

Investigation of the effect of psychological birth order on perceived parental attitudes and early maladaptive schemas in adults

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ABSTRACT

Aims: The aim of this study is to examine the effect of psychological birth order on perceived parental attitudes and early maladaptive schemas.

Methods: In this study, the psychological birth order inventory, perceived parental attitudes scale-child form, and young's schema scale were used. The sample consisted of 189 women and 102 men. Relational and predictive analyses were conducted regarding birth order, psychological birth order, perceived parental attitudes, and schema domains.

Results: There was a moderate positive relationship between the sibling rank of the women who participated in the study and the emotional deprivation schema area. For female participants, being the middle child was found to have a moderately positive relationship with emotional deprivation, dependence, pessimism, and defectiveness schemas. A weak positive relationship was found between being the middle child and emotional warmth maternal attitude, overprotective mother/father attitude, and rejecting father attitude scores.

Conclusion: The study concluded that there is a significant relationship between psychological birth order and perceived parental attitudes as well as early maladaptive schemas.

Keywords: order of birth, psychological order of birth, perceived parental attitudes, maladaptive schemes, early maladaptive schemas

INTRODUCTION

As soon as a person is born, they are part of a physical and social framework that actively influences their personality development. Various factors, including physiology, inherited traits, social structure, and family dynamics, significantly shape people's personalities.¹ The evolving structure of one's personality governs their attitudes and behaviors.

Birth order significantly influences a person's personality and lifestyle. It refers to a person's position among siblings, which determines certain childhood responsibilities and experiences that impact their adult lives.² Alfred Adler, who introduced the concept of birth order, emphasized the importance of parents' attitudes and actions during a child's early years and the role of social relationships in shaping personality. He asserted that birth order influences

personality but did not specify the exact attributes associated with each birth order.³

Adler highlighted the significance of an infant's birth position and how it is perceived during the psychological birth process.⁴ He aimed to identify issues people face based on their birth order and sought solutions within his birth order concept. The fundamental birth situation involves the parents' attitudes and behaviors toward their children, which vary according to the children's birth order, sometimes consciously and sometimes unconsciously.^{5,6}

Adler⁷ underscored how birth order affects a child's place in the family. Despite the subjective nature of perceptions by parents and children, they live their individual lives independent of birth order. However, certain periods can significantly impact a child's personality.⁸

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Several definitions and theories about personality have been proposed. According to Cüceloğlu,⁹ personality is the consistent way an individual relates to their inner and outer world, distinguishing them from others—a standard definition of personality.

From birth, a child is surrounded by a physical and social system, with parents as their first social environment. Parents play a crucial role in meeting the child's needs and profoundly impact their development.¹⁰ The parent-child relationship is vital for healthy personality development. Parents act as role models, teaching behaviors by example. They must adopt an accepting mindset, respect themselves and others, communicate effectively, and raise self-assured children.¹¹

Darling and Steing¹² highlighted the importance of family characteristics in children's psychosocial development.¹³ The family significantly influences an individual's emotions, behaviors, perceptions, and habits developed in childhood and carried into adulthood. Different parental systems lead to diverse attitudes and actions, emphasizing the need to understand a person's upbringing and family background.⁹

Early life experiences are crucial in shaping emotions in adulthood.¹⁴ Unmet developmental needs lead to maladaptive schemas.¹⁵ Theorists define schemas as constructs related to early childhood experiences that manifest in adulthood.¹⁶ Schemas can form in compatible, incompatible, positive, and negative ways. According to Young,¹⁷ schemas start in childhood as cognitive and emotional constructs with lasting impacts, often leading to maladaptive behaviors. Young et al.¹⁸ identified five schema areas from unmet needs and 18 early maladaptive schemas: impaired autonomy, disconnection, unrelenting standards, other-directedness, and impaired limits.¹⁹

This study aimed to show that psychological birth order has an effect on perceived parental attitudes and early maladaptive schemas. It is thought that individuals' early maladaptive schemas are related to their birth order and similarly, perceived parental attitudes are also shaped according to birth order. Considering that early life experiences and not providing of needs play a major role in the formation of early maladaptive schemas and perceived parental attitudes,¹⁵ it is known that birth order is important in terms of affecting these experiences.¹

METHODS

Ethics

The questionnaires we requested to use in our study were found appropriate with the decision of İstanbul Aydın University Ethics Committee (Date: 09.06.2021, Decision No: 2021/07). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

This study is derived from the master's thesis of Büşra Tüysüz (Examination of the Effects of Real and Psychological Birth Order in Adults on Perceived Structural Attitudes and Early Maladaptive Schemas) conducted under the supervision of Kahraman Güler.

Purpose of the Research

In this study, it was aimed to examine the effect of real and psychological birth order on perceived parental attitudes and early maladaptive schemas.

Model of the Research

The research was designed as a relational screening model.

Sample of the Research

The study's population consists of adults aged 18-45 living in İstanbul and Antalya, Türkiye. Using a convenience sampling method, the researcher selected 291 participants (189 women and 102 men) from these regions.

Data Collection Tools

Psychological Birth Order Inventory: This scale was developed by Campell, White and Stewart in 1991 and was adapted into Turkish by Melek Kalkan in 2005.² The PSDE consists of four subscales: single child, older child, middle child, and young child. There are 42 items in the scale.

Perceived Parental Attitudes Scale-Child Form 3: Developed by Arrindel et al. in 1999, with a reliability-validity study by Dirik²⁰ in Türkiye, this scale consists of 23 items. It includes three sub-dimensions: rejecting attitudes, overprotective attitudes, and emotional warmth attitudes, scored separately for mother and father.

Young Schema Scale: The scale was developed by Young. The validity-reliability study in Turkey was conducted by Soygüt, Karaosmanoğlu, and Çakır.²¹ There are 18 dimensions covering the schema domains of impaired autonomy, disconnection, unrelenting standards, other-directedness, and impaired limits.

Data Collection

In this study, psychological birth order inventory, abbreviated perceived parental attitudes scale-child form and Young schema scale short form-3 were used as data collection tools. Before these data collection tools, there is an information form. Through the information form, information was given about the purpose of the research and that the participation was voluntary.

Statistical Analysis

After the data were transferred to the SPSS 25 program, the analyzes were started. Normality test, which is the first step of the analysis, was applied and when the skewness and kurtosis values of the variables were examined, it was seen that the relevant values were between -2 and +2.

RESULTS

In the study, 291 participants (189 women and 102 men) were analyzed. The average age of male participants was (X^- =29, SD =7), the youngest age was 18 and the oldest age was 45. The average age of female participants was (X^- =30, SD =8), the youngest age was 18 and the oldest age was 45 (Table 1).

Table 1. Descriptive statistics of participants' ages

	n	Min	Max	X^-	SD
Erkek	102	18	45	29	7
Kadın	189	18	45	30	8

Min: Minimum, Max: Maximum, SD: Standard deviation

Table 2. Findings of the relationship between the perceived parental attitudes scale and the Young schema scale of female participants

	Emotional warmth/ mother	Overprotective/ mother	Rejection/ mother	Emotional warmth/ father	Overprotective/ father	Rejection/ father
Emotional deprivation	-.412**	.217**	.363**	-.280**	.276**	.294**
Social isolation/ mistrust	-.226**	.462**	.298**	-.149*	.345**	.222**
Defectiveness	-.484**	.175*	.443**	-.381**	.350**	.451**
Emotional inhibition	-.274**	.188**	.321**	-.226**	.220**	.301**
Enmeshment/ dependency	-.381**	.329**	.358**	-.261**	.329**	.239**
Abandonment	-.236**	.300**	.301**	-0.089	.282**	.200**
Vulnerability to harm	-.191**	.360**	.306**	-0.118	.374**	.254**
Failure	-.304**	0.093	.188**	-.279**	.168*	.175*
Pessimism	-.267**	.325**	.367**	-.194**	.323**	.264**
Entitlement/ insufficient self-control	0.014	.292**	.150*	0.080	.288**	.168*
Self-sacrifice	-0.031	.345**	.181*	0.041	.331**	0.035
Punitiveness	0.053	.365**	0.084	0.121	.312**	0.037
Unrelenting standards	-0.002	.230**	.146*	.150*	.209**	0.051
Approval-seeking	.184*	.322**	-0.027	.148*	0.128	-0.117

There is a positive relationship between unrelenting standards and overprotection/mother ($r=.230, p<0.01$), the rejection/mother ($r=.146, p<0.01$), the emotional warmth/father ($r=.150, p<0.01$), and the overprotection/father ($r=.209, p<0.01$). There is a positive relationship between approval seeking and emotional warmth/mother ($r=.184, p<0.01$), the

Table 3. When we examine the findings, the findings of the examination of the relationship between the psychological birth order scale and the Young schema scale of emotional female participants

	Eldest child	Middle child	Youngest child	Single child
Emotional deprivation	0.066	.318**	0.004	.263**
Social isolation/mistrust	.179*	.274**	0.025	.353**
Defectiveness	0.077	.376**	0.094	.248**
Emotional inhibition	0.011	.146*	0.032	.245**
Enmeshment/dependency	0.107	.327**	0.062	.235**
Abandonment	.196**	.240**	0.037	.277**
Vulnerability to harm	.223**	.236**	0.037	.269**
Failure	0.073	.228**	-0.007	.147*
Pessimism	.190**	.301**	-0.021	.237**
Entitlement/insufficient self-control	.234**	0.046	0.104	.158*
Self-sacrifice	.218**	.230**	0.059	.312**
Punitiveness	.363**	0.085	0.088	.232**
Unrelenting standards	.253**	.159*	.240**	.209**
Approval-seeking	0.127	0.110	0.047	.251**

**p<0.01, *p<0.05, Test used: Pearson Correlation Test

overprotective/mother ($r=.322, p<0.01$), and the emotional warmth/father ($r=.148, p<0.01$) (Table 2).

There is a positive relationship between vulnerability to harm and eldest child ($r=.223, p<0.01$), the middle child ($r=.236, p<0.01$), and the single child ($r=.269, p<0.01$). There is a positive relationship between self-sacrifice and eldest child ($r=.218, p<0.01$), the middle child ($r=.230, p<0.01$), and the single child ($r=.312, p<0.01$). There is a positive relationship between punitiveness and eldest child ($r=.363, p<0.01$), and the single child ($r=.232, p<0.01$). There is a positive relationship between unrelenting standards and eldest child ($r=.253, p<0.01$), the middle child ($r=.159, p<0.01$), the youngest child ($r=.240, p<0.01$), and the single child ($r=.209, p<0.01$). There is a positive correlation between approval-seeking and single child ($r=.251, p<0.01$) (Table 3).

There is a positive relationship between rejection/mother and middle child ($r=.366, p<0.01$), and the single child ($r=.244, p<0.01$). There is a negative relationship between emotional warmth/father and middle child ($r=-.260, p<0.01$), and the single child ($r=-.173, p<0.01$). There is a positive relationship between overprotection/father and eldest child ($r=.178, p<0.01$), the middle child ($r=.237, p<0.01$), and the single child ($r=.310, p<0.01$). There is a positive relationship between rejection/father and middle child ($r=.340, p<0.01$), and the single child ($r=.171, p<0.01$) (Table 4).

There is a negative relationship between emotional deprivation and the emotional warmth/mother ($r=-.450, p<0.01$), a positive relationship with the overprotection/mother ($r=.246, p<0.01$) and the rejection/mother ($r=.528, p<0.01$). For fathers, there is a negative relationship between emotional deprivation and the emotional warmth ($r=-.293, p<0.01$), and positive relationships with the overprotection ($r=.309, p<0.01$) and the rejection ($r=.492, p<0.01$). There is a negative relationship between social isolation/mistrust and the emotional warmth/mother ($r=-.246, p<0.01$), a positive correlation with the overprotection/mother ($r=.283, p<0.01$) and the overprotection/father ($r=.264, p<0.01$). There is a negative relationship between defectiveness and the emotional warmth/mother ($r=-.486, p<0.01$) and a positive relationship with the rejection/mother ($r=.511, p<0.01$). There is a negative relationship between defectiveness and the emotional warmth/father ($r=-.365, p<0.01$), a positive relationship with the overprotection/father ($r=.315, p<0.01$)

Table 4. Findings of the relationship between the psychological birth order scale and the perceived parental attitudes scale of female participants

	Eldest child	Middle child	Youngest child	Single child
Emotional warmth/mother	0.058	-.326**	0.028	-.191**
Overprotective/mother	.202**	.254**	0.079	.433**
Rejection/mother	0.119	.366**	0.042	.244**
Emotional warmth/father	0.127	-.260**	0.020	-.173*
Overprotective/father	.178*	.237**	0.077	.310**
Rejection/father	0.002	.340**	0.016	.171*

**p<0.01, *p<0.05 Test used: Pearson Correlation Test

Table 5. Findings of the relationship between the perceived parental attitudes scale of male participants and the Young schema scale

	Emotional warmth/mother	Overprotective/mother	Rejection/mother	Emotional warmth/father	Overprotective/father	Rejection/father
Emotional deprivation	-.450**	.246*	.528**	-.293**	.309**	.492**
Social isolation/mistrust	-.246*	.283**	0.145	-0.160	.264**	0.041
Defectiveness	-.486**	0.170	.511**	-.365**	.315**	.511**
Emotional inhibition	-.351**	.360**	.423**	-.222*	.310**	.390**
Enmeshment/dependency	-.485**	.239*	.420**	-.379**	.315**	.420**
Abandonment	-.290**	.327**	.408**	-.213*	.364**	.481**
Vulnerability to harm	-.203*	.305**	.349**	-0.104	.395**	.388**
Failure	-.475**	.296**	.455**	-.329**	.381**	.410**
Pessimism	-.236*	.374**	.358**	-.203*	.390**	.386**
Entitlement/insufficient self-control	-0.054	.432**	.201*	-0.044	.299**	0.086
Self-sacrifice	-0.140	.423**	.313**	-0.062	.370**	.365**
Punitiveness	-0.142	.229*	.241*	0.014	.364**	.199*
Unrelenting standards	0.042	.211*	0.153	0.051	0.188	0.165
Approval-seeking	0.057	0.161	-0.039	0.061	0.187	0.021

**p<0.01, *p<0.05 Test used: Pearson correlation test

and the rejection/father (r=.511, p<0.01). There is a negative relationship between emotional inhibition and the emotional warmth/mother (r=-.351, p<0.01), a positive correlation with the overprotective/mother (r=.360, p<0.01), the rejection/mother (r=.423, p<0.01), a negative relationship between emotional inhibition and emotional warmth/father (r=-.222, p<0.01), a positive correlation with overprotective/father (r=.310, p<0.01) and the rejection/father (r=.390, p<0.01). There is a negative relationship between enmeshment/dependency and the emotional warmth/mother (r=-.485, p<0.01), a positive correlation with the overprotection/mother (r=.239, p<0.01) and the rejection/mother (r=.420, p<0.01). There is a negative relationship between enmeshment/dependency and the emotional warmth/father (r=-.379, p<0.01), a positive relationship with the overprotection/father (r=.315, p<0.01) and the rejection/father (r=.420, p<0.01). There is a negative relationship between abandonment and the emotional warmth/mother (r=-.290, p<0.01), and positive correlations with the overprotection/mother (r=.327, p<0.01) and the rejection/mother (r=.408, p<0.01). For fathers, there is a negative relationship between abandonment and the emotional warmth (r=-.213, p<0.01), and positive correlations with the overprotection (r=.364, p<0.01) and the rejection (r=.481, p<0.01). There is a negative relationship between vulnerability to the harm and emotional warmth/mother (r=-.203, p<0.01), a positive correlation with the overprotection/

mother (r=.305, p<0.01), the rejection/mother (r=.349, p<0.01), the overprotection/father (r=.395, p<0.01), and the rejection/father (r=.388, p<0.01) (Table 5).

There is a negative relationship between failure and emotional warmth/mother (r=-.475, p<0.01), a positive correlation with the overprotection/mother (r=.296, p<0.01), and the rejection/mother (r=.455, p<0.01). For fathers, there is a negative relationship between the failure and the emotional warmth (r=-.329, p<0.01), and positive correlations with the overprotection (r=.381, p<0.01) and the rejection (r=.410, p<0.01). There is a negative relationship between pessimism and the emotional warmth/mother (r=-.236, p<0.01), and positive correlations with the overprotection/mother (r=.374, p<0.01) and the rejection/mother (r=.358, p<0.01). For fathers, there is a negative relationship with the emotional warmth (r=-.203, p<0.01), and positive correlations with the overprotection (r=.390, p<0.01) and the rejection (r=.386, p<0.01) (Table 5).

There is a positive correlation between entitlement/insufficient self-control and the overprotection/mother (r=.432, p<0.01), the rejection/mother (r=.201, p<0.01), and the overprotection/father (r=.299, p<0.01). There is a positive correlation between self-sacrifice and the overprotection/mother (r=.423, p<0.01), the rejection/mother (r=.313, p<0.01), the overprotection/father (r=.370, p<0.01), and the rejection/father (r=.365, p<0.01). There is a positive relationship between punitiveness and the overprotection/mother (r=.229, p<0.01), the rejection/mother (r=.241, p<0.01), the overprotection/father (r=.364, p<0.01), and the rejection/father (r=.199, p<0.01) There is a positive correlation between unrelenting standards and the overprotective/mother (r=.211, p<0.01) (Table 5).

There is a positive relationship between emotional deprivation and eldest child (r=.225, p<0.01), the middle child (r=.337, p<0.01), the youngest child (r=.334, p<0.01), and the single child (r=.276, p<0.01). There is a positive relationship between social isolation/mistrust and the middle child (r=.213, p<0.01), and the youngest child (r=.198, p<0.01). There is a positive relationship between defectiveness and the middle child (r=.228, p<0.01), the youngest child (r=.318, p<0.01), and the single child (r=.205, p<0.01). There is a positive relationship between emotional inhibition and eldest child (r=.261, p<0.01), the middle child (r=.220, p<0.01), the youngest child (r=.368, p<0.01), and the single child (r=.208, p<0.01). There is a positive correlation between enmeshment/dependency and middle child (r=.256, p<0.01), the youngest child (r=.263, p<0.01), and the single child (r=.323, p<0.01). There is a positive relationship between abandonment and eldest child (r=.212, p<0.01), the middle child (r=.284, p<0.01), the youngest child (r=.380, p<0.01), and the single child (r=.351, p<0.01). There is a positive relationship between vulnerability to harm and eldest child (r=.205, p<0.01), the middle child (r=.314, p<0.01), the youngest child (r=.354, p<0.01), and the single child (r=.324, p<0.01). There is a positive relationship between failure and the eldest child (r=.221, p<0.01), the middle child (r=.248, p<0.01), the youngest child (r=.390, p<0.01), and the single child (r=.301, p<0.01). There is a positive relationship between pessimism and the middle child (r=.309, p<0.01), the youngest child (r=.331, p<0.01) and the single child (r=.397, p<0.01). There is

Table 6. Findings of the relationship between the psychological birth order scale and the Young schema scale in male participants

	Eldest child	Middle child	Youngest child	Single child
Emotional deprivation	.225 [†]	.337 ^{**}	.334 ^{**}	.276 ^{**}
Social isolation/mistrust	0.150	.213 [†]	.198 [†]	0.124
Defectiveness	0.149	.228 [†]	.318 ^{**}	.205 [*]
Emotional inhibition	.261 ^{**}	.220 [†]	.368 ^{**}	.208 [*]
Enmeshment/dependency	0.128	.256 ^{**}	.263 ^{**}	.323 ^{**}
Abandonment	.212 [†]	.284 ^{**}	.380 ^{**}	.351 ^{**}
Vulnerability to harm	.205 [†]	.314 ^{**}	.354 ^{**}	.324 ^{**}
Failure	.221 [†]	.248 [†]	.390 ^{**}	.301 ^{**}
Pessimism	0.131	.309 ^{**}	.331 ^{**}	.397 ^{**}
Entitlement/insufficient self-control	.299 ^{**}	0.190	.328 ^{**}	.205 [*]
Self-sacrifice	.314 ^{**}	0.141	.409 ^{**}	.367 ^{**}
Punitiveness	.199 [†]	0.194	0.189	.213 [†]
Unrelenting standards	.374 ^{**}	.209 [†]	.273 ^{**}	.235 [†]
Approval-seeking	0.136	0.061	0.177	0.073

**p<0.01, *p<0.05 Test used: Pearson Correlation Test

a positive relationship between entitlement/insufficient self-control and the eldest child ($r=.299$, $p<0.01$), the youngest child ($r=.328$, $p<0.01$), and the single child ($r=.205$, $p<0.01$). There is a positive relationship between self-sacrifice and the eldest child ($r=.314$, $p<0.01$), the youngest child ($r=.409$, $p<0.01$), and the single child ($r=.367$, $p<0.01$). There is a weak positive relationship between punitiveness and the older child ($r=.199$, $p<0.01$), and the one child ($r=.213$, $p<0.01$). There is a positive relationship between unrelenting standards and the eldest child ($r=.374$, $p<0.01$), the middle child ($r=.209$, $p<0.01$), the youngest child ($r=.273$, $p<0.01$), and the single child ($r=.235$, $p<0.01$) (Table 6).

There is a weak negative relationship between emotional warmth/mother and middle child ($r=-.216$, $p<0.01$). There is a positive relationship between overprotection/mother and the eldest child ($r=.340$, $p<0.01$), the middle child ($r=.296$, $p<0.01$), the youngest child ($r=.306$, $p<0.01$), and the single child ($r=.456$, $p<0.01$). There is a positive relationship between rejection/mother and eldest child ($r=.331$, $p<0.01$), the middle child ($r=.356$, $p<0.01$), the youngest child ($r=.311$, $p<0.01$), and the single child ($r=.322$, $p<0.01$). There is a positive relationship between overprotection/father and the eldest child ($r=.306$, $p<0.01$), the middle child ($r=.282$, $p<0.01$), the youngest child ($r=.239$, $p<0.01$), and the single child ($r=.422$, $p<0.01$). There is a positive relationship between rejection/father and the oldest child ($r=.239$, $p<0.01$), the middle child ($r=.299$, $p<0.01$), the youngest child ($r=.236$, $p<0.01$) and the only child ($r=.344$, $p<0.01$) (Table 7).

DISCUSSION

This study examined the effect of psychological birth order on perceived parental attitudes and early maladaptive schemas in adults. When considering the relationship between emotional deprivation schema sub-dimension and birth order, it was found that there was a moderate positive

Table 7. Findings of the relationship between the psychological birth order scale and the perceived parental attitudes scale of male participants

	Eldest child	Middle child	Youngest child	Single child
Emotional warmth/mother	0.036	-.216 [†]	-0.057	-0.130
Overprotective/mother	.340 ^{**}	.296 ^{**}	.306 ^{**}	.456 ^{**}
Rejection/mother	.331 ^{**}	.356 ^{**}	.311 ^{**}	.322 ^{**}
Emotional warmth/father	0.162	-0.146	0.065	-0.036
Overprotective/father	.306 ^{**}	.282 ^{**}	.239 [*]	.422 ^{**}
Rejection/father	.239 [†]	.299 ^{**}	.236 [*]	.344 ^{**}

**p<0.01, *p<0.05 Test used: Pearson Correlation Test

relationship in female participants and a moderate negative relationship in males. It was found that there was a positive relationship between being the median child of women and men who participated in the study and emotional deprivation, pessimism and tendency to harm schema areas. Literature studies found a weak relationship between early maladaptive schemas and birth order, with Nilüfer and Çınarbaş²² indicating no antecedent effect.

The findings of our study revealed that rejecting parental attitudes showed significant relationships with various schema domains. In particular, moderate positive relationships were found with emotional deprivation, emotional frustration, pessimism, abandonment and entanglement/dependency schema domains. These results are in parallel with Yurtsever and Sütçü's²³ study, which found that negative maternal attitudes were significantly related to the schema domains of altruism, cruel standards and emotional deprivation. One of the most striking results of our study is related to cruel standards and self-sacrifice schemas. It was found that being the oldest child at the time of psychological birth was positively and moderately related to these two schema domains, whereas it was weakly related to the other schema domains. These findings suggest that parental attitudes and birth order may play an important role in children's schema development.

A moderately positive relationship was found between overprotective mothers and the schema domains of social isolation/mistrust, enmeshment/dependency, vulnerability to harm, punitiveness, approval seeking, and self-sacrifice. Overprotective father attitudes showed a moderate positive relationship with vulnerability to harm, pessimism, enmeshment/dependency, social isolation/mistrust, and punitiveness schemas. Macik's²⁴ study also concluded that overprotective parental attitudes are a risk factor for early maladaptive schemas.

In the study, a moderate positive relationship was found between psychological birth order and various domains of early maladaptive schemas such as defectiveness, pessimism, emotional deprivation and social isolation/insecurity in female participants. In particular, median children showed a higher level of association with early maladaptive schemas compared to other birth orders. This finding is consistent with Kalkan's²⁵ study on the link between psychological birth order and irrational relationship beliefs, as well as Shulman

and Mosak's²⁶ theoretical explanations suggesting that middle children may feel 'squeezed' and 'unimportant'. Together, these studies paint a consistent picture that emphasizes the impact of psychological birth order on individuals' thought structures and emotional schemas. The psychological birth order inventory used in the study also included items related to the middle child feeling less important and marginalized compared to other members of the family.

The feeling of being 'squeezed' and 'unimportant' that middle children experience may lead them to develop these maladaptive schemas. The study also found that punitiveness was moderately related to being the oldest child and early maladaptive schemas were weakly related to being the only or youngest child. Collectively, these findings underline the complex relationship between psychological birth order and the development of early maladaptive schemas.

Parental attitudes by gender revealed that fathers are crucial for emotional warmth in enmeshment/dependency and defectiveness schema domains for males. For females, mothers were essential in the failure schema sub-dimension. Positive parental attitudes of the same gender prevented the perception of failure. Aydoğdu and Dilekmen²⁷ found no differences between authoritarian, overprotective, and permissive parental attitudes by gender.²⁸

Rejecting mother scores positively correlated with enmeshment/dependency, emotional inhibition, and emotional deprivation schemas. Insufficient self-control, emotional inhibition, and protective mother ratings were somewhat positively correlated. Anti-protective father scores marginally correlated with emotional deprivation schema. Overprotective and rejecting father views were somewhat positively correlated with enmeshment/dependency, self-sacrifice, emotional inhibition, pessimism, sensitivity to damage, and abandonment schema.

Failure and abandonment schema domains were moderately related to rejecting mother attitudes, while self-sacrifice, pessimism, and vulnerability to harm were moderately related to overprotective and rejecting mother attitudes. Middle children had a moderate positive relationship with rejecting mother attitudes and weak positive correlations with overprotective/mother, emotional warmth/mother, overprotective/father, and rejecting/father attitudes. Fathers in studies by İnci and Deniz²⁹ showed more positive attitudes toward their first and last children than middle children.

Negative parental attitudes affect early maladaptive schema areas. For instance, an overprotective attitude can lead to an enmeshment/dependency schema domain. Tim's³⁰ study similarly concluded that parental attitudes influence early maladaptive schema domains. The study found that being an only child had a positive relationship with self-sacrifice and pessimism. The single child factor most affected the pessimism schema area. Ardebili and Golshani³¹ also found birth order differences in schema areas.

CONCLUSION

As a result of this study, it was found that there was a significant relationship between psychological birth order and perceived parental attitudes in early maladaptive schemas in adults. It was concluded that there is a moderate

positive relationship between emotional deprivation, pessimism and vulnerability to harm schema domains and psychological birth order. It was determined that there was a positive relationship between being the middle child of women and men participating in this study and emotional deprivation, pessimism and vulnerability to harm schema domains. Another important finding of the study is that the median child feels less important and marginalized than the other members of the family. In the light of the findings obtained as a result of the study, it was determined that overprotective and rejecting parental attitudes contribute to early maladaptive schemas, while positive attitudes can prevent them, and it is thought that studies on parents will contribute to the future literature.

ETHICAL DECLARATIONS

Ethics Committee Approval

2021/07 dated 09.06.2021 It was approved with the decision of İstanbul Aydın University Ethics Committee (Date: 09.06.2021, Decision No: 2021/07).

Informed Consent

Informed consent was obtained from all subjects involved in the study.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

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Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

1. Özsoy E, Yıldız G. Kişilik kavramının örgütler açısından önemi: bir literatür taraması. *İşletme Bil Derg.* 2013;1(2):1-12.
2. Kalkan M, Koç HE. Psikolojik doğum sırası bireylerin stresle başa çıkma stratejilerinin yordayıcısı mıdır? *Türk Psikol Danış Rehber Derg.* 2016;3(30):45-49.
3. Burger JM. Kişilik psikoloji biliminin insan doğasına dair söyledikleri. İstanbul: Kaknüs Yayınları; 2006.
4. Eckstein D, Aycock KJ, Sperber MA, et al. A review of 200 birth-order studies: lifestyle characteristics. *J Individ Psychol.* 2010;66(4):408-434.
5. Yavuzer H. Ana-baba ve çocuk. İstanbul: Remzi Kitapevi; 2005.
6. Eckstein D, Kaufman JA. The role of birth order in personality: an enduring intellectual legacy of Alfred Adler. *J Individ Psychol.* 2012; 68(1):60-74.
7. Adler A. İnsanı tanıma sanatı. Şipal K, Çev. İstanbul: Say Yayınları; 2010.
8. İnanç BY, Yerlikaya E. Kişilik kuramları. İstanbul: Pegem Akademi; 2015.
9. Cüceloğlu D. İnsan ve davranış. İstanbul: Remzi Kitapevi; 2006.
10. Yavuzer H, Köknel Ö, Kulaksızoğlu A, Ayhan H, Dodurgalı A, Ekşi H. Çocuk ve ergen eğitiminde anne baba tutumları. İstanbul: Timaş Yayınları; 2011.

11. Afat N. Çocuklarda üstün zekanın yordayıcı olarak ebeveyn tutumları. *Hasan Ali Yücel Eğitim Fak Derg.* 2013;1(20):155-168.
12. Darling, N. ve Steinberg, L. Parenting style as context: an integrative model. *Psychol Bull.* 1993;113(3), 487-496.
13. Sümer N, Aktürk EG, Helvacı E. Anne-baba tutum ve davranışlarının psikolojik etkileri: Türkiye’de yapılan çalışmalara toplu bakış. *Türk Psikoloji Yazıları.* 2010;3(25):42-59.
14. Jacob G, Genderen H, Seebauer L. Mod terapisi diğer yollardan gitmek: yaşam örüntülerini anlamak ve değiştirmek. Azizlerli N, Soykut M. Çev. İstanbul: Psikonet Yayıncılık; 2020.
15. Farrel JM, Reiss N, Shaw IA. Şema terapi klinisyenin rehberi. Göral AS, Alkan E, Çev. İstanbul: Psikonet Yayınları; 2018.
16. Rafaeli E, Bernstein DB, Young J. Şema terapi ayırıcı özellikler. Şaşıoğlu M, Çev. İstanbul: Psikonet Yayınları. 2015.
17. Young JE, Klosko JS, Weishhar ME. Şema terapi. Soylu TV, Çev. İstanbul: Litera Yayıncılık; 2013.
18. Young JE, Klosko JS, Weishaar ME. Schema therapy: a practitioner’s guide. *New York: The Guilford Press;* 2003.
19. Gör N, Yiğit İ, Kömürücü B, Ertürk İŞ. Geçmişin mirası ve geleceğin haritası: erken dönem uyumsuz şemalar. *Nesne Psikol Derg.* 2017;5(10): 197-218.
20. Dirik G, Yorulmaz O, Karancı AN. Çocukluk dönemi ebeveyn tutumlarının değerlendirilmesi. *Türk Psikiyatri Dergisi.* 2015;26(2):123-130.
21. Soygüt G, Karaoşmanoğlu A, Çakır Z. Erken dönem uyumsuz şemaların değerlendirilmesi: Young şema ölçeği kısa form-3’ün psikometrik özelliklerine ilişkin bir inceleme. *Türk Psikiyatri Derg.* 2009;20(1):75-84.
22. Nilüfer G, Çınarbaş DC. Doğum sırası, algılanan ebeveynlik biçimleri ve erken dönem uyumsuz şemalar arasındaki ilişki. *Çocuk Gençlik Ruh Sağ Derg.* 2017;25(2): 125-139.
23. Yurtsever SS, Sütçü ST. Algılanan ebeveynlik biçimleri ile bozulmuş yeme tutumu arasındaki ilişkide erken dönem uyumsuz şemaların ve duyu düzenleme güçlüğüünün aracı rolü. *Türk Psikol Derg.* 2017;32(80): 20-37.
24. Macik D. Temperament, parenting styles and the intensity of early maladaptive schemas: assessment of correlations in a non-clinical adult group. *Behav Cogn Psychother.* 2021;49(2):218-232.
25. Kalkan M. The relationship of psychological birth order to irrational relationship beliefs. Social behavior and personality: an international. *Soc Behav Personal Int J.* 2008;36(4):455-466.
26. Shulman BH, Mosak HH. (1977). Birth order and ordinal position: two Adlerian views. *J Indiv Psychol.* 1977;33(1):114-121.
27. Aydoğdu F, Dilekmen M. Ebeveyn tutumlarının çeşitli değişkenler açısından değerlendirilmesi. *Bayburt Eğitim Fak Derg.* 2016;11(2):569-585.
28. Uji M, Sakamoto A, Adachi K, Kitamura T. the impact of authoritative, authoritarian and permissive parenting styles on children’s later mental health in Japan: focusing on parent and child gender. *J Child Fam Stud.* 2014;23(2):293-302.
29. İnci MA, Deniz Ü. Baba tutumları ile çocuğun yaşı, cinsiyeti, doğum sırası ve kardeş sayısı değişkenleri arasındaki ilişkinin incelenmesi. *Karadeniz Sos Bil Derg.* 2015;7(2):1-9.
30. Tim JC. Mediation of early maladaptive schemas between perceptions of parental rearing style and personality disorder symptoms. *J Behav Ther Exp Psychiatry.* 2010;41(1):52-59.
31. Ardebili EF, Golshani F. Early maladaptive schemas and aggression based on the birth order of children. *Modern Appl Sci.* 2016;10(9):14-21.