



Journal of the Institute for Educational Research
Volume 56 • Number 2 • December 2024 • 397–415
UDC 316.362.1-055.71

ISSN 0579-6431
ISSN 1820-9270 (Online)
<https://doi.org/10.2298/ZIPI2402397A>
Original research paper

PERCEPTION OF FAMILY ENVIRONMENT, SIBLING RELATIONSHIPS, AND LIFE SATISFACTION: EFFECTS OF GENDER AND BIRTH ORDER*

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A B S T R A C T

The perception of early experiences in the family of origin and sibling relations can significantly shape life satisfaction. Considering the different roles influenced by birth order and gender, examining the predictive power of perceived family environment and sibling relationships in the context of subjective well-being seems crucial. This retrospective study explored the relationship between the perception of family support and organization, the quality of sibling relationships, and life satisfaction. The study included 642 participants, with an average age of 24.16 years, who had grown up/were growing up in families with one sibling, i.e., brother or sister. Life satisfaction was assessed using the Satisfaction with Life Scale, while the Block Environment Questionnaire was used to measure support and organization within the nuclear family. Sibling relationships were measured using the Sibling Relationship Questionnaire. The main findings of this research indicate that there are specificities in the assessment of the family environment, the quality of sibling relationships, and life satisfaction in the context of gender and birth order. Perceived experiences of family support were a stronger predictor of

* *Note.* This research was supported by the Science Fund of the Republic of Serbia (#7744418, Genetic and environmental influences on psychological adaptation of children and adults GENIUS). Some of the results were presented at the scientific conference Current Trends in Psychology (STuP) 2023.

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life satisfaction among individuals who grew up in brother-brother dyads or dyads where the brother was older than the sister. Lower levels of conflict and rivalry were determinants of life satisfaction in sister-sister dyads and dyads where the sister was older than the brother. The results of this study support the postulates of the Family Systems Theory and the *tend-and-befriend* theory. The research implications are directed toward early preventive programs in the context of family and individual counseling.

Key words:

family environment, sibling relationships, life satisfaction, gender, birth order.

■ INTRODUCTION

The family represents one of the most important agents of socialization, and the interactions within it play a significant role in shaping an individual's personality (Britto et al., 2018). Today, there is a consensus that genetics and the environment shape an individual's psychological life, and their interaction within the family and the broader environment. (e.g., Kandler, 2008; Milovanović et al., 2023). With the rise of cognitivism, an individual's perception of the environment began to be emphasized. This brings us to the question of how a person experiences their surroundings — how they interpret and explain events in their environment. Among the key aspects of life satisfaction, the authors highlight, among other things, the perception of the family environment and the perception of the functionality of relationships with siblings (npr. Ponti & Smorti, 2020). Considering the various (gender) roles an individual may have within their family, a deeper understanding of life satisfaction among siblings requires an examination of the effects of gender and birth order. This should be done in the context of their retrospective perception of the nuclear family environment, as well as in the context of their mutual relationships.

Perception of the Family Environment and Life Satisfaction

Even in the earliest definitions of the perception of the family environment, it is evident that this phenomenon pertains to how an individual experiences and interprets the family setting, including relationships, dynamics, communication, and the overall atmosphere within the family (Block, 1971; Hur & Bouchard, 1995; Scar & McCartney, 1983). This involves assessing emotional support and the quality of family activity organization, based on personal, retrospective experiences. At this point, it is important to emphasize the distinction between the perception of the family environment and the actual one. The family environment is defined by objective

occurrences, encompassing all real, existing physical and communication processes among its members. These events take place within the family circle and pertain to the actual conditions, dynamics, and factors within the family system, including objective indicators such as family structure, consistently upheld and practiced rules and values (Flores et al., 2014; Kintner et al., 1981). Previous research highlights the importance of examining the objective family environment and its perception, as a significant predictor of many behaviors.

The most prominent model of subjective well-being in research was proposed by Diener et al. (1985). According to Diener et al. (1985, 2002), subjective well-being consists of life satisfaction, positive affect, and negative affect. Life satisfaction represents the cognitive component, reflecting an individual's evaluation of how satisfied they are with their life overall, and with various life aspects, such as family or health. Parents aim to create conditions through upbringing that foster greater life satisfaction in their children. However, children may perceive these conditions differently. For this reason, examining the connection between the perception of the family environment, other behaviors, and subjective well-being is essential.

A systematic review of the literature consistently highlights a positive association between the perception of family support and organization and life satisfaction, both among children and adolescents (e.g., Izzo et al., 2022; Savahl et al., 2020) and adults (Conger & Little, 2010; Stavoulaki et al., 2021; Erkoc et al., 2021). This consistency is reflected in findings that the perception of functional family support and organization significantly contributes to greater life satisfaction (Dunn & Plomin, 1990; Schrodtt et al., 2007). The principles of Family Systems Theory (Bowen, 1978), suggest that functional family support and organization create an environment that fosters warmth and emotional stability throughout life, contributing to a more positive evaluation.

Sibling Relationships: The Role of Gender and Birth Order

The system of relationships among siblings constitutes an important subsystem within family functioning. Regardless of their quality, sibling relationships are among the longest-lasting connections in life, imbued with intense and profound emotional bonds. The model proposed by Lanthier et al. (2001) describes sibling relationships along three primary dimensions: warmth, conflict, and rivalry. Siblings with frequent interactions tend to develop emotionally closer, warmer relationships. In dysfunctional sibling relationships, rivalry and conflict are prominent, whereas functional relationships are primarily characterized by pronounced emotional warmth, which may or may not be accompanied by lower levels of conflict and rivalry (Stocker et al.,

2020). Adult siblings often do not live together and can choose how frequently they wish to remain in contact. As a result, the frequency of conflicts tends to decrease in adulthood. Research findings are inconsistent regarding rivalry; there is no consensus on whether rivalry for parental attention diminishes or persists into adulthood (Gilligan et al., 2020). Functional sibling relationships are associated with lower loneliness, fewer depressive symptoms, higher self-esteem, and greater life satisfaction. On the other hand, conflictual sibling relationships are linked to more frequent symptoms of depression, anxiety, and aggression, and consequently, a lower quality of life. (Portner & Riggs, 2016; White & Hughes, 2017).

Variability in the gender and birth order of siblings can lead to differing assessments of the quality of sibling relationships and varying perceptions of the family environment. Relationships between sisters are characterized by significantly more warmth, love, empathy, closeness, and cooperation compared to brother-brother or mixed-gender sibling pairs (Jurkin et al., 2017; Stocker et al., 2020; Tannen, 2014). This is supported by the postulates of the “tend-and-befriend” theory, which suggests that women are more inclined to build social bonds and provide support (Taylor, 2012). Additionally, conflicts are more common in same-gender sibling pairs, compared to mixed-gender pairs (Stocker et al., 1997). In Western cultures, sisterly dyads are typically the warmest, whereas, in Eastern cultures, the closest relationships are observed in brother-brother dyads, reflecting the specificity of gender roles within different cultural contexts (Derne, 1993; Shi & Champione-Barr, 2021). In mixed-gender dyads, where the older sibling is a sister, visits are more frequent than in cases where the older sibling is a brother. Older brothers are often motivated by a sense of responsibility to maintain contact with their younger sisters, while older sisters are more frequently driven by a personal sense of attachment to their younger brothers, leading to more frequent visits (Shi & Champione-Barr, 2021). However, in adulthood, the influence of family constellation factors on the quality of sibling relationships diminishes (Cicirelli, 2013; Ge & Jiang, 2021; Milevsky, 2004). For these reasons, additional research is necessary to determine how sibling relationships in childhood shape various aspects of mental health in adulthood, particularly life satisfaction.

The Importance of the Family Environment for the Quality of Sibling Relationships

Previous research suggests that the quality of affective attachment to both parents is associated with sibling relationships and the perception of life satisfaction (Ponti & Smorti, 2018). The parent-child relationship serves as a model for most close relationships in adulthood, including sibling relationships, leading to the replication of certain behavioral patterns in these interactions (Porner & Riggs, 2016). Research indicates that a functional family environment contributes to emotionally warmer sibling relationships and greater life satisfaction, whereas dysfunctional family conditions lead to increased sibling rivalry and lower life satisfaction (Ponti & Smorti, 2018). Family support is an important protective factor in overcoming developmental and accidental crises. A supportive and warm family environment, and more frequent contact among siblings, fosters functional sibling relationships, emphasizing the importance of studying sibling relationships within family studies. Functional sibling relationships are linked to mental health across all life stages (Buist & Vermande, 2014; Milevsky & Heerwagen, 2013; Whiteman et al., 2011).

This raises the question of the extent to which life satisfaction is shaped by sibling relationships and the perception of the family environment during childhood, as well as the relative impact of these two predictors. Previous research findings suggest that a family atmosphere with adequate support and organization significantly and positively contributes to subjective well-being by increasing warmth and reducing rivalry and conflicts in sibling relationships. On the other hand, the findings on the relationship between gender and birth order with the quality of sibling relationships and life satisfaction remain inconsistent (Gilligan et al., 2020; Sulloway, 2007). Therefore, the primary focus of this research was to examine the relationships between the perception of the family environment during childhood and current life satisfaction, considering dominant sibling relationships and the effects of sibling gender and birth order.

■ RESEARCH METHODOLOGY

Sample and Procedure

The study involved 642 participants, with an average age of 24.16 years ($SD = 8.23$), from the territory of Serbia, all of whom have one brother or one sister with whom they grew up. The age difference between the participants and their siblings was no greater than four years, a criterion set to partially control the time interval between the births of siblings. Of the total number of participants, 346 came from same-sex sibling families (270 from sister-sister dyads and 76 from brother-brother dyads). The remaining 296 participants came from families with siblings of different sexes (170 from dyads where the sister was older than the brother, and 126 from dyads where the brother was older). Of the total sample, 227 participants were male (34.4%), and 415 were female (65.6%). The sample was balanced concerning the birth order variable, with 50% comprising first-born siblings and 50% second-born siblings.

Data collection was conducted anonymously through an online platform designed specifically for the project (for more information, see Smederevac et al., 2019). Data collection took place over the period from 2021 to 2023. The questionnaire was administered as part of a larger battery of questionnaires, and the completion time did not exceed 20 minutes. Before participation, following the institution's ethical approval, participants provided informed consent to participate in the study. The data collected through this research were analyzed using the statistical software SPSS for Windows, v.25.

Instruments

Block Environmental Questionnaire (BEQ; Block, 1971) measures the retrospective perception of the nuclear family environment using a five-point Likert scale (1 – *never*; 5 – *always*). It consists of six subscales organized into two higher-order factors: Perception of Support (e.g., “My parents encouraged me to talk to them about my problems”; $\alpha = .88$) and Perception of Organization (e.g., “My parents knew how to organize activities for me”; $\alpha = .74$), based on the scoring framework of the original study.

Adult Sibling Relationship Questionnaire (ASRQ; Stocker et al., 1997) focuses on measuring perceptions of sibling relationships using a five-point Likert scale (1 – *never*; 5 – *very often*). It consists of fourteen subscales organized into three higher-order factors based on the original study: Conflict (e.g., “How often do you argue with your brother/sister?”; $\alpha = .84$), Rivalry (e.g., “How often do you compete with your brother/sister?”; $\alpha = .86$), and Warmth (e.g., “How often do you talk about your feelings with your brother/sister?”; $\alpha = .72$).

Satisfaction with Life Scale (SWLS; Diener et al., 1985) is a unidimensional measure used to assess the cognitive component of subjective well-being, specifically life satisfaction. Responses to the five items (e.g., “The conditions of my life are excellent”; $\alpha = .83$) range from 1 – *strongly disagree* to 7 – *strongly agree*. This scale has been widely used with Serbian samples (e.g., Jovanović, 2016; Milovanović et al., 2019) and has demonstrated good psychometric properties in these studies.

■ RESULTS

Descriptive Statistics and Intergroup Comparison

Before calculating descriptive parameters, the sample was divided into four categories: (1) male participants from families with male siblings (76; 12%); (2) female participants from families with female siblings (270; 42%); (3) male participants from families with mixed-gender siblings where they are older than their sisters (126; 20%); and (4) female participants from families with mixed-gender siblings where participants are older than their brothers (170; 26%). Descriptive parameters for these categories, and group comparisons on the variables used in the study, are presented in Table 1.

Table 1. Descriptive parameters and dyad comparison

Variable	Dyad	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Ku</i>	<i>F</i>	<i>C</i>
Life Satisfaction	B-B	4.73	1.29	-0.33	-0.18	3.70*	S-S>B-B*
	S-S	5.14	1.17	-0.55	-0.20		
	B-S	4.81	1.20	-0.60	0.42		
	S-B	4.90	1.24	-0.62	0.09		
Warmth	B-B	3.53	0.60	-0.14	0.07	20.07**	S-S>B-B** S-S>B-S** S-S>S-B**
	S-S	4.04	0.69	-0.91	0.50		
	B-S	3.69	0.58	-0.35	-0.36		
	S-B	3.69	0.60	-0.08	-0.56		

Conflict	B-B	2.59	0.75	0.10	-0.69	1.09	-
	S-S	2.50	0.71	0.22	-0.52		
	B-S	2.41	0.64	0.13	-0.21		
	S-B	2.52	0.74	0.29	-0.28		
Rivalry	B-B	2.72	0.72	-1.29	1.21	4.06**	B-S>B-B* B-S>S-S*
	S-S	2.80	0.70	-0.89	1.63		
	B-S	2.99	0.40	-1.28	1.53		
	S-B	2.92	0.66	-1.18	1.29		
Support	B-B	4.03	0.62	-0.54	-0.91	3.17*	S-S>S-B*
	S-S	4.17	0.61	-0.91	-0.06		
	B-S	4.15	0.61	-0.92	0.19		
	S-B	4.00	0.65	-0.60	-0.58		
Organization	B-B	3.11	0.40	-0.64	0.42	1.19	-
	S-S	3.20	0.45	-0.04	0.08		
	B-S	3.22	0.45	-0.28	0.44		
	S-B	3.17	0.45	-0.59	0.29		

Note. B-B – brother-brother dyads; S-S – sister-sister dyads; B-S – brother-older-than-sister dyads; S-B – sister-older-than-brother dyads. *F* – *F*-test value; *C* – Bonferroni post-hoc comparison test. * *p* < .05. ** *p* < .01.

Based on the skewness and kurtosis coefficients of the distributions (within the range of -2 to 2), it was observed that these values align with the common recommendations for research in social and humanities sciences (Tabachnick & Fidell, 2021) according to more lenient criteria. The variance analysis and Bonferroni post-hoc test indicated statistically significant differences in life satisfaction. Specifically, individuals who grew up in same-sex sister dyads reported higher life satisfaction compared to those who grew up in same-sex brother dyads. Similarly, same-sex sister dyads exhibited greater warmth in their relationships, compared to all other sibling dyads. Dyads

where brothers are older and sisters younger showed higher levels of rivalry compared to same-sex sister and brother dyads, while same-sex sister dyads perceived parental actions during childhood as more supportive compared to dyads where sisters were older than their brothers. No significant differences between sibling dyads on conflict and perception of organization were found.

Intercorrelations of Measures in the Context of Sibling Dyads

Pearson's correlation coefficients (Table 2) revealed that life satisfaction is significantly positively correlated with warmth, perception of support, and perception of organization across all sibling dyads. Additionally, in all dyads, there is a significant positive relationship between the perception of support and both - warmth and the perception of organization. Life satisfaction is significantly negatively correlated with conflicts and rivalry only in the case of same-sex sister dyads and dyads where the sister is the older sibling. A similar pattern is observed in these two dyads regarding the relationships between conflict and warmth and between the perception of support and conflict and rivalry. Rivalry is significantly associated with conflicts only in dyads where the sister is older than the brother. Considering previous findings that rivalry is most pronounced in dyads where the brother is older than the sister, this suggests that the relationship between rivalry and conflicts in sibling relationships is not dependent on their intensity but rather on the birth order of siblings in mixed-gender dyads. Perception of organization is positively related to warmth in all dyads, except in the case where the brother is older than the sister. It is negatively correlated with conflicts in same-sex sister dyads and dyads where the brother is older than the sister.

Table 2. Intercorrelations of measures in the context of sibling dyads

Variables		Life Satisfaction	Warmth	Conflict	Rivalry	Support
Life Satisfaction	B-B	-				
	S-S	-				
	B-S	-				
	S-B	-				
Warmth	B-B	.40**	-			
	S-S	.27**	-			
	B-S	.21*	-			
	S-B	.23**	-			
Conflict	B-B	.05	.06	-		
	S-S	-.22**	-.42**	-		
	B-S	.03	-.11	-		
	S-B	-.22**	-.15*	-		
Rivalry	B-B	.06	-.01	.05	-	
	S-S	-.21**	-.09	.12	-	
	B-S	-.03	-.13	.15	-	
	S-B	-.27**	-.07	.19*	-	
Support	B-B	.44**	.45**	-.10	-.06	-
	S-S	.41**	.50**	-.24**	-.18**	-
	B-S	.49**	.26**	-.07	-.13	-
	S-B	.34**	.41**	-.22**	-.32**	-
	B-B	.16*	.24*	.14	-.14	.24*
	S-S	.16*	.16*	-.20**	.06	.21**
	B-S	.25**	.07	-.25**	.11	.21*
	S-B	.25**	.28**	.03	-.14	.49**

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

Relationships between Life Satisfaction, Perceptions of Family Environment, and Sibling Relationships

Given that an insight into the correlations can be established that life satisfaction, perception of the family environment, and sibling relationships are related and that there are specificities in the context of gender and birth order of siblings, the next step of the analysis involved examining the relationships between these variables in the overall predictor model. To respond to the research problem, life satisfaction was placed as a criterion variable, perception of the family environment as a predictor in the first step, and sibling relationships as a predictor in the second step of a hierarchical regression analysis, stratified by sibling dyads. Based on this analysis, it is possible to establish which of the predictor groups of variables has greater explanatory power in determining life satisfaction, taking into account gender and birth order (Table 3).

Looking at the results of the hierarchical regression analysis, it can be established that a significant change in the contribution to life satisfaction can be observed only in sister dyads (17% vs 21%) and dyads where the sister is older than the brother (13% vs 18%), while there is no significant change in the explanation of the variance of life satisfaction after the second step of the analysis in the remaining two types of dyads. It can be concluded that early perceived experiences of family support are a more significant predictor of life satisfaction in individuals who grew up in brother-brother dyads or in dyads where the brother is older than the sister, while these experiences are accompanied by a low level of conflict and rivalry, as significant determinants of life satisfaction in same-sex sister dyads, as well as in dyads where the sister is older than the brother.

Table 3. Prediction of life satisfaction based on perception of family environment and sibling relationships

Step	Dyad--->	B-B		S-S		B-S		S-B	
	Predictor	β	t	β	t	β	t	β	t
1	Support	.44	4.10**	.39	6.89**	.45	5.71**	.29	3.50**
	Organization	-.01	-0.02	.07	1.25	.15	1.91	.11	1.28
2	Support	.35	2.96**	.31	4.77**	.44	5.25**	.13	1.75
	Organization	-.04	-0.35	.12	1.52	.13	1.65	.12	1.52
	Warmth	.25	2.12*	.02	0.36	.09	1.12	.08	1.14
	Conflict	.07	0.64	-.14	-2.22*	.03	0.37	-.14	-1.98*
	Rivalry	.08	0.68	-.16	-2.55*	.02	0.29	-.16	-2.18*
Step 1		$F = 8.88^{**}$ $R^2 = .20$		$F = 27.65^{**}$ $R^2 = .17$		$F = 21.41^{**}$ $R^2 = .26$		$F = 12.02^{**}$ $R^2 = .13$	
Step 2		$F = 4.86^{**}$ $R^2 = .23$ $\Delta R^2 = .03$		$F = 14.27^{**}$ $R^2 = .21$ $\Delta R^2 = .04^*$		$F = 8.73^{**}$ $R^2 = .27$ $\Delta R^2 = .01$		$F = 7.29^{**}$ $R^2 = .18$ $\Delta R^2 = .05^*$	

Note. β – partial contribution of the predictor; t – t-test value; F – F-test value; R^2 – coefficient of multiple determination; ΔR^2 – change in the coefficient of multiple determination in the second step of the hierarchical regression analysis. * $p < .05$. ** $p < .01$.

■ DISCUSSION

The research aimed to examine the relationship between the perception of the family environment during childhood and current life satisfaction, taking into account dominant sibling relationships, and the effects of gender and birth order among siblings. Obtained results largely support existing theories on family relationships and how the perception of these relationships contributes to the development of various forms of interaction among siblings in adulthood, and their life satisfaction.

Previous research suggests that sisters, compared to brothers, are more likely to engage in open communication and mutual empathy, which contributes to a greater sense of warmth, emotional closeness, and security in family relationships (Tannen, 2009). This can significantly impact higher life satisfaction in later years. According to the tend-and-befriend theory (Taylor, 2012), women are inclined to build long-lasting social connections and support systems, which may explain why individuals who grew up with sisters tend to be more satisfied with life than those who grew up with brothers. Sisters are often better at resolving conflicts constructively, valuing relationships, care, and emotional intimacy, which helps maintain closeness and reduces long-term conflicts in adulthood. In contrast, relationships among brothers may involve more rivalry, as socialization often steers them toward independence and achievements, potentially diminishing life satisfaction in later developmental stages (Derne, 1993; Wood & Eagly, 2012).

Dyads in which brothers are the older siblings and sisters are the younger ones may exhibit more rivalry compared to same-gender sibling dyads, due to several factors. In many cultures, older brothers often assume a protective and dominant role over their younger sisters, leading to a power imbalance and potential rivalry. Younger sisters may feel pressured to fulfill expectations related to dependency or a passive role, which can result in resistance and rivalry in relationships with older brothers as early as adolescence (Whiteman et al., 2007). This dynamic may also lead to conflicts, as sisters might feel that their role in the family is minimized (Tucker et al., 2001), prompting them to assert themselves and seek affirmation within the family to compete for parental attention, especially if the older brother holds a central role in the family structure (Sulloway, 2007). Therefore, the adolescent period appears critical for sibling relationships and life satisfaction in adulthood.

There may be a stronger perception of parental behaviors in childhood as supportive, in sister dyads compared to dyads where sisters are older than brothers. Parents often display greater emotional support toward daughters in same-gender dyads, as well as differing parenting approaches in dyads where sisters are older than brothers, due to varying attitudes toward gender roles. This is particularly because girls are often expected to be more emotionally close and connected. From childhood, this level of emotional closeness in sister dyads can lead to sisters developing a sensitivity to emotional support from the family. In contrast, in dyads where sisters are older than brothers, this dynamic may result in the perception of less warmth and greater rigidity in family relationships (Tucker et al., 2001).

The factors of warmth, perceived support, and perceived organization in all sibling dyads generally create an environment of emotional stability and security that shapes overall well-being (e.g., Izzo et al., 2022; Stavoulaki et al., 2021). Bowen (1978), in his Family systems theory, emphasized that family support and organization foster an environment that unequivocally enhances support, warmth, and emotional stability. Additionally, the positive correlation between warmth, perceived support,

and perceived organization highlights that family dynamics are crucial in shaping positive relationships and life satisfaction. When relationships among siblings and family members are characterized by warmth, family members feel secure and supported, leading to greater life satisfaction (Dunn & Plomin, 1990; Schrodtt et al., 2007). In well-organized families with adequate support, members have greater control over their responsibilities and expectations, along with a stronger sense of security, which potentially reduces stress and increases satisfaction (Vendell & Bailey, 1992).

Conflicts and rivalry can undermine warmth in relationships, disrupting emotional closeness and stability among family members. This dynamic is particularly pronounced in sister dyads and dyads where the sister is the older sibling, as conflicts and rivalry may be more intense due to the pursuit of close emotional bonds and implicit expectations of a higher level of mutual support. Sisters often engage in more emotionally demanding interactions, so conflicts and rivalry can have a more significant negative impact on emotional well-being and life satisfaction (Sulloway, 2007). Rivalry is strongly linked to conflicts specifically in dyads where the sister is the older sibling to a brother, as the unique role dynamics in these dyads can lead to power and responsibility struggles. The older sister often assumes the role of a “third parent” or authority figure, which can provoke resistance and rivalry from the younger brother. This may escalate into conflicts, especially during adolescence, when the younger brother seeks independence and attempts to break free from the older sister’s influence (Sulloway, 2007). Such dynamics can persist into adulthood. Given that rivalry is not most pronounced in sister-brother dyads but rather in brother-sister dyads, it appears to have a dysfunctional nature leading to sibling conflicts in cases where birth order and gender roles in mixed-gender dyads play a significant role.

The perception of organization is positively associated with warmth in relationships in nearly all sibling dyads, as clear organization and structure within the family contribute to better communication, reduced stress, and a greater sense of emotional security. However, in dyads where the brother is older than the sister, this relationship may be less pronounced due to differing expectations and roles that parents establish based on gender and birth order. An older brother may take on more responsibilities or be less emotionally available, which can reduce the warmth in the relationship with his younger sister (Vendell & Bailey, 1992). The perception of organization is negatively associated with conflicts in sister dyads and in dyads where the brother is older than the sister, as a clear family structure and balanced organization reduce the likelihood of disagreements and rivalry over role and power distribution among siblings. In sister dyads, fewer conflicts and richer emotional

exchanges may result from the perception of good family organization. In dyads where the brother is older, conflict may be reduced if family organization is clear and family roles are equitable (Vendell & Bailey, 1992).

Regression analyses indicated that perceived family experiences are a significant predictor of life satisfaction for individuals who grew up in brother-brother dyads and dyads where the brother is older than the sister. Such experiences are likely to contribute to a sense of security, stability, and self-confidence during childhood. In these dyads, family roles and relationships are often more clearly defined, and the expectations placed on the older brother may create structure and discipline that foster responsibility and personal success in the younger sibling. In these cases, a clearly defined relationship between the older and younger sibling is often present, where the older brother assumes the role of protector or "leader," who is more relied upon by parents in terms of responsibilities and serves as a role model for the younger sibling. This dynamic leads to a clearer family structure and organization (Whiteman et al., 2007), reducing rivalry. This contributes to the development of more stable family relationships, reduces long-term conflicts, and improves interpersonal relationships in adulthood (Sulloway, 2007), positively impacting personal satisfaction.

A low level of conflict and rivalry is a significant determinant of life satisfaction in sister dyads and in dyads where the sister is the older sibling. Sisters are often socialized to be empathetic and relationship-oriented, which can result in lower levels of conflict and a greater sense of closeness in sister dyads. A low degree of conflict during childhood facilitates the development of positive and supportive relationships, which is a key factor for later life satisfaction (Stocker et al., 1997). In dyads where the sister is the older sibling, older sisters often take on the role of protector and provide emotional support to their younger brothers (McHale et al., 1995). In sister and mixed-gender dyads with an older sister, harmonious relationships characterized by low conflict and rivalry promote emotional well-being. When relationships with an older sister are based on cooperation, support, and understanding, greater emotional security is achieved, fulfilling psychological needs for secure attachment, ultimately contributing to higher life satisfaction (Dunn et al., 1994).

Despite its significant findings, this study has several limitations. First and foremost, it is important to note that the sample in this research was limited to families with only two children. Considering that family size is a significant variable in family studies, future research should include families with more children. Similarly, the findings could be viewed from different perspectives if sibling-dependent assessments were taken into account, as this study's sample included only one sibling evaluating the family context, the sibling relationship, and life satisfaction. Therefore, future research should include both siblings from the same family to gain a clearer understanding of the interdependence between siblings in these assessments. Finally, conducting a longitudinal study would be of great importance to gain insight into

the development of sibling relationships over time and how their perception of the family environment and life satisfaction evolve. This approach would overcome the limitations inherent in this study, which was retrospective.

In general, the results obtained in this study largely support existing family theories and a holistic approach to understanding human well-being. It appears that a comprehensive view of mental health requires consideration not only of individual characteristics but also of one's perception of early family experiences and the interaction among family members, particularly between siblings. Sibling relationships are among the longest and most intense relationships throughout life. The findings of this study also highlight the importance of timely prevention and intervention aimed at enhancing life satisfaction among siblings. This can be achieved through timely family counseling and individual counseling for children in the family, taking into account their gender-specific roles and roles shaped by birth order. These interventions would primarily focus on educating parents about the importance of organized family activities and expressing warmth and support toward their children, as well as guiding siblings on appropriate ways to resolve conflicts, express rivalry, and engage in competition through functional behaviors. Such an approach can create a safe family environment for children, fostering an atmosphere where warm relationships and cooperation are valued. Consequently, this would contribute to an increase in subjective well-being throughout life.

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Received 14.09.2024; accepted for publishing 26.11.2024.