önemlidir. Adler, küçük kardeşlerin daha neşeli, daha özgür ruhlu ve empatik olduklarından söz eder.

# 1.2. Sulloway'in Teorisi

Sulloway (1996), doğum sırası ve kişilik arasındaki ilişkiyi "aile içinde özel yer edinme modeli" ile evrimsel bir yolla açıklamaktadır. Sulloway daha evrimsel bir teoriden bahsederken de kardeşlerin birbirinden farklılaşmasında Adler ile paralellikler göstermektedir. Sulloway, her bir çocuğun ailede eşsiz ve kendine has bir "niche" yani özel bir mevki aradığından söz eder (1996). Bunun, ortama ayak uydurabilmek ve uyum sağlayabilmek için evrimsel olarak gerekli olduğunu savunur. Bu farklılaşmanın, anne babanın sınırlı kaynaklarına ulaşmada çok büyük yararlar sağladığını vurgularken, farklılaşmalar sayesinde rekabeti azaltarak her bir çocuğun daha fazla ilgiye sahip olabildiğini savunur (Sulloway, 1996). Sulloway, teorisini Darwin (1859)'in evrim teorisiyle temellendirerek büyük çocukların fiziksel özellikleri, yaş vb yönlerden küçük kardeşlerden üstün olduklarını ve bu özelliklerinden kardeşleriyle rekabette yararlandıklarını söylemektedir. Küçük kardeşlerin de bu rekabette daha güçsüz görünmeleri yüzünden anne ve babaları tarafından daha fazla korunabileceğini ve belki de bu güçsüz pozisyonları sayesinde ailenin "favori" çocuğu konumuna gelebileceklerini söylemektedir (Sulloway, 1996).

Sulloway (1996)'e göre de ilk çocuklar anne ve babalarının en çok ilgisini alan kardeşlerdir. Bu nedenle aile dinamiklerine, değerlerine ve kurallarına ilk çocukların daha bağlı olduğunu söylemektedir. Pozisyonlarını korumak amacıyla da büyük kardeşlerin daha uyumlu yolu seçtiklerini savunmaktadır. Ailelerinin beklentilerini karşılayabilmek amacıyla da daha vicdanlı ve sorumluluk sahibi olduklarını vurgulamaktadır. Bunların sonucunda da daha hırslı, organize ve başarı odaklı olduklarını söyler. Küçük kardeşlerin de büyüklerin aksine onların seçmediği yollardan ailelerin ilgi ve sevgisini kazanmaya çalıştıkları dikkat çekicidir (Sulloway, 1996). Buna bağlı olarak da küçük kardeşlerin aile değerlerine, kurallarına daha fazla karşı gelen, otoriteyle çatışmaya girebilen kişiler olma eğilimine dikkat çekmektedir. Bunlara ek olarak, büyük çocukların daha nörotik olduklarını, küçük kardeşlerin ise rekabetin etkilerini azaltmak amacıyla anlaşmaya müsait olduklarını ve kişilerarası ilişkilerde daha iyi olduklarını savunmaktadır (Sulloway, 1996).

Genel olarak, Sulloway ilk çocukları "başarı odaklı, kaygılı, iddialı, itaatkar, dışadönük, korkulu, kıskanç, aileye daha bağlı, nevrotik, sorumlu, geleneksel ve daha stresli" olarak tanımlamıştır. Küçük kardeşleri ise "maceracı, fedakar, iş birlikçi, iyi geçineempatik, yeni deneyimlere açık, popüler, isyankar, risk alabilen, daha sosyal ve yenilikçi" bireyler olarak tanımlamıştır (Sulloway, 1996, sayfa 68-70).

Sulloway (1996), teorisinde özelikle Büyük Beşli diye adlandırılan kişilik özellikleri ve doğum sırası arasındaki ilişkilere önem vermiştir. Sulloway'e göre büyük kardeşler daha nörotik ve vicdanlı iken, küçük kardeşler daha anlaşmaya ve deneyimlere açık bulunmuştur. Dışa dönüklük bakımından ise dominant olma kısmı büyük kardeşlerle daha ilişkili bulunurken, sosyallik kısmı küçük kardeşlerle daha ilgili bulunmuştur (Sulloway, 1996). Bu kişilik özelliklerinin şemalarla ilişkisine bakan çalışmalarda nörotik olmanın büyük ölçüde uyumsuz şemalarla ilişkili olduğu bulunmuştur (Muris, 2006).

# 1.3. Doğum Sırası ve Ebeveynlik Stilleri

Aileler, kişilerin yaşam süreleri boyunca çok önemli bir yere sahiptir. Adler (1927) ve Sulloway (1996), ailelerin tutumlarının, çocuklarının doğum sırasına göre farklılık gösterebileceğini vurgulamıştır. Bu nedenle, aynı aileye sahip olsalar da kardeşlerin farklı kişilik özellikleri ve baş etme yolları kazanacağını savunmuşlardır. Bunlarla ilişkili olarak paylaşılmamış çevre etkileri, kardeşlerin farklı gelişimlerinde ve deneyimlerinde önemli bir rol oynamaktadır (Plomin et al. 2001).

Ailelerin farklı tutumlarına ilişkin olarak, anne ve babaların ilk çocuklarına sahip olduklarında, yeterli tecrübeye sahip olmadıkları için, daha korumacı ve disiplinli bir çocuk yetiştirme tarzına sahip olabilecekleri öne sürülmüştür (Adler, 1927). Bu ilişki hakkında literatürde, değişik sonuçlar elde edilen birçok araştırma vardır. Ailelerin ilk çocuklarına daha kuralcı, daha kontrolcü ve korumacı olma eğiliminde oldukları ve beklentilerini daha yüksek tuttuklarına dair araştırmalar literatürde yerini almaktadır (Forer, 1976). Son doğan çocuklarıyla ilişkilerinde daha rahat ve daha az kontrolcü oldukları bulunmuştur (Forer, 1976). Örneğin, Moore (1997), anne ve çocukları gözlemleyerek yapılan bir çalışmada annelerin ilk çocuklarına göre ikinci çocuklarına daha sıcak ve rahat tavırlar sergilediklerini söylemiştir. Bunun sebeplerine baktığında, doğum sonrası depresyonunu, annelerin ilk çocuklarında daha ağır ve şiddetli yaşayabileceklerini ve buna bağlı olarak sıcak ve rahat tavırlar sergilemekte zorlanabileceklerini öne sürmüştür (Moore, 1997).

Diğer bir açıdan, daha önce de bahsedildiği üzere, Sulloway (1996), ilk çocukların fiziksel olarak daha üstün olmaları nedeniyle, ailelerin ilk çocuklarına karşı son çocuklarını daha koruma eğiliminde olabileceklerinden bahsetmiştir.

# 1.5. Şema Teori

Young (1999), kişilerin doğdukları andan itibaren sevilme, ilgi görme, korunma, anlaşılma gibi ihtiyaçları olduğuna dikkat çekmiştir. Bu ihtiyaçların giderilmesinde ebeveynlerin çocuklarıyla ilişkilerinin önemli bir rolü olduğunu savunmaktadır. Young (1999), erken dönemden itibaren özellikle anne babayla olumsuz deneyimler sonucunda ve mizacın yatkınlığı ile bireylerin uyumsuz semalar geliştirdiğini savunmuştur. Young (2003) bu uyumsuz şemaları "duygular, bilişler, hatıralar ve bedensel duyumlardan oluşan, çocuklukta ve ergenlikte gelişen, bireyin hayatı boyunca sürdürdüğü ve belli bir seviyeden sonra işlevsiz olan geniş, her tarafa yayılmış örüntüler" olarak tanımlamıştır (Young ve arkadaşları, sayfa 7). Bu uyumsuz şemalar, çocuğun gerekli olan ihtiyaçlarının ebeveynleri tarafından karşılanmaması ile yakından ilişkilidir (Young 1999, Young ve arkadaşları, 2003). Young ve arkadaşları (2003), ihtiyaçlarla ilişkili olarak güvenli bağlanmaya, otonominin sağlanmasına, kimlik algısının oluşmasına, duyguların rahatça ifade edilebilmesine, kendiliğindenliğe ve gerçekçi limitlerin kurulmasına önem vermistir. Coçukların bu ihtiyaçları yeteri kadar sağlanmadığında, bu ihtiyaçların giderilememesiyle ilişkili olarak uyumsuz şemaların gelişebileceğini öngörmüştür (Young ve arkadaşları, 2003). Erken dönem uyumsuz şemaların içerik ve sayısı çalışmalara göre değişiklik göstermiştir (Ek E).

Literatürde doğum sırasına göre kişilerin erken dönem uyumsuz şemalarını inceleyen bir çalışmaya rastlanmamıştır. Ancak Büyük Beşli denen kişilik özellikleri ve erken dönem uyumsuz şemalar arasındaki ilişkiyi inceleyen çalışmalara bakıldığında, nörotiklik uyumsuz şemalarla anlamlı derecede pozitif ilişkili bulunmuştur (Thimm, 2010). Bu bulgular, çalışmanın hipotezlerini oluşturmada yol gösterici olmuştur. Nörotiklik, ilk doğan çocuklarla ilişkilendirildiğinden (Adler, 1927), büyük çocuklardan daha yüksek şema skoru beklenmiştir.

# 1.6. Çalışmanın Hipotezleri

Çalışmanın ana hipotezleri kişilerin doğum sırasına bağlı olarak şema alanları ve algılanan ebeveynlik biçimlerinde farklılık göstermesidir. Bu bağlamda, büyük kardeşlerin toplam şema skorunun küçük kardeşlere kıyasla daha yüksek olması beklenmektedir. Hangi şema alanında farklılık olacağına dair belirli hipotezimiz olmasa da büyük ve küçük kardeşlerin şema alanlarında farklılık göstermesi beklenmektedir. Bunlarla ilişkili olarak

belirtildiği üzere, büyük ve küçük kardeşlerin ebeveynlik biçimlerinde de farklılık göstermesi beklenmektedir.

# 2. YÖNTEM

#### 2.1. Katılımcılar

Çalışmaya sadece anne ve babası halen evli olan kişiler dahil edilmiştir. Ebeveynlerinden herhangi birisi vefat eden ya da üvey kardeşe sahip olan kişiler çalışmaya dahil edilmemiştir. Bunun sonucunda çalışmaya, yaşları 18 ile 30 arasında olan 294 kişi katılmıştır. Katılımcıların 219' u kadın (% 71.4), 84'ü (% 28.6) erkektir. Katılımcıların 135'i (% 45.9) büyük kardeş, 159'u (% 54.1) küçük kardeştir. Katılımcılar 18-30 yaş arasında en az bir kardeşe sahiptir. Çalışmada kendisinden başka en fazla 3 kardeşe sahip kişiler yer almıştır.

# 2.2. Ölçüm Araçları

Çalışmada ilk olarak Demografik Bilgi Formu sunulmuştur. Bu formda kişinin yaş, cinsiyet, eğitim seviyesi, doğum sırası, kaç kardeşe sahip olduğu, kardeşlerin cinsiyeti, kardeşler arasındaki yaş farkı, ailenin aylık geliri, anne ve babanın eğitim seviyesi ve birlikte olup olmadıkları bilgilerinin elde edilmesi amaçlanmıştır. Sonrasında sırasıyla 90 maddelik Young Şema Ölçeği'nin Türkçe versiyonu ve 72 maddelik Young Ebeveynlik Stilleri Ölçeği'nin anne ve baba formları sunulmuştur.

# 2.2.1.Young Şema Ölçeği

Young Şema Ölçeği Young (1990) tarafından kişilerin erken dönem uyumsuz şemalarını ölçmek amacıyla geliştirilmiştir. Ölçeğin bu halinde 16 uyumsuz şema ve 205 madde yer almaktadır. Ancak, ölçek zamanla bazı değişimlere uğramıştır. Soygüt, Karaosmanoğlu, & Çakır (2009), ölçeği Türkçe'ye çevirmiş ve psikometrik özelliklerine ilişkin çalışmalar yapmıştır. Buna göre, Young Şema Ölçeği'nin Türkçe formunda 90 madde bulunmaktadır ve 5 şema alanı altında toplam 14 uyumsuz şema yer almaktadır. Bu şema alanları Kopukluk, Zedelenmiş Otonomi, Zedelenmiş Sınırlar, Diğeri Yönelimlilik ve Yüksek Standartlar olarak belirlenmiştir. Ölçeğin 5 şema alanının iç tutarlılık katsayısının.53 ile.81 arasında değiştiği bulunmuştur.

# 2.2.2. Young Ebeveynlik Stilleri Ölçeği

Young Ebeveynlik Stilleri Ölçeği, Young (1994) tarafından geliştirilmiş olup, kişilerin anne ve babalarının ebeveynlik tarzlarına ilişkin algılarını ölçmeyi amaçlamaktadır. Ölçek 72 maddeden oluşmakta ve anne ve baba için 10 ayrı ebeveynlik biçimi tanımlanmaktadır. Bunlar, duygusal olarak yoksun bırakan, aşırı korumacı/endişeli, küçümseyici/kusur bulucu, kötümser/endişeli, kuralcı, duygusal olarak bastırılmış, cezalandırıcı, koşullu/başarı odaklı, aşırı izin verici ve sömürücü ebeveynlik biçimleri olarak belirlenmiştir (Young, 1994). Ölçek, Karamanoğlu ve Soygüt (2004) tarafından Türkçe'ye çevrilmiş ve ölçeğin psikometrik çalışmaları yapılmıştır. Anne formunun iç tutarlılık katsayısının .53 ile .86 arasında, baba formunun iç tutarlılık katsayısının .61 ile .88 arasında değiştiği saptanmıştır (Karamanoğlu & Soygüt, 2004).

#### 2.3. Prosedür

Öncelikle ODTÜ Etik Komitesi'nden gerekli izinler alınmıştır. Sonrasında Qualtrics adlı anket oluşturma sitesinde bir anket oluşturulmuş ve katılımcılar internet aracılığıyla bu ankete ulaşmışlardır. Katılımcılar, önce bilgilendirme yazısını ve gönüllü katılım formunu okumuşlar, ardından ise ölçeklerin bulunduğu soru setini ortalama 25 dakikada tamamlamışlardır.

### 2.4. Analiz

İstatistiksel analizler için Sosyal Bilimler için İstatistik Paketi (SPSS) kullanılmıştır. Öncelikle, doğum sırası ve demografik değişkenlere göre şema alanları ve ebeveynlik biçimleri farklılıklarını saptamak amacıyla Varyans Analizleri (ANOVA) ve Çoklu Varyans Analizleri (MANOVA) yürütülmüştür. Değişkenler arasındaki ilişkiler ise korelasyon analizleri ile incelenmiştir. Son olarak, şema alanlarını yordayıcı faktörler basit regresyon ve hiyerarşik regresyonlar aracılığıyla incelenmiştir.

# 3. SONUCLAR

# 3.1. Çalışmanın Değişkenlerine Dair Betimleyici Analizler

Çalışmanın değişkenlerine dair betimleyici analizler sonucunda, ortalama skorlar, standart sapma değerleri, minimum ve maksimum değerler ve Cronbach alpha puanları hesaplanmıştır. Bu hesaplamalara ilişkin değerler Tablo 3.1 ve Tablo 3.2'de görülebilir.

# 3.2. Demografik Değişkenlere göre Şema Alanlarında ve Ebeveynlik Stillerindeki Farklılıklar

Öncelikle toplam şema skorundaki grup farklılıkları için ANOVA uygulanmış, sadece yaş için önemli grup farklılıkları gözlemlenmiştir. Buna göre, genç katılımcılar, görece daha yaşlı katılımcılara göre daha yüksek şema skoru elde etmiştir. Ancak ana hipotezlerimizden biri olan büyük ve küçük kardeşler arasında toplam şema skoru bakımından anlamlı bir fark gözlemlenmemiştir.

Demografik değişkenlere göre şema alanlarındaki farklılıkları incelemek amacıyla MANOVA uygulanmış, ancak büyük ve küçük kardeşler arasında beklenen anlamlı şema alanı farklılıkları hipotezi desteklenmemiştir. Bunun yanı sıra, erkek katılımcılar, kadın katılımcılara göre ve üniversite öğrencileri diğer eğitim seviyelerine göre daha fazla Kopukluk şema alanı skoruna sahip bulunmuştur. Genç katılımcılar, daha fazla Zedelenmiş Sınırlar şema alanına sahip bulunmuştur. (Tablo 3.4, 3.5, 3.6).

Bunların yanı sıra, MANOVA sonuçlarına göre, son doğan katılımcılar, ilk doğan katılımcılara göre, annelerini daha korumacı ve endişeli bulduklarını ifade etmişlerdir. Ancak, babalarının ebeveynlik stilleri bakımından herhangi bir farklılık gözlemlenmemiştir. Bu sonuçlara ilişkin bilgiler Tablo 3.8'de görülebilir.

# 3.3. Çalışmanın Değişkenleri arasındaki Korelasyonlar

Çalışmanın değişkenleri arasındaki korelasyon değerleri ile ilgili detaylı bilgiler Tablo 3.9, 3.10 ve 3.11'de verilmiştir. Anne ve baba eğitim seviyesi ve aile geliri arasında anlamlı şekilde pozitif ilişkiler gözlemlenmiştir. Negatif ebeveynlik tutumları ve şemalar arasında da anlamlı şekilde pozitif ilişkiler bulunmuştur.

# 3.4. Şema Alanlarını Yordayıcı Faktörler

Öncelikle doğum sırası ve ebeveynlik stillerini, şema alanlarını yordayıcı faktörler olarak analiz etmek için regresyon analizi uygulanmıştır. Ancak, doğum sırasının şema alanlarını yordayıcı etkisi gözlemlenmemiştir. Teorik çerçevenin de sunduğu üzere, anne ve babanın ebeveynlik stili, şema alanlarını anlamlı bir şekilde yordamıştır.

Sonrasında her bir şema alanının diğer yordayıcı faktörlerini bulmak üzere hiyerarşik regresyonlar uygulanmıştır. Bu analizlerin sonucuna göre, cinsiyet, yaş ve anne ve babanın negatif ebeveynlik biçimleri Kopukluk şema alanını anlamlı şekilde yordamıştır. Buna göre, erkeklerin ve genç katılımcıların daha fazla Kopukluk şema alanına sahip olduğu gözlemlenmiştir. Aynı zamanda anne ve babası negatif ebeveynlik biçimlerine sahip olan bireylerin daha fazla Kopukluk şema alanına sahip olduğu desteklenmiştir. Zedelenmiş

Otonomi şema alanı açısından, genç katılımcıların ve anne ve babası negatif ebeveynlik stiline sahip olan bireylerin daha fazla Zedelenmiş Otonomi skoru aldığı saptanmıştır. Ancak, sadece anne ve babanın negatif tutumları Zedelenmiş Sınırlar şema alanını yordamıştır. Herhangi bir demografik değişken bu alanla ilgili ilişkili bulunmamıştır. Diğeri Yönelimlilik şema alanı bakımından, annelerin negatif ebeveynlik stilleri bu alanla ilişkili bulunurken, babaların olumsuz tutumları bu alanı yordamamıştır. Bunun yanı sıra annelerin düşük eğitim seviyesi Diğeri Yönelimlilik şema alanını yordamıştır. Son olarak Yüksek Standartlar şema alanı bakımından, annelerin negatif ebeveynlik tutumlarının yanı sıra, cinsiyet ve yaşın da bu şema alanını yordadığı tespit edilmiştir. Buna göre kadınların ve genç katılımcıların daha fazla Yüksek Standartlar şema alanına sahip olduğu gözlemlenmiştir.

## 4. TARTIŞMA

Bu çalışmada, büyük kardeş ve küçük kardeşler arasında beklenen toplam şema skoru ve şema alanları farklılıkları desteklenmemiştir. Ancak, annelerin ebeveynlik tutumlarına ilişkin büyük ve küçük kardeşler arasında farklılık gözlemlenmiştir. Buna göre, küçük çocuklar annelerinin daha korumacı ve endişeli olduklarını ifade etmişlerdir. Doğum sırasına göre babaların ebeveynlik tutumlarında anlamlı bir farklılık gözlemlenmemiştir.

Büyük ve küçük kardeşler arasındaki şema farklılıklarının desteklenmemesine ilişkin olarak, buna sebep olacak bazı önemli durumlardan bahsedilebilir. Örneğin, çalışmadaki ilk doğan ve son doğan çocuklar farklı ailelerden katılmıştır. Bu çalışma aynı ailelerden büyük ve küçük kardeşler ile yapılsaydı; büyük ve küçük kardeşlerin şema alanlarında farklılık göstermesi desteklenebilir olarak düşünülmüştür. Böylece aile içi dinamiği faktörleri gözden kaçırılmayabilirdi.

Bu çalışmada, anne ebeveynlik stillerinin doğum sırasına göre farklılık göstermesi de çalışmanın önemli bulgularından biridir. Adler (1927), ailelerin ilk çocuklarına karşı daha korumacı olduklarını iddia etse de, çalışmadaki bu bulgu, ailelerin, çocukların doğum sırasına göre farklılık gösteren tutumlarıyla ilişkili olarak birçok açıdan tartışılabilir ve desteklenebilir niteliktedir.

İlk olarak, Adler (1927), kardeşler arasında güç savaşına dikkat çekmektedir. Bu bağlamda, ilk çocukların diğer kardeşlerin gelmesiyle tahttan indirilme durumunu tecrübe ettiklerini ve bunun sonucunda üstünlüklerini ve güçlerini kaybettiklerini savunur. Ancak küçük kardeşler, hiçbir zaman ilk çocuklar gibi tek oldukları özel bir zaman dilimine sahip değillerdir. Tüm bu durumlar dikkate alındığında, ilk çocuklar, diğer kardeşlerin geldiği anla

birlikte annelerinin sevgisinin ve ilgisinin onlara karşı azaldığını düşünebilir ve onların kendisine karşı daha az korumacı olduklarını söyleyebilirler.

Bu durumla ilişki olarak, Adler (1927) büyük çocukları dominant ve güçlü olarak tanımlamıştır. Anneler de büyük çocukların bu özellikleri sayesinde kendilerini koruyabileceklerini düşünürken, küçük çocuklarını daha korunmaya muhtaç olarak düşünüyor olabilirler. Bu savı destekler nitelikte, Sulloway (1996), büyük çocuklarını yaş ve fiziksel özellikleri bakımından üstün özelliklerine karşın annelerin küçük çocuklarını onlara karşı koruma eğiliminde olduklarını ve böylece küçük çocuklarını dezavantajlı konumları sayesinde en sevilen çocuk pozisyonuna geçebileceklerini savunmuştur. Bu bağlamda, Türkiye'nin kültürel yapısı göz önüne alındığında, aşırı korumacı olmanın sevgi ve ilginin işareti olabileceğine dair yorumlar yapılabilir. Sümer ve Kağıtçıbaşı (2010), Türkiye'de annelerin aşırı korumacı tavrı negatif bir durumun aksine, pozitif olarak algıladıklarını, bunun da kolektivist kültür yapısıyla ilişkili olduklarını savunmuşlardır. Kolektivist yapıda kişiler bireysellikten ve otonomiden çok grup dinamiklerine önem verdiklerinden, bu durumu destekler niteliktedir (Sümer & Kağıtçıbaşı, 2010). Böylece, annelerin son doğan çocuklarına daha fazla korumacı olmalarıyla, son doğan çocukların "favori çocuk" olma durumunu tecrübe edebilecekleri düşünülmüştür.

Bir diğer açıdan, bireylerin doğum sırasına göre atfedilen özelliklerden dolayı, kişiler bu özellikleri taşımasa bile annelerin tutumlarının bunlardan etkilenebileceği düşünülmüştür. Örneğin, ilk çocuklar daha sorumluluk sahibi, kuralcı, geleneksel, aile değerlerine bağlı olarak değerlendirilirken küçük çocukların daha asi, yeni deneyimlere açık ve aile kurallarından daha bağımsız olduklarına dair çalışmalar bulunmaktadır (Baskett, 1985, Healey & Ellis, 2007, Pulakos, 1987). Bireyler, bu özellikleri taşımasa da annelerin, büyük çocukların bu özelliklerinden dolayı onlara karşı daha rahat olurken, küçüklere karşı daha korumacı ve endişeli olma eğiliminde olabilecekleri düşünülmüştür.

Bu konuya ilişkin bir başka bakış açısı olarak, küçük çocukların doğmasıyla birlikte annelerin onlara karşı daha korumacı olmalarının önemli olabileceği düşünülmüştür. Şöyle ki küçük çocuklar büyüse dahi anneleri onların gelişimine ve yaşlarına göre tutumlarını değiştirmiyor olabilirler ve onların gözünde hep küçük kaldıkları için korumacı tavırlarını sürdürüyor olabilirler. Bir başka deyişle, son doğan çocuklar büyük kardeşlere göre hep daha küçük olmaları özelliklerinden dolayı anneleri hep daha korumacı olabilirler. Örneğin, büyük çocuk 6 yaşına geldiğinde, bir kardeşe sahip olmasıyla birlikte daha olgun olarak tanımlanabilir. Ancak küçük çocuk 6 yaşına geldiğinde annesi tarafından olgun olmayan ve

küçük olarak tanımlanabilir ve anneler küçük çocuklarına karşı korumacı ve endişeli tutumlarının yaşamlarının sonraki süreçlerinde devam ettirebilirler.

Bu bulguya ek olarak, şema alanlarını yordayan faktörler de incelendiğinde doğum sırası şema alanlarını yordamamıştır. Ancak teorik yapının bahsettiği gibi, negatif ebeveynlik biçimleri anlamlı şekilde şema alanlarını yordamıştır. Daha spesifik olarak, hem anne hem baba negatif ebeveynlik biçimleri Kopukluk, Zedelenmiş Otonomi ve Zedelenmiş Sınırlar şema alanlarını yordamıştır. Ancak sadece annelerin ebeveynlik tutumları Diğeri Yönelimlik ve Yüksek Standartlar şema alanlarını yordamıştır. Bu durum, toplumlardaki sosyal rollerle ilişkilendirilebilir. Anneler daha çocuğun temel bakımını veren ebeveynler olarak algılanırken, babalar daha çok evi geçindiren ve kural koyan ebeveynler olarak tanımlanmaktadır. Bu bağlamda, annelerin çocuklarıyla ilişkisinin babaların ilişkilerine kıyasla, çocukların kişiliklerinde daha fazla etkiye sahip olduğu söylenebilir.

Genel bir çerçevede, Young ve arkadaşları (2003), ebeveynlerin olumsuz ve negatif tutumlarının, bireylerin erken dönem uyumsuz şemalar geliştirmesine etkinse büyük bir dikkat çekmiştir. Çocukluktan itibaren hayattaki önemli yakın kişilerle etkileşim biçimlerinin, kişinin sonraki yaşam biçimine yansımaları Young ve arkadaşları (2003) tarafından vurgulanmıştır. Bu bağlamda bu çalışma da anne ve babaların tutumlarının kişilerinin farklı uyumsuz şema alanları oluşturmasına ilişkin savları destekler niteliktedir.

Erkeklerin daha fazla Kopukluk şema alanına sahip olmasıyla ilgili olarak, kültürel faktörlerin, cinsiyet rollerine ilişkin kalıp düşüncelerin ve sosyal rollerin rol oynayabileceği düşünülmüştür (Brody, 1997). Toplumlarda, kadınların erkeklere oranla daha duygusal olmalarına ve duygularını ifade etmelerine ilişkin düşünceler ve çalışmalar yaygındır. Örneğin, kadınlar ilişkilerinde sorun yaşadıklarında, duygularını ifade etmeyi seçerken, erkeklerin daha mantıksal çözümler aradıkları ve göz kontağından ve duygu ifadelerinden kaçındıkları bulunmuştur (Kelley ve arkadaşları, 1978). Bu bağlamda erkeklerin duygularını ifade etmeyişlerinin, sosyal ilişkilerinde kadınlar kadar ifade edici olmamalarının onların daha fazla Kopukluk hissetmeleriyle ilişkili olabileceği düşünülmüştür.

Genç katılımcıların ise daha fazla Kopukluk şema alanına sahip olmalarıyla ilişkili olarak, ergenlik döneminden genç yetişkinlik dönemine geçişin etkili olabileceği düşünülmüştür. Yetişkinliğe geçiş ile birlikte farklı sorumluluklar almak, aileden ayrı yaşamak, bireyin kendi yaşamını kendisinin idare etmesi gibi durumların psikolojik olarak zorluklara sebep olabileceği ve daha fazla Kopukluk şema alanına sahip olmalarıyla ilişkili olabileceği düşünülmüştür (Andrew ve arkadaşları, 2006).

Genç katılımcılar aynı zamanda daha fazla Zedelenmiş Otonomi şema alanına sahip bulunmuşlardır. Yukarıda bahsedildiği gibi, ergenlik döneminden genç yetişkinlik dönemine geçiş, otonomi ile ilgili zorlukların da olabileceğini düşündürmektedir. Aileden ayrı yaşamak, bireyin kendi yaşamını kendisinin idare etmesi gibi durumlar otonomiyi güçlendirir gibi görünse de, bu durumlarla başa çıkarken bireylerin otonomilerinin zedenebileceği düşünülmüştür (Andrew ve arkadaşları, 2006).

Diğer bir bulgu, annesi düşük eğitim seviyesine sahip bireylerin daha fazla Diğeri Yönelimlilik şema alanına sahip olmalarıdır. Diğeri Yönelimlilik şema alanına bakıldığında Cezalandırıcılık ve Kendini Feda şemalarının bu alanda yer aldığı görülmektedir (Soygüt ve arkadaşları, 2009). Bu bağlamda, düşük eğitim seviyesine sahip annelerin çocuklarına daha fazla fiziksel ve psikolojik şiddet uyguladıkları bulunmuştur (McCarthy ve arkadaşları, 2016). Bu çalışmalara dayanarak, annelerin cezalandırıcı tutumlarının bireylerde diğeri yönelimlilik şema alanına sahip olma eğilimini artırabileceği düşünülmüştür.

Bu konuyla ilişkili diğer önemli bir nokta, Türkiye kültüründe, düşük eğitim seviyesine sahip annelerin çocuklarını yetiştirirken daha kolektivist ve gelenekçi bir tutuma sahip olabilecekleri ve bunun da kişilerde Diğeri Yönelimlilik şema alanına daha fazla sahip olmalarına neden olabileceği savıdır (Kağıtçıbaşı, 2005). Kağıtçıbaşı (2005), düşük eğitim seviyesi ve düşük gelire sahip ailelerin, çocuklarını yetiştirirken daha fazla grup norm ve değerlerine bağlı olmalarına önem verirken, eğitim seviyesi ve gelir seviyesi arttıkça, ailelerin daha fazla bireyselliğe ve otonomiye önem verdiklerini iddia etmiştir. Tüm bu savlar, çalışmadaki bu bulguyu destekler niteliktedir.

Son olarak Yüksek Standartlar şema alanı ile ilişkili olarak, annelerin negatif ebeveynlik stillerinin yanı sıra kadınların ve genç katılımcıların daha fazla bu şema alanına sahip oldukları saptanmıştır. Kadınların daha fazla Yüksek Standartlara sahip olması ile ilgili cinsiyet rollerinin ve ailelerin cinsiyet rollerine göre değişen beklentilerinin bu sonuçta etkili olabileceği düşünülmüştür (Melillo and College, 1983). Literatürden bir destek olarak, ailelerin erkek çocuklarına kıyasa kız çocuklarından daha fazla başarı beklentilerinin olduğu bulunmuştur (Bhanot & Jovanovic, 2005).

Buna ek olarak, genç yaşlarda, kişilerin daha fazla rekabet içine girdiği ortamların, kişilerde Yüksek Standartlar şemalarını tetikleyebileceği düşünülmüştür. Bu bağlamda, Oberle ve Schonert-Reicl (2013), kişilerin sosyal ortamlarda kabul alabilmek için daha fazla başarılı olma arzularının olduğunu söylemiştir.

Özet olarak, bu çalışmada büyük ve küçük kardeşler arasında şema alanı farklılıkları bulunamamıştır. Bu sonuçta, büyük ve küçük kardeşlerin aynı aileden olmamalarının etkili olduğu söylenebilir. Diğer yandan, büyük ve küçük kardeşler arasında annelerinin ebeveynlik tutumlarına ilişkin farklılıklar bulunmuştur. Buna göre, küçük kardeşler büyük kardeşlere göre annelerinin daha korumacı ve endişeli olduklarını ifade etmiştir. Şema alanlarını yordayıcı faktörler incelendiğinde, doğum sırası şema alanlarını yordamamış; ancak, negatif ebeveynlik biçimleri şema alanlarını anlamlı biçimde yordamıştır. Hem anne hem baba negatif ebeveynlik biçimleri Kopukluk, Zedelenmiş Otonomi ve Zedelenmiş Sınırlar şema alanlarını yordarken; sadece annelerin ebeveynlik tutumları Diğeri Yönelimlik ve Yüksek Standartlar şema alanlarını yordamıştır.

Bu çalışma, yeni bir araştırma sorusunu inceleyerek psikoloji literatürüne katkı sağlamıştır. Doğum sırasının şemalar üzerindeki etkilerini araştırmak amacıyla katılımcıların anne ve babalarının hala evli olmaları ve üvey kardeşe sahip olmamaları şartları çalışmanın kuvvetli yönleri arasındadır. Ancak aileler arası yöntem kullanmak çalışmanın eksik yanları arasında sayılabilir.

Bu çalışmanın, klinik anlamda şema terapi metoduna katkı sağladığı söylenebilir. Kişilerin anne ve babalarının tutumlarına ilişkin algıları ve bu tutumların kişilerde uyumsuz şema gelişimine etkileri bu çalışmayla da desteklenmiştir. Diğer bir yandan, küçük doğan çocukların daha korumacı annelerine sahip olmalarının, "aileden ayrışma, ayrı bir birey olma" konuları ile ilişkili olarak terapide yol gösterici önemli bir bilgi olabileceği düşünülmüştür.

# APPENDIX H

# TEZ FOTOKOPİSİ İZİN FORMU

	<u>ENSTİTÜ</u>			
	Fen Bilimleri Enstitüsü			
	Sosyal Bilimler Enstitüsü	X		
	Uygulamalı Matematik Enstitüsü			
	Enformatik Enstitüsü			
	Deniz Bilimleri Enstitüsü			
	YAZARIN			
	Soyadı : NİLÜFER Adı : GÖZDE Bölümü : PSİKOLOJİ			
	<u><b>TEZİN ADI</b></u> (İngilizce) : The Relati Parenting Styles, and Early Maladap	-	Order, Perce	eived
	TEZİN TÜRÜ : Yüksek Lisans	X	Ooktora	
1.	Tezimin tamamından kaynak gösteri	ilmek şartıyla fotokopi	alınabilir.	X
2.	Tezimin içindekiler sayfası, özet, ind bölümünden kaynak gösterilmek şa	2	-	
3.	Tezimden bir bir (1) yıl süreyle foto	okopi alınamaz.		

# TEZİN KÜTÜPHANEYE TESLİM TARİHİ: