



Personality, Co-parenting, and Psychological Symptoms in Adolescent Children

Larissa Enriconi Benini¹

Luiza Dalla Corte Euzebio¹

Clarisse Pereira Mosmann¹

Abstract: Co-parenting is the relationship between two adults who are responsible for the care of a child or adolescent. It can be influenced by personality characteristics of each member of the dyad. These constructs can be associated with psychological symptoms in adolescent children. The aim of this study was to investigate the relationships between personality, co-parenting, and psychological symptoms in adolescents, examining the co-parenting's mediating role. This was a quantitative, explanatory, and cross-sectional study conducted with one member of the co-parenting dyad, responsible for an adolescent aged 12-16 years. 217 participants responded to the Reduced Markers of the Big Five Personality Factors, The Coparenting Inventory for Parents and Adolescents, the Strength and Difficulties Questionnaire, and the Sociodemographic Questionnaire. Structural Equation Modeling was used for data analysis. Co-parental cooperation acted as a partial mediator between parents' personality factors and psychological symptoms in children, highlighting the importance of working with parents in a clinical setting.

Keywords: personality, parent-child relations, adolescent behavior, teenagers, parenting

Personalidade, Coparentalidade e Sintomas Psicológicos em Filhos (as) Adolescentes

Resumo: A coparentalidade é a relação entre dois adultos responsáveis pelo cuidado de uma criança ou adolescente. Ela pode ser influenciada pelas características de personalidade de cada membro da díade. Esses constructos podem estar associados com sintomas psicológicos em filhos adolescentes. Este estudo teve como objetivo investigar as relações entre personalidade, coparentalidade e sintomas psicológicos em adolescentes, verificando o papel mediador da coparentalidade. Trata-se de um estudo quantitativo, explicativo e transversal, realizado com um membro da díade coparental, responsável por um adolescente de 12 a 16 anos. 217 participantes responderam ao Marcadores Reduzidos dos Cinco Grandes Fatores da Personalidade, *The Coparenting Inventory for Parents and Adolescents*, *Strength and Difficulties Questionnaire* e o Questionário Sociodemográfico. Utilizou-se Modelagem de Equações Estruturais para a análise de dados. A cooperação coparental atuou como mediadora parcial entre fatores de personalidade dos pais e sintomas psicológicos nos filhos, destacando a relevância de atuar junto aos responsáveis no âmbito clínico.

Palavras-chave: personalidade, relações pais-filho, comportamento do adolescente, adolescentes, parentalidade

Personalidad, Coparentalidad y Síntomas Psicológicos en Niños Adolescentes

Resumen: La coparentalidad es la relación entre dos responsables por el cuidado de un niño o adolescente. Puede verse influenciada por las características de cada miembro de la pareja. Estos constructos pueden asociarse con síntomas psicológicos en hijos adolescentes. El objetivo de este estudio fue investigar las relaciones entre personalidad, la coparentalidad y síntomas psicológicos en adolescentes, examinando el papel mediador de la coparentalidad. Es un estudio cualitativo, explicativo y transversal, realizado con un miembro de la pareja, responsable por un adolescente de 12 hasta 16 años. 217 participantes respondieron a los Marcadores Reducidos de los Cinco Grandes Factores de Personalidad, *The Coparenting Inventory for Parents and Adolescents*, *Strength and Difficulties Questionnaire* y el Cuestionario Sociodemográfico. Se utilizó la Modelación de Ecuaciones Estructurales para el análisis de datos. La cooperación coparental actuó como mediador parcial entre los factores de personalidad parental y síntomas psicológicos en hijos, resaltando la importancia de trabajar en conjunto con los responsables en el entorno clínico.

Palabras-clave: personalidad, relaciones padres-hijo, conducta del adolescente, adolescentes, paternidad

The personality encompasses the behavioral characteristics of individuals, the way people see each other. It is a pattern of behavior in response to a given stimulus and one of the factors that shape our experience in the

world, in relationships, in the way we exercise roles at work, in personal and professional choices (Feist et al., 2015; Schultz & Schultz, 2021).

The personality exerts notable influence on the different roles played by individuals throughout their lives (Feist et al., 2015; Shultz & Schultz, 2021). One way to elucidate this issue is through the Five-Factor Model of Personality, which is a theory developed in the late 1970s by Robert R. McCrae and Paul T. Costa Jr. using factor analysis techniques. The Five-Factors of the Personality are divided and represented by its characteristics in Table 1.

¹Universidade do Vale do Rio dos Sinos, São Leopoldo-RS, Brazil

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Correspondence address: Larissa Enriconi Benini. Universidade do Vale do Rio dos Sinos. Avenida Unisinos, 950, Cristo Rei, São Leopoldo-RS, Brazil. CEP 93.022-750. E-mail: larissaebenini24@gmail.com

Table 1*Big Five Personality Factors as described by Feist et al. (2015)*

Factors	High levels	Low levels
Extraversion	Like to communicate and be around other people.	More solitary, with difficulties in expressing themselves and their emotions.
Agreeableness	Receptive and empathetic.	Have difficult behaviors towards others and are suspicious.
Conscientiousness	People with goal-oriented and organized behavior.	Tend to show negligence, lack of organization and commitment.
Openness to New Experiences	Would be related to experiencing new adventures and constantly questioning moral standards.	Would be related to inflexible and conservative people.
Neuroticism	May predict some degree of suffering and difficulties in dealing with emotions and people.	Would be related to emotional intelligence and self-satisfaction.

Considering the aforementioned, all these characteristics can influence people's different life cycles, such as the experience of co-parenting, if it occurs. Co-parenting is the relationship between two adults who share the responsibility of caring for a child/adolescent with the duty to ensure his/her healthy, functional development and well-being (Feinberg, 2003; Margolin et al., 2001). It refers to emotional, financial and legal issues related to the support that should be given to the child in question (Feinberg, 2003).

According to Margolin et al. (2001), co-parenting has three dimensions. Co-parenting conflict involves discussions and disagreements between the couple regarding ways of raising the child/adolescent, combining routines, and the degree of approval or disapproval of the care provided by the other. Cooperation refers to how much one parent helps the other and respects each other's decisions and characteristics. Finally, triangulation occurs as a result of discussions between the couple and is the inclusion of a third party (son or daughter) in the situation, which generally results in the dependent joining forces with one of the parents, excluding the other parent.

Although personality has been identified as one of the possible predictors of co-parenting quality, further study is still needed (Altenburger & Schoppe-Sullivan, 2020). The two variables, co-parenting and personality, may also be associated with the development of psychological symptoms in offspring. One way to elucidate these psychological symptoms is to group them into internalizing and externalizing symptoms. Externalizing symptoms refer to the involvement of other people in the conflict, the clash with other people's expectations, and may result in outburst behavior and aggressive syndromes. Internalizing symptoms are expressed in relation to the subject himself through, for example, somatic complaints, feelings of anxiety, depression, and withdrawal (Machado & Mosmann, 2020).

Triangulation and low levels of co-parental cooperation between the couple can lead to the production of a hostile environment, which increases adolescents' stress,

makes it difficult for them to regulate their emotions, and creates dysfunctional models of behavior for them (Euzebio & Mosmann, 2023; Machado & Mosmann, 2020). Disengaged, controlling parents with high levels of neuroticism who present dysfunctional communication can trigger emotional difficulties in their offspring and contribute to the development of psychological symptoms in adolescents, as indicated in a study of 1,976 young people aged between 14 and 25 years conducted in the north of Portugal by Mota and Ferreira (2019).

In 2020, Machado and Mosmann conducted a study with 229 adolescents aged 11-18 years living in southern Brazil on externalizing symptoms in adolescents. It was identified that triangulation and the exposure of children to co-parental conflict can predict their externalizing symptoms (Machado & Mosmann, 2020). Adolescents exposed to coercive, dysfunctional environments are at greater risk of presenting aggressive behavior, difficulty in emotional regulation, and harmful use of social media (Monteiro & Mota, 2021).

On the other hand, personality, co-parenting, and their respective dimensions can also positively affect the development of offspring. Co-parental cooperation can lead to a feeling of satisfaction with co-parenting, creating a more conducive environment to the development of social and emotional skills of dependents. Dyads with higher levels of the Agreeableness personality trait (referred to as Socialization in the Brazilian adaptation of the instrument Reduced Markers of the Big Five Personality Factors-RM-25, Hauck et al., 2012) tend to greater engagement in co-parental cooperation and encouragement of these same behaviors in their children (Campbell, 2023; Euzebio & Mosmann, 2023). Parents with high levels of extraversion, agreeableness, and conscientiousness, who are involved, present and open to experience contribute to the development of social skills and a personality that is emotionally consistent with environmental stimuli (Mota & Ferreira, 2019).

This study seeks to investigate the relationships between personality, co-parenting, and psychological

symptoms in adolescents by relating the contexts and assessing the mediating role of co-parenting through a systemic approach. It will contribute to the literature in the area, since materials produced on the relationship between the variables in question are still scarce. The aim was to investigate the relationships between personality, co-parenting, and psychological symptoms in adolescents, assessing the mediating role of co-parenting

Method

A quantitative, explanatory, cross-sectional design was adopted in the study (Gil, 2019).

Participants

This study included 217 Brazilians selected by the convenience criterion (Gil, 2019); 89.30% were female and 10.70% were male. The majority of the sample lived in Rio Grande do Sul (90.3%). The average age was 44.84 years with a standard deviation of 7.38. The inclusion criterion for participants was sharing the care for an adolescent aged 12-16 years with another adult. The number of participants was defined by the sample calculation of Hair et al. (2009), in which 200 is the minimum number of participants for the calculation of structural equation modeling (SEM).

Most participants had postgraduate education (36.7%), followed by complete secondary education (17.2%), incomplete higher education (15.8%), complete higher education (14.9%), incomplete secondary education (6%), technical education (4.7%), complete and incomplete primary education (2.3%). As for income, there is a greater concentration of up to 2 minimum wages (26.5%), followed by 2-4 minimum wages (23.2%), 4-6 minimum wages (12.3%), no personal income (10.9%), 8-10 minimum wages (10%), 10-15 minimum wages (8.1%), 6-8 minimum wages (4.3%), 15-20 minimum wages (3.3%) and more than 20 minimum wages (1.4%).

Regarding marital status, 58.1% were officially married, 29.5% in a stable union, 8.8% were single and 3.7% were divorced. Regarding information on previous or current psychological treatment, 53.1% were not undergoing therapy, while 46.9% were undergoing or had undergone individual, couple, family or group therapy.

Instruments

Sociodemographic questionnaire: A questionnaire consisting of 28 questions related to gender, age, education, family structure, marital status, number of children, religion, place of residence and information about previous treatments was developed for this study. Four of these questions are related to the gender, age and race of the adolescent chosen for the study. This material allowed us to know the profile of the sample under study.

Assessment of Personality Markers: The *Reduced Markers of the Big Five Personality Factors* (RM-25) (Hauck et al., 2012) were used. The instrument consists of 25 adjectives, for example: communicative; dedicated. Participants must indicate how much they identify with the term using five degrees ranging from “totally disagree” to “totally agree”, and five major personality factors are used in the assessment of personality: Extraversion ($\alpha = 0.83$), Agreeableness ($\alpha = 0.79$), Conscientiousness ($\alpha = 0.79$), Neuroticism ($\alpha = 0.69$), and Openness ($\alpha = 0.61$) (Hauck et al., 2012).

Co-parenting assessment: The *CI-PA, The Coparenting Inventory for Parents and Adolescents* (Teubert & Pinquart, 2011) was used. It consists of a Likert scale ranging from 0, not at all true, to 4, completely true. Its structure is divided into two parts with three subscales: cooperation ($\alpha = 0.89$), conflict ($\alpha = 0.76$), and triangulation ($\alpha = 0.92$). In the first part, participants respond about co-parenting at the level of the couple with whom they share care of the child, for example: “My partner and I raise our child together”. In the second part, participants respond about the co-parenting of the other parent, for example: “It is difficult for our child to please my partner”. Only the second part of the inventory, which addresses the view of one parent on the co-parenting of the other parent, was used in this study.

Assessment of Psychological Symptoms in Adolescents: The Brazilian version of the *SDQ Strengths and Difficulties Questionnaire* was used (Fleitlich et al., 2000). The questionnaire consists of 25 items subdivided into: 10 items about the child’s strengths, 14 items about the child’s difficulties, and one neutral item. For example, “Easily loses concentration”, “Is considerate of other people’s feelings”. The response scale ranges from 0 (false) absent behavior to 2 (true) frequent behavior. It allows knowledge of five subscales: Emotional Symptoms, Conduct problems, Hyperactivity, Relationship problems with peers and Prosocial behavior.

Procedure

Data collection. Participants were selected based on convenience criteria, seeking to achieve the “snowball” effect by sharing the survey on social media (Instagram, Facebook, WhatsApp), workplaces and schools. The application was carried out online through Google Forms and in person through a researcher. At the beginning of the survey, both in person and online, all participants were given the Informed Consent form for their agreement. Confidentiality and the right to withdraw from the study were ensured and responses to any discomfort indicated by participants were provided.

Data analysis. The analysis was performed using the Statistical Package for Social Sciences 22.0 (IBM SPSS), considering a significance level of 5% ($p < 0.05$), and the Statistical Package for Social Sciences Analysis of Moment Structures 22.0 (IBM SPSS Amos) expansion for structural

equation modeling. At first, the psychometric properties of each instrument used (reliability and validity) were assessed. The parametric assumptions (dependent and independent variables, sample size, and normality) were also assessed. The degree of normality for the variables under study was identified, as well as the reliability and validity of the selected instruments.

Expected Maximization was used to calculate missing responses. A completely random missing response was identified, since the “Little’s MCAR Test” presented significance above 0.05 (sig = 0.443). Regarding the descriptive analysis, the mean and standard deviation were calculated to better understand each variable, and the Pearson’s Correlation Test was performed to identify the levels of correlation between the variables under study.

Structural equation modeling was used to analyze the explanatory relationships and the predictive value of personality and co-parenting on psychological symptoms in adolescent children. In addition, the mediating role of co-parenting between personality and psychological symptoms in adolescent children was jointly assessed. The Maximum Likelihood estimation method was chosen, since a normal distribution of the variables was identified. The following model adjustment/adequacy indices were used: chi-square/degrees of freedom - χ^2/df (indicator of good adjustment - below five), Root Mean Square Error of Approximation - RMSEA (indicator of good adjustment - less than 0.10) (Hair et al., 2009) and incremental adjustment measure - Comparative Fit Index-CFI (indicator of reasonable adjustment - greater than 0.8) (Marôco, 2010).

Ethical Considerations

The research project was approved by the Research Ethics Committee of the Universidade do Vale do Rio dos Sinos, CAAE No. 43697020.0.0000.5344.

Results

Descriptive Analysis and Pearson Correlations

A descriptive analysis, mean and standard deviation calculation were performed for the variables and their dimensions addressed in this study. They are: The Big Five Personality Factors (Big Five) that involve extraversion, agreeableness, conscientiousness, neuroticism and openness to new experiences; Co-parenting described by cooperation, triangulation and conflict; and Psychological Symptoms in adolescent children represented by emotional symptoms, conduct problems, hyperactivity, relationship problems, prosocial behavior and total problems (combination of

emotional symptoms, conduct problems, hyperactivity and relationship problems). Table 2 shows the results of the descriptive analysis.

Statistical assumptions were assessed to ensure the adequacy of data for analysis. Normality analysis was applied using the Shapiro-Wilk test, confirming the normal distribution of data in the dimensions studied, which enabled Pearson’s Correlation Analysis. Additionally, multicollinearity was tested between the independent variables, observing that the variance inflation factor (VIF) for each variable remained below the critical values, indicating the absence of significant multicollinearity and reinforcing the independence of the variables.

Table 2

Descriptive analysis (N = 217)

Variable/ Dimensions	Mean	Standard Deviation
<i>Big Five- Personality</i>		
Extraversion	18.21	4.07
Agreeableness	20.57	2.90
Conscientiousness	21.87	2.46
Neuroticism	13.84	4.33
Openness to New Experiences	15.27	3.81
<i>Co-parenting</i>		
Cooperation	15.85	4.60
Conflict	6.17	3.96
Triangulation	1.63	3.26
<i>Psychological Symptoms in Adolescents</i>		
Emotional Symptoms	3.86	2.38
Conduct Problems	2.16	1.83
Hyperactivity	3.55	2.49
Relationship Problems	2.35	1.95
Prosocial Behavior	6.67	1.51
Total Problems	11.93	6.77

A positive correlation is also observed between agreeableness, conscientiousness, co-parental cooperation, and prosocial behavior in adolescents. Neuroticism correlated positively with co-parenting conflict and co-parental triangulation. These two dimensions of co-parenting and neuroticism also correlated positively with emotional symptoms, conduct problems, hyperactivity and relationship problems in adolescent children. Table 3 presents the results of the correlations of the variables under study.

Table 3
Correlations between variables

	1EX	2SO	3CO	4NE	5AB	6COO	7CON	8TRI	9SE	10PC	11HI	12PR	13PS	14TP
1	1	,194*	0,160	-,362**	,131	,166*	-,017	-,003	-,095	-,007	-,022	-,057	-,172*	-,060
2		1	,422**	-,197*	,245**	,245**	,038	-,090	-,023	-,051	-,096	-,166*	,274**	-,105
3			1	-,146	,180**	,271*	-,148*	-,192**	-,101	-,225**	-,245**	-,165*	,258**	-,234**
4				1	-,078	-,216**	,160*	,237**	,337**	,319**	,289**	,264*	-,226**	,387*
5					1	,121	-,117	,114	-,129	,019	-,015	,000	,007	-,046
6						1	-,139	-,397**	-,163*	-,156*	-,183**	-,250**	,284**	-,239**
7							1	,357**	,164*	,213**	,091	,196**	-,045	,205*
8								1	,231**	,282**	,207**	,232**	-,253*	,301**
9									1	,476**	,472*	,514**	-,126	,802**
10										1	,563**	,442**	-,322**	,772*
11											1	,413**	-,298**	,805**
12												1	-,179**	,740*
13													1	-,292**
14														1

Note: 1EX= extraversion; 2SO= agreeableness; 3CO= conscientiousness; 4NE= neuroticism; 5AB= openness to new experiences; 6COO= cooperation; 7CON= conflict; 8TRI= triangulation; 9SE= emotional symptoms; 10PC= conduct problems; 11HI= hyperactivity; 12PR= relationship problems; 13PS= prosocial behavior; 14TP= total problems: **. Correlation is significant at the 0.01 level (2 tails); *. Correlation is significant at the 0.05 level (2 tails).

Structural Equation Modeling

A SEM calculates the relationship between variables (independent and dependent) simultaneously and the degree of prediction and mediation that each one may have over the other. The modeling is similar to the calculation of numerous multiple regression equations that examine relationships of dependence between two variables combined with the concept of factor analysis, which allows the representation of unmeasured concepts in factors with their various variables. This analysis technique allows testing different models, in addition to adding the expected measurement error to the calculation, providing greater reliability to the results (Hair et al., 2009).

For model adjustment, covariances suggested by the “IBM SPSS Amos” were used between: neuroticism and extroversion (dimensions of personality); conflict and cooperation (dimensions of co-parenting); and emotional symptoms and prosocial behavior (dimensions of psychological symptoms in adolescents). Thus, an adequate adjustment of data was obtained: CFI=0.85, CMIN/DF=2.40, and RMSEA = 0.08. Covariances between the dimensions were added for adjustment, better isolating the effect of the latent variable.

The model shows that the personality dimensions of parents in the sample, with emphasis on conscientiousness ($\beta = 0.65$) and agreeableness ($\beta = 0.59$), positively interfere with co-parenting, especially with regard to co-parenting cooperation ($\beta = 0.65$), and negatively interfere with the emotional symptoms of adolescents, especially with regard to hyperactivity ($\beta = 0.70$) and emotional

symptoms ($\beta = 0.69$). These same personality dimensions predict a positive path to prosocial behavior in adolescents ($\beta = -0.43$). The prediction of the personality dimension for co-parenting ($\beta = 0.48$) and for psychological symptoms in adolescents ($\beta = -0.26$) showed moderate indices.

When the co-parenting mediation variable was inserted as an additional predictor ($\beta = -0.37$) of psychological symptoms in adolescent children, the predictive value of personality was reduced. Therefore, co-parenting acts as a partial mediator (Hair et al., 2009) between the personality of parents and the psychological symptoms in adolescent children. Co-parenting cooperation, which characterizes the sample, also had a negative impact on the emotional symptoms of adolescent children, especially hyperactivity ($\beta = 0.70$) and emotional symptoms ($\beta = 0.69$), and a positive impact on prosocial behavior in adolescents ($\beta = -0.43$).

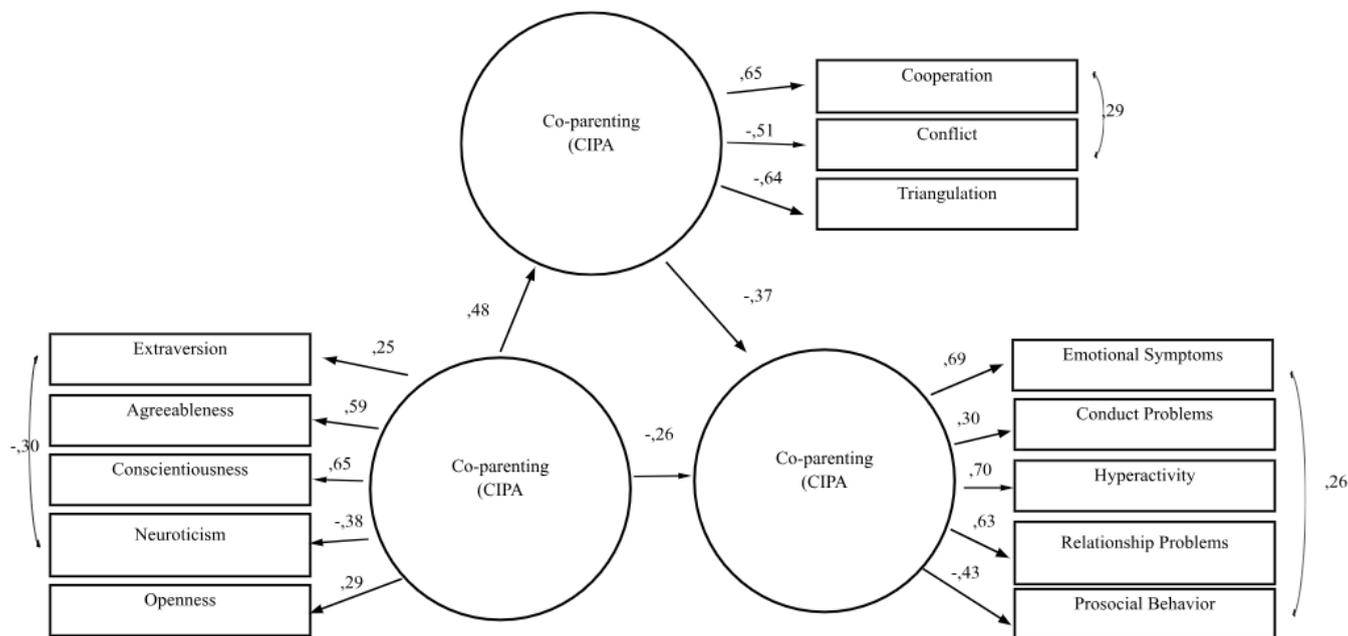
The standardized regression coefficients showed that the personality dimensions of parents presented moderate and low indices: conscientiousness ($\beta = 0.65$), agreeableness ($\beta = 0.59$), openness to new experiences ($\beta = 0.29$), extraversion ($\beta = 0.25$) and neuroticism ($\beta = -0.38$). The standardized regression coefficients of co-parenting also presented moderate indices: cooperation ($\beta = 0.65$), conflict ($\beta = -0.51$) and triangulation ($\beta = -0.64$). Regarding psychological symptoms in adolescent children, high and moderate rates are observed, starting with hyperactivity ($\beta = 0.70$), emotional symptoms ($\beta = 0.69$), relationship problems ($\beta = 0.63$), conduct problems ($\beta = 0.30$) and prosocial behavior ($\beta = -0.43$). Figure 1 represents the final structural equation model.

Discussion

The results of the present study corroborate the information present in the literature on the reverberations of personality in the development of co-parenting (Choi & Becher, 2019; Ju et al. 2021; Zvara et al., 2019). In addition, they are in line with the considerations of several authors regarding the relationship between co-parenting style and psychological symptoms in children (Euzebio & Mosmann, 2023; Machado & Mosmann, 2020).

Conscientiousness, when at high levels, is related to organization, goal-oriented behavior, care in tasks and interpersonal relationships. Agreeableness, when present at significant levels in individuals, is characterized by feelings of trust, loyalty towards others and empathy. In general, these two factors help those who have them to deal with their emotions, especially difficult emotions such as stress, to establish good interpersonal relationships and seek stability in their professional and personal lives (Shultz & Schultz, 2021).

Figure 1
Structural equation model



In the systemic view, the family is the children’s first social group, regardless of its constitution, and will help them in their physical and psychological development and in learning social relationships. The family is a group with different individuals and an identity in itself, an idea of support among its members and a sense of belonging (Walsh, 2016). Adolescents experience physical, psychological and social changes, and caregivers who accompany this process also need to rethink their position before this child, who is less demanding but still needs support, limits and affection. At this stage of the family, there is greater openness to the outside world, as adolescents begin to spend more time with their peers, seek and explore new spaces, and parents/caregivers accompany them and deal with these changes and encounters (Walsh, 2016).

Therefore, the personality of each parent will be one of the possible factors that shape the co-parenting characteristics of the couple, understood here as cooperation, triangulation, and conflict (Margolin et al., 2001). Some international studies have already indicated and hypothesized the interaction of the personality of parents with co-parenting (Altenburger & Schoppe-Sullivan, 2020). In the present

study, a sample with characteristics of high levels of conscientiousness and agreeableness may have reinforced cooperative co-parenting, since this co-parenting dimension is related to the support provided mutually by the parents and the respect that each one has for the care of the other when related to the child (Margolin et al., 2001).

Co-parental cooperation reflects the efforts of those responsible for caring for their child, how connected they are to each other, and how emotionally and instrumentally available they are to make decisions for the dyad (Margolin et al., 2001). This factor, combined with the aforementioned personality characteristics, facilitates the construction of a stable care environment. This environment, unlike a hostile environment that generally presents dysfunctional models of behavior to dependents, can help adolescents regulate their emotions during this intense phase of change (Machado & Mosmann, 2020; Mota & Ferreira, 2019).

Adolescents living in a protective and stable environment tend to experience more positive feelings such as joy, perseverance, and satisfaction (Tehrani et al., 2024). Furthermore, in this phase of social expansion, parents

who have personality traits related to higher levels of agreeableness and cooperation may have a more pleasant experience when faced with these entries and exits from the family system, supporting each other in the process of redefining their care and in decisions regarding the care of the child who is seeking his/her autonomy. The more caregivers tend to invest in the co-parenting duo in terms of greater cooperation, the more available they are to care and encourage the development of social and emotional skills in their offspring (Euzebio & Mosmann, 2023).

This sample was mostly composed of parents with a high level of education, a variable that also impacts predictors of better mental health indices in children (Borges et al., 2023). This factor also appears to influence co-parental cooperation and the presence of symptoms in offspring, possibly reinforcing adaptive co-parenting practices and reducing risk factors for the development of emotional difficulties in adolescent children.

The personality and co-parenting characteristics of the sample showed a negative path when related to the psychological symptoms of adolescent children. Both to internalizing symptoms, characterized by emotional and relationship symptoms, and to externalizing symptoms, represented by conduct and hyperactivity symptoms (Youth In Mind, 2022). Therefore, co-parental cooperation and personality characteristics such as conscientiousness and agreeableness can help in the development of co-parental support and provide less exposure to co-parental conflict, thus hindering the development of clinical symptoms in offspring (Euzebio & Mosmann, 2023).

The aim of the study was to investigate the relationships between the personality of parents, co-parenting and psychological symptoms in adolescent children, as well as the mediating role of co-parenting. Structural Equation Modeling was used, which allowed to jointly relate dependent and independent variables and calculate the degree of prediction and mediation that exists between them (in the case of co-parenting).

The personality characteristics of parents had an impact on the psychological symptoms of adolescents, but to a greater extent on the constitution of the co-parenting relationship. In this case, co-parenting acted as a partial mediator between personality and psychological symptoms in adolescent children. Therefore, in addition to the individual sphere, it is necessary to pay attention to how caregiving dyads are constituted, since individual personality characteristics can reverberate in the organization and relationship of the dyad. The way this couple organizes their co-parenting relationship also has a positive or negative impact on the overall development of their adolescent children.

In clinical settings, it is necessary to address the insecurities and doubts of the couple and clarify issues related to the functioning of each parent and of adolescents. All of these actions can influence the co-parenting relationship by making it more balanced and engaged, and consequently, the influence offspring. Interventions with the parents in psychotherapy or in groups can also be used, because by

working with one or more members of the family, there is the possibility of contributing to the entire system.

A relevant limitation of the study was the composition of the sample, mostly of mothers with a high level of education. This characteristic may limit the generalization of results, since parents with a higher level of education often have more resources and knowledge to deal with challenges related to the mental health and development of their children. This situation may impact the identification of risk factors and the intensity of psychological symptoms in adolescents, which may be different in contexts of lower parental education. Future studies could benefit from including a more diverse sample, covering different levels of education, as well as socioeconomic status, age, and gender to provide a more complete understanding of the effects of co-parenting and other family variables on offspring development.

As positive points, we can mention the innovative nature in studying the possible influence of the personality of the parents in the co-parenting dyad and in the psychological symptoms of the adolescent children. In addition, the study presented as a result the positive interaction between the characteristics of co-parenting and personality of most parents in the sample by reinforcing the prosocial behaviors of adolescents, a relationship still little addressed in the existing literature.

In short, when parents establish solid co-parenting cooperation, they create an environment of harmony and support that is directly reflected in the positive social development of their children. This bond of collaboration and mutual respect offers adolescents a model of healthy and safe social interaction, thus strengthening their abilities to act with empathy, responsibility and cooperation in their own relationships.

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Larissa Enriconi Benini is a Scientific initiation scholarship holder PIBIC- CNPq of the Universidade do Vale do Rio dos Sinos, São Leopoldo-RS, Brazil.

Luiza Dalla Corte Euzebio is a Ph.D. Student of the Universidade do Vale do Rio dos Sinos, São Leopoldo-RS, Brazil.

Clarisse Pereira Mosmann is a Professor of the Universidade do Vale do Rio dos Sinos, São Leopoldo-RS, Brazil.

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