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# Like Parent, Like Child? Exploring the Longitudinal Effect Between Personality Similarity and the Quality of Parenting

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## Abstract

Personality similarity-hypothesis has not been put to the test with longitudinal wave-data before. This study investigates the temporal aspects of personality similarity and its implications for parenting qualities. I aim to explore if an individual's personality similarity with their parents at an earlier time point can predict higher levels of child well-being, attachment style, and relationship quality with parents at a later time point. Data was collected from children, mothers, and fathers, with instruments including: FFPI, HiPIC, PPQ, NRI-RQV, ECR-S, PANAS, and SWLS. Random-Intercept Cross Lagged Panel Model showed that there was no effect between personality similarity and parental quality. However, both variables showed stability throughout the nine year span. Partial Correlations indicated no personality similarity influence apart from child-father dyads on avoidant attachment style and life satisfaction. Future research should take into account other personality similarity conversions and the potential redundancy of using personality similarity. Understanding the stability of personality traits and their impacts on parenting aids in developing interventions that adapt parenting styles to children's inherent traits rather than attempting to modify these traits.

*Keywords:* Personality similarity, relationship quality, parenting, subjective well-being, Big Five

**Like Parent, Like Child? Exploring the Longitudinal Effect Between Personality Similarity and the Quality of Parenting**

Despite previous research highlighting the dynamic and bidirectional nature of parent-child interactions (Collins et al., 2000), the specific influence of personality similarity on parenting quality remains unexplored. While previous studies have shown that personality similarity between adolescents and their parents is associated with reduced behavioral problems and increased emotional closeness (Heijkoop et al., 2009; Loehlin et al., 2010; van Tuijl et al., 2005), these investigations have not developed causal inferences between personality similarities and parenting quality. Nonetheless, research indicates that parental personality influences parenting dimensions such as warmth, behavioral control, and autonomy support, affecting child outcomes (Prinzie et al., 2009). It is crucial to understand that while correlations between personality similarity and child outcomes are documented, the mechanisms through which these similarities influence specific parenting practices have not been directly examined. The first part of this study seeks to address this gap by longitudinally examining the role of personality similarity between child-mother and child-father dyads in shaping parenting quality.

Significant research has substantiated the enduring stability and predictive validity of both personality (Roberts & DelVecchio, 2000) and attachment styles (van IJzendoorn, 1995) across the lifespan (Fraley, 2002; Waters et al., 2000). These are vital for predicting overall well-being (Brezo et al., 2006; Carnelley et al., 1994; Waters et al., 2010) and relationship outcomes during upbringing as well as for the remainder of life (Feeney & Noller, 1990; Marušić et al., 2007). A foundational concept in attachment theory suggests that early child-parent relationships form the basis for future social relationships, shaping individuals' internal working models (Ainsworth et al., 2015; Hazan & Shaver, 1987). These internal working models are significantly affected by the quality of parenting experienced. Therefore, the second part of this study will investigate how personality similarity between child-parent dyads influence the subsequent development of relationship quality with parent, attachment styles, and well-being. Personality similarity, their influence on parenting quality, and their long-term effects on children's attachment styles, well-being, and relationship quality with parents will provide a deeper understanding of the dynamics in the most intimate social environment (Vrolijk et al., 2022).

**Personality similarity and parenting**

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The studies previously done on personality similarity have been investigated through romantic relationship dyads (Gaunt, 2006; Gattis et al., 2004; Luo & Klohnen, 2005; Nemechek & Olson, 1999; Robins et al., 2000). Comparing personality traits like neuroticism in spouses has revealed differences in marital quality (Ben-Ari & Lavee, 2005; Bouchard et al., 1999). Marital quality is higher when both spouses have low neuroticism, while mixed neuroticism pairs report lower quality. One study found that while similarity in personality domains correlates with marital satisfaction, similarity in values, attitudes, and religiosity does not (Luo & Klohnen, 2005). Furthermore, longitudinal studies indicate that couples tend to maintain their personality similarities over time (Caspi et al., 1992). However, couples who become more alike in personality after one year of marriage tend to maintain or increase relationship quality, while those who diverge experience decreased quality (Gonzaga et al., 2007). This suggests that similarity in personality predicts greater relationship quality in romantic relationships.

Previous research on personality similarity between child and parent is sparse. This gap exists despite the acknowledgment within the ecological approach to parenting that parent-child interaction is a dynamic and bidirectional system (Collins et al., 2000). Personality similarity between adolescents and their parents is linked to reduced internalizing and externalizing behaviors, greater emotional closeness, and less perceived restrictive control (Heijkoop et al., 2009; Loehlin et al., 2010; van Tuijl et al., 2005). This concept aligns with the 'goodness of fit' theory, which posits that when adolescent traits align with parental expectations, it enhances development, whereas mismatches can lead to adjustment challenges (Lerner, 1984; Seifer, 2000). Additionally, differential parental treatment affects child adjustment beyond general parenting effects (Dunn & Plomin, 1990; McGuire, 2003). Research also shows that siblings who resemble their mother more closely tend to receive more autonomy support, especially at the between-family level, highlighting the nuanced benefits of personality alignment within family dynamics (Vrolijk et al., 2022). Notably, no significant effects were observed regarding fathers' differential autonomy support.

Most research focuses on a parent-centered approach, leaving us with limited knowledge about children's behavior in interactions with parents. Warmth in parenting, often termed responsiveness, is the degree to which parents nurture individuality, self-regulation, and self-assertion by being attentive, supportive, and responsive to the child's unique needs (Baumrind, 1991). Higher levels of Extraversion, Agreeableness, Conscientiousness, Openness, and lower levels of Neuroticism proved related to the parenting dimension of warmth (Prinzie et al., 2009). While we can analyze the effects of parental personality traits

on parenting, similar conclusions cannot be drawn for the effects of child traits on children's behavior in interactions. It is unclear whether analogous traits in parents and children manifest similarly during interaction or have comparable influences on each other.

**Parent-child dynamics and Attachment development**

A foundational concept in attachment theory posits that early child-parent relationships serve as prototypes for subsequent social relationships (Waters et al., 1991; Zimmermann, 2004). Experiences from prior attachments to significant others serve as the foundation for internal cognitive structures referred to as 'working models' (Ainsworth et al., 2015; Hazan & Shaver, 1987). These models play a pivotal role in shaping individuals' expectations and beliefs related to past, present, and future social interactions. Children with consistent, caring caregivers develop secure attachments and seek comfort when distressed (Ainsworth et al., 2015). Inconsistent or inadequate care leads to insecure attachments, with children struggling to find comfort or self-soothing. New experiences, such as forming attachments with different figures later in life (e.g., close friends, romantic partners), can gradually reshape an individual's internal working models and their attachment security (Fraley et al., 2004). However, it is important to note that early attachment patterns exert unique and enduring effects on later adult outcomes. For instance, individuals who had secure childhood attachments tend to experience and express more positive emotions during conflicts with their romantic partners in early adulthood (Simpson et al., 2007).

Beyond influencing individual personality traits longitudinally (Young et al., 2019), child-parent relationships contribute to subsequent patterns of family organization, playing a role in the intergenerational transmission of family attachment patterns (Verhage et al., 2016). Much of the research in adult attachment operates under the assumption of parallel individual differences in infant and adult attachment patterns and representations (Hazan & Shaver, 1987; Mikulincer & Shaver, 2007). However, the source of confusion within the literature on adult attachment can be attributed to the discrepancies in the prototype hypothesis - whether early experiences serve as prototypes for subsequent relationships (Crowell et al., 1999). It is essential to clarify these differences to understand better the origins of adult attachment patterns, and the structure of the attachment system in adulthood. Developmental psychology theorized that the representations that form during childhood are merely explained by attachment-related experiences (Bowlby, 1982). This interplay that occurs between children's needs and parental care has been the social-environmental setting in which an individual´s

personal feelings and behavior toward relationships form, but there is a gap in the knowledge of where attachment experiences stem from.

**Personality traits and their associations with well-being and attachment**

The interactions between parental personalities and child personalities could however explain the previously mentioned experiences and interplays because of the scientific associations between attachment and personality. Previous research suggests that, although attachment dimensions assessed via self-reports share variance with Five-Factor personality traits, they are not redundant (Becker et al., 1997; Bäckström & Holmes, 2001; Griffin & Bartholomew, 1994; Roisman et al., 2007; Shaver & Brennan, 1992). While consensus exists on Extraversion, Agreeableness, Conscientiousness, and Emotional Stability, debate surrounds the fifth factor, with labels such as Intellect, Openness to Experience, and Creativity or Imagination used (De Raad & van Heck, 1994; Hendriks et al., 1999; Perugini & Ercolani, 1998; Rodríguez-Fornells et al., 2001). FFPI-Autonomy aligns with personal autonomy, correlating with various traits and behaviors, including cognitive/intellectual activity and situational exploration (Perugini & Ercolani, 1998; Rodríguez-Fornells et al., 2001; Verplanken & Herabadi, 2001).

Integrating two major attachment dimensions (anxious and avoidant attachment) into five-factor models of personality raises questions about their relationship with the five factors. For example, studies found that the anxiety dimension correlated approximately .42 with neuroticism, while avoidance correlated approximately -.22 with agreeableness (Noftle & Shaver, 2006). In uncontrolled survey studies, attachment variables tend to outperform the big five trait variables in predicting relationship outcomes (Noftle & Shaver, 2006; Shaver & Brennan, 1992). The reason might be because traits are general whereas attachment styles are relationship specific. Despite the conceptual coherence between attachment and Big Five traits, empirical evidence validating this connection remains elusive. By specifying the scope for research on personality in social settings, the current study could come closer to explaining how a disparity between individual Big Five traits and the Big Five of the social environments can lead to different levels of well-being.

**The Current Study**

Current research on personality similarity between children and parents lacks both depth and robust methodologies required to establish causal relationships. This deficiency underscores the need for comprehensive longitudinal studies to fill this critical gap and enhance our understanding of how personality congruence affects parenting dynamics and

child development. The primary objective of this study is to explore personality similarity between child-mother and child-father dyads at different time points of measurement within a longitudinal framework. Understanding if these personality similarities change over time can provide valuable insights into the dynamics of parent-child relationships. This research question extends our investigation into the temporal aspects of personality similarity and its implications for parenting qualities. By elucidating the temporal stability of personality similarity, we can gain deeper insights into the long-term effects of parent-child dynamics on individual development and relationship dynamics.

The second part of the study aims to investigate for the first time whether an individual's similarity with their parents' personality traits at an earlier time point explains higher levels of child well-being, attachment style, and relationship quality with parents at a later time point. Additionally, personality similarity will be compared with individual differences for mothers, fathers, and children. This leads to an understanding of how the disparity of one´s personality traits and those of the social environment affects aspects of well-being, relationship quality, and attachment style.

## Research Questions

1. How do parent-child personality similarities influence parenting qualities (warmth/involvement and reasoning/induction) longitudinally and vice versa?
2. How much does personality similarity explain the child's level well-being, attachment, and relationship quality with parents in later years?

## Method

### Participants

This study is part of the ongoing Flemish Study on Parenting, Personality, and Development , which consists of ten waves spanning from 1999 to 2022. The child sample consists of 49% females whereas the parents sample consists of 52% mothers. The socioeconomic status of the family sample consists of 12% upper class, 79% middle class, and 9% lower class. Ethical approval for the study procedures was obtained from the Katholieke Universiteit Leuven (OT 98/12 ZKA 2922). The original study sample was randomly selected from 167 schools in Flanders, Belgium, and participants provided written informed consent. The first part of the study utilized data from three waves: Wave 4 (measured 2004) with an average age of 11 years, Wave 5 (measured 2007) with an average age of 14 years, and Wave 6 (measured 2009) with an average age of 16 years, encompassing a total of 889 families. The second segment employed data from Wave 9 (measured 2018),

which included participants with a mean age of 25 years from 367 families. A detailed description of the study's design and participant recruitment can be found in a prior publication (See Prinzie et al., 2003).

**Instruments**

The current study will utilize a cross-sectional design and a longitudinal design, leveraging the established methodologies of prior research on personal relationships. All measurements have their specific reliability values from this study presented in table 3 and tables 5,6,7,8 in the appendix. All measurements have been utilized for self-assessments and completed in separate individual environments.

*Five-Factor Personality Inventory*

The measurements for adult personality used were the Five-Factor Personality Inventory (FFPI; Hendriks et al., 1999). Measuring the factors Autonomy, Emotional Stability, Conscientiousness, Extraversion, and Agreeableness. The previous reliability coefficients for the personality traits ranged as follows: Extraversion varied from $\alpha = .82$ to $\alpha = .87$ ($M = .85$), Agreeableness from $\alpha = .80$ to $\alpha = .89$ ($M = .83$), Conscientiousness from $\alpha = .78$ to $\alpha = .87$ ($M = .84$), and Emotional Stability from $\alpha = .81$ to $\alpha = .88$ ($M = .85$). Autonomy showed the lowest values, ranging from $\alpha = .74$ to $\alpha = .84$ with an average of $\alpha = .80$ (Hendriks et al., 2003). Ratings were recorded on a 5-point Likert scale, ranging from "much less than others" to "much more than others" answering statements such as "loves to chat".

*Hierachical Personality Inventory for Children*

To measure child personality, the study used Hierarchical Personality Inventory for Children, which also measures the Five Factors of Personality (HiPIC; Mervielde & de Fruyt, 1999). This scale is typically used for rating children's personality provided by parents. However, this study only used self-rated data. Three HiPIC domains—Extraversion, Conscientiousness, and Emotional Stability—align closely with adult FFM dimensions. The Benevolence domain, conceptually similar to Agreeableness, spans broader behaviors such as Dominance and Compliance, linking to the temperament concept of the 'easy-difficult child' (de Fruyt et al., 2000). The Imagination domain combines creativity and curiosity with intellect, bridging Openness and Intellect traits from adult models. Studies have verified the robust psychometric properties of the HiPIC in both clinical and general populations, with domain and facet reliabilities generally exceeding $\alpha = .80$ (Mervielde & Asendorpf, 2014;

van Leeuwen et al., 2004). Ratings were recorded on a 5-point Likert scale, answering statements such as "wants to shine at everything".

***Parenting Practices Questionnaire***

The Parenting Practices Questionnaire (PPQ; Robinson et al., 1995) utilizes a 5-point Likert scale ranging from "Never" to "Always" to measure how often a parent exhibits a certain quality. This 62-item measure achieves high internal reliability, with Cronbach's alpha ranging from $\alpha = .75$ to $\alpha = .91$ across different domains. Notably, the questionnaire identifies specific qualities within each parenting style, such as "Warmth/Involvement" and "Reasoning/Induction," contributing nuanced insights into parenting dynamics. Examples of items are: "Gives comfort and understanding when child is upset" for Warmth/Involvement and "Explains the consequences of the child's behavior" for Reasoning/Induction.

***Network of Relationships Inventory - Relationship Qualities Version***

The measurement used for relationship quality with parents (support, satisfaction, conflict, and antagonism) is called Network of Relationships Inventory - Relationship Qualities Version (NRI-RQV; Furman & Buhrmester, 2004). Ratings were recorded on a 5-point Likert scale, answering statements such as "How much do you seek out this person when you're upset?". Psychometric analyses from previous studies revealed that the internal consistencies of the scale scores were satisfactory, $\alpha = .80$ (Furman & Buhrmester, 1985)

***Experiences in Close Relationship Scale - Short Form***

For attachment, the measurement used was the Experiences in Close Relationship Scale - Short Form (ECR-S; Wei et al., 2007). This tool captures attachment-related anxiety and avoidance using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) answering statements such as "I prefer not to show a partner how I feel deep down" for avoidance, and "I worry about being abandoned" for anxiety. It demonstrates strong reliability, with Cronbach's alpha typically reported around $\alpha = .91$ for anxiety and $\alpha = .94$ for avoidance, affirming its robustness as a measure of attachment dimensions.

***Positive and Negative Affect Schedule***

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) is a psychometric scale developed to assess two broad dimensions of subjective well-being: positive affect (PA) and negative affect (NA). Each dimension is measured using 10 words describing moods which are rated on a 5-point Likert scale from 1 (very slightly or not at all) to 5 (extremely). Examples of items are "Interested" for PA and "Irritable" for NA. The scale is known for its reliability, with Cronbach's alphas typically ranging from $\alpha = .86$ to $\alpha = .90$

for PA and from α = .84 to α = .87 for NA, reflecting consistent and robust measurement of affective states.

### The Satisfaction with Life Scale

The Satisfaction with Life Scale (SWLS; Diener et al., 1985) is a widely used instrument designed to measure global cognitive judgments of one's life satisfaction. The scale consists of five items that participants rate using a 7-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). Examples of items are "I am satisfied with my life" and "The conditions of my life are excellent". It has strong psychometric properties, including high internal consistency and temporal stability, with a typical Cronbach's alpha reported around α = .87. The scale's validity and reliability across different groups and cultures make it a robust tool for assessing subjective well-being.

## Statistical Designs

Upon initiating the statistical examination of the dataset, the first step will be to perform exploratory data analysis. Descriptive statistics will be calculated for all variables, including means, standard deviations, and ranges. This preliminary step will help understand the general trends within the dataset and identify any anomalies or outliers that may require special attention.

### General Personality Similarity

Next, I will focus on the core of our analytical approach: the calculation of personality similarity. This process involves assessing the Big Five personality traits collected via the HiPIC and FFPI, and then standardizing in z-scores for comparability. For each dyad, I calculate absolute differences for each Big Five trait, reflecting how similar each trait is between the parent and child. Averaging these differences yields a *General Personality Similarity* score for each dyad, encapsulating the overall personality trait similarity (Furr, 2008). The following analyses will then utilize these composite scores as independent variables. A smaller absolute difference indicates that the parent and child have more similar scores for that trait, meaning their personality trait expressions are closely aligned relative to the average of my sample. For example, an absolute difference of 0.2 suggests that the parent and child are very similar in that specific trait, differing by only a fifth of a standard deviation from each other. Conversely, a larger absolute difference suggests greater dissimilarity between the parent and child concerning that trait. A difference of 1.5 indicates that their scores are 1.5 standard deviations apart, signifying a notable divergence in that personality trait between the parent and child.

***Longitudinal Models***

        In this study, Cross-Lagged Panel Models (CLPM) and Random Intercept Cross-Lagged Panel Models (RI-CLPM) were employed to examine how parent-child general personality similarities influence parenting qualities across waves 4 (2004), 5 (2007), and 6 (2009), acknowledging the potential for changes within these dyads. The use of CLPM (Figure 3 and 4 in Appendix) helps to clarify whether observed relationships are consistent across different time points, providing a simplified longitudinal framework to test theories of personality influence and developmental outcome interactions. However, the CLPM will only be used as a comparative model and therefore presented in the appendix whereas the RI-CLPM will be presented in the results. The models will incorporate *Autoregressive* or *Lagged dependent variable* path effects, representing the stability of each variable across time. In both models, the lagged dependent variables serve as controls for past levels of the variables of interest, thereby helping to mitigate potential estimation issues arising from omitted variable bias (Morgan & Winship, 2015). These controls are crucial for ensuring that the temporal sequence of personality and parenting qualities is accurately modeled, reflecting the developmental processes over time without overestimating the influence of past values on current outcomes.

        The inclusion of *Cross-lagged* path effects is pivotal in our study, allowing for a rigorous examination of the directional influences between personality similarity and parenting quality across time. As outlined in academic methodologies (Zyphur et al., 2020), these effects assess how prior values of one variable can predict future values of another, thereby establishing temporal precedence and potential causality. This methodological approach addresses the dynamic interactions between variables, crucial for hypothesizing about changes in parenting practices as influenced by shifts in personality alignment over time.

        Error terms and the covariance among variables are integral in understanding the simultaneous influences and shared variability in longitudinal studies. These components help to delineate the person-specific or event-specific effects that impact multiple variables concurrently, known as co-movement (Zyphur et al., 2020). For instance, significant life events like moving out, divorce, or loss can influence both personality and parenting qualities simultaneously, leading to contemporaneous changes in these measures. In my analysis, I model this phenomenon by including covariance terms among the residuals of the variables within the same time point. This approach recognizes that not all variations can be attributed directly to causal influences between the studied variables.

This approach allows the investigation of potential reciprocal causality—exploring not only how personality similarities might affect parenting qualities but also how these parenting behaviors might influence personality traits over time. The addition of random intercepts in RI-CLPM (Figure 1 and 2) addresses the issue of homogeneity and reduces bias by accounting for individual differences that persist over time (Hamaker et al., 2015). This model refinement is essential for handling endogeneity issues—where correlations between independent variables and unexplained variations in dependent variables may introduce bias. Specifically, this model adjusts for autocorrelation within error terms, clarifying the impacts of personality and parenting across time without conflating these with unmodeled latent variables. By allowing the intercepts to covary, I acknowledge that these stable differences may be correlated between the variables measured across different time points.

RI-CLPM allows us to separate the effects of variables into within-person and between-person components. This distinction is crucial because it helps us understand how much of the variation in our dependent variables is due to changes within the same individual over time versus differences between different individuals. By incorporating random intercepts, RI-CLPM controls for any unobserved, stable traits that might influence the observed relationships. This reduces the bias that can occur in standard CLPM where such stable traits might be erroneously interpreted as time-specific effects.

Within-Person Variation refers to changes that occur within an individual over time. For example, how changes in a child's personality similarity with their father from one time point to the next might influence changes in the father's parenting quality at subsequent times. Between-Person Variation captures the differences between individuals that are consistent over time. For example, it allows us to examine how individuals who generally have higher levels of personality similarity with their father differ in their experiences of paternal parenting quality compared to those with consistently lower similarity.

Our CLPM/RI-CLPM may not control for other confounding variables that could influence the outcomes, such as socioeconomic status, age, gender of child, or other contextual influences that vary across individuals and over time. This limitation is partly because the inclusion of too many control variables can complicate the model and obscure the specific effects being studied. Moreover, each additional variable requires more data and computational power and can introduce its own set of complexities, potentially leading to overfitting or multicollinearity issues. Nonetheless, without having to control for gender of parent, I will incorporate two RI-CLPM and two CLPM which models general personality similarity between child-mother dyads and child-father dyads separately. Additionally, the

specific dyad will be modeled together with the specific parental quality for respective parent. For instance, child-mother dyads will be modeled together with maternal parental quality.

### *Partial Correlations*

The second research question assessed how the Big Five personality traits influence the dynamics between parental qualities and the late life outcomes; subjective well-being, attachment styles, and relationship quality with parents. This was made through partial correlational analyses using Jamovi (The Jamovi Project, 2024). Initial relationships were determined through zero-order correlations, and more nuanced analyses sequentially introduced controls for child-specific and parent-specific traits, as well as dyadic dynamics. This hierarchical method enabled a detailed examination of the unique effects of personality traits on observed relationships. For instance, if the initial correlation between parental warmth and child life satisfaction was ($r = .25$) and then reduced to $r = .16$ after controlling for paternal traits, it would reflect a 59% decrease in explained variance. Guidelines for effect sizes in individual differences research were followed to categorize the strength of the observed correlations (Gignac & Szodorai, 2016). The decrease will illustrate the profound impact of familial personality on relationship quality, attachment and well-being. No control for sex and age was applied through residualization, which involves statistically removing the effects of these variables to focus solely on the influence of personality traits. This method highlights the study's emphasis on exploring individual differences attributed to personality, isolating its effects from other demographic factors.

### Analysis

I will implement the CLPM using R (4.3.3; R Core Team, 2020) and the Lavaan package that specializes in structural equation modeling. In this study, missing data were addressed using Full Information Maximum Likelihood (FIML). FIML is advantageous as it uses all available data points to estimate model parameters, thereby reducing potential biases associated with missing data in complex models involving multiple time points and variables (Berry & Willoughby, 2017). To assess the goodness of fit of our CLPM, I will consider several fit indices. These include the Chi-square statistic for overall model fit, the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) for relative fit, and the Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) for residual errors. Acceptable fit is typically indicated by CFI and TLI values close to or above .95, and RMSEA and SRMR values below .06 (Hu & Bentler, 1995). The results from the CLPM will be interpreted to understand the directional relationships

between parent-child personality alignment and parenting qualities. This analysis will contribute to our understanding of the long-term impacts of personality alignment in parent-child relationships.

## Results

**Descriptive statistics**

Across waves 4, 5, and 6, I observed the Big Five personality traits and parenting qualities (See tables 5,6,7, and 8 in appendix). For personality traits such as Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Autonomy, mean scores were consistent, typically ranging between 3.4 and 4.0 on a scale up to 5, indicating a moderate to high level of these traits in parents and children. The standard deviations were relatively tight, generally around .40 to .60, suggesting a relatively homogenous sample in terms of personality. These personality traits are the basis for General Personality Similarity conversion. Parenting qualities such as warmth/involvement and reasoning/induction showed mean scores fluctuating slightly across waves but remained within a similar band, indicating consistent parenting approaches over time. For instance, warmth/involvement and reasoning/induction reported means consistently above 3.0, pointing towards generally positive parental behavior.

**Table 1**

*Descriptive table of participants' ages in months*

| Age (months) | Gender | N | Missing | Mean | SD | Minimum | Maximum |
|---|---|---|---|---|---|---|---|
| Wave 4 | boys | 437 | 3 | 129 | 13.7 | 102.0 | 165 |
| | girls | 452 | 3 | 130 | 14.1 | 95.0 | 160 |
| Wave 5 | boys | 437 | 3 | 165 | 13.7 | 138.0 | 201 |
| | girls | 452 | 3 | 166 | 14.1 | 131.0 | 196 |
| Wave 6 | boys | 437 | 3 | 189 | 13.7 | 162.0 | 225 |
| | girls | 452 | 3 | 190 | 14.1 | 155.0 | 220 |
| Wave 9 | boys | 160 | 280 | 299 | 13.4 | 275.0 | 327 |
| | girls | 207 | 248 | 298 | 13.7 | 272.0 | 326 |

*Note.* Mean age in years: Wave 4 (measured 2004) - 11 years, Wave 5 (measured 2007) - 14 years, wave 6 (measured 2009), and wave 9 (measured 2018) - 25 years.

Reliability for both personality and parenting quality measures was high across all waves, with Cronbach's alpha values predominantly above $\alpha = .80$ (See "Reliability $\alpha$" in

table 3, and tables 5, 6, 7, 8 in appendix), reflecting a strong internal consistency within each construct measured. Correlations between study variables are presented in Table 2. These descriptive insights set a foundation for further analyses of how these variables interact and influence each other over time, contributing to our comprehensive understanding of family dynamics and developmental outcomes.

As shown in Table 3, the study variables in Wave 9 encompassed the Big Five personality traits, relationship quality with parents, attachment styles, and subjective well-being. The sample consisted of 360 individuals with a notable number of missing observations. The Big Five traits—Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Autonomy—had mean scores ranging from 3.44 to 4.02, suggesting moderate to high levels of these traits within the sample. The reliability of these measures was satisfactory, with Cronbach's alpha ranging from $\alpha = .74$ to $\alpha = .88$.

In terms of relationship quality, both mothers and fathers scored high on satisfaction (mean above 3.86), with mother-child relationships slightly higher on average. Parental support also showed variability, especially from fathers, with mean scores of 3.19 for mothers and 2.58 for fathers. Both antagonism and conflict dimensions had lower mean scores, indicating less frequent negative interactions. Attachment styles showed a mean of 2.72 for

**Table 2**

*Correlation matrix for all variables in Study 1*

|  |  | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wave 4 | 1. PS with mother | — | | | | | | | | | | | |
| | 2. PS with father | .34*** | — | | | | | | | | | | |
| | 3. PPQ mother | .00 | .02 | — | | | | | | | | | |
| | 4. PPQ father | .06 | -.03 | .35*** | — | | | | | | | | |
| Wave 5 | 5. PS with mother | .41*** | .12* | -.05 | .04 | — | | | | | | | |
| | 6. PS with father | .20*** | .28*** | .05 | .01 | .25*** | — | | | | | | |
| | 7. PPQ mother | .05 | .07 | .56*** | .21*** | .08 | .08 | — | | | | | |
| | 8. PPQ father | .02 | .03 | .19*** | .56*** | -.02 | -.04 | .23*** | — | | | | |
| Wave 6 | 9. PS with mother | .26*** | .16** | -.08 | -.01 | .50*** | .25*** | .03 | -.03 | — | | | |
| | 10. PS with father | .11* | .24*** | .06 | .05 | .13* | .53*** | .02 | -.03 | .36*** | — | | |
| | 11. PPQ mother | .01 | .05 | .60*** | .21*** | .00 | .03 | .67*** | .14** | -.06 | -.02 | — | |
| | 12. PPQ father | .08 | -.02 | .27*** | .54*** | .02 | -.03 | .23*** | .58*** | .01 | -.04 | .21*** | — |

*Note.* * *p*<.05, ** *p*<.01, *** *p*<.001. PS = Personality Similarity, PPQ = Parental Quality.

avoidance and 3.57 for anxiety, on scales that extended to 7 and above 6, respectively, with reliabilities of .86 and .74.

For well-being, life satisfaction was relatively high with a mean of 5.14, while positive and negative affects showed mean scores of 3.42 and 1.97, respectively, indicating a balance skewed towards more positive affective states in the sample. The reliabilities for these well-being measures were strong, all above α = .84.

**Table 3**
*Descriptives from study variables in wave 9*

| Variable | Dimension | N | Missing | Mean | SD | Minimum | Maximum | Reliability (α) |
|---|---|---|---|---|---|---|---|---|
| Big Five | Extraversion | 360 | 539 | 3.55 | .58 | .75 | 4.75 | .88 |
| | Agreeableness | 360 | 539 | 4.02 | .42 | 1.95 | 4.99 | .78 |
| | Conscientiousness | 360 | 539 | 3.57 | .50 | 2.00 | 4.80 | .82 |
| | Emotional Stability | 360 | 539 | 3.61 | .57 | 1.75 | 4.90 | .87 |
| | Autonomy | 360 | 539 | 3.44 | .45 | 2.35 | 4.90 | .74 |
| RQ Mother | Satisfaction | 322 | 577 | 4.09 | .81 | 1.00 | 5.00 | .96 |
| | Support | 322 | 577 | 3.19 | 1.03 | 1.00 | 5.00 | .92 |
| RQ Father | Satisfaction | 318 | 581 | 3.86 | .88 | 1.00 | 5.00 | .95 |
| | Support | 318 | 581 | 2.58 | .91 | 1.00 | 5.00 | .89 |
| Attachment | Avoidance | 346 | 553 | 2.72 | 1.31 | 1.00 | 7.00 | .86 |
| | Anxiety | 344 | 555 | 3.57 | 1.16 | 1.00 | 6.33 | .74 |
| Well-being | Life Satisfaction | 344 | 555 | 5.14 | 1.13 | 1.00 | 7.00 | .84 |
| | Positive Affect | 343 | 556 | 3.42 | .65 | 1.20 | 5.00 | .89 |
| | Negative Affect | 343 | 556 | 1.97 | .68 | 1.00 | 4.30 | .87 |

*Note.* RQ=Relationship Quality, α = Cronbach's Alpha

**Longitudinal Effects of Personality Similarity between Child-parent Dyads and Parenting Qualities**

The analysis of the RI-CLPM (Figure 1) incorporating latent variables for random intercepts of General Personality Similarity and Parenting Quality in mother-child dyads demonstrated an excellent fit ($\chi^2(1) = 0.733$, $p = .392$; RMSEA = 0.000, 90% CI [0.000, 0.124]; CFI = 1.000; TLI = 1.007; SRMR = 0.007). Significant autoregressive paths were observed for General Personality from Wave 4 to Wave 5 ($\beta = .30$, $p = .001$) and from Wave 5 to Wave 6 ($\beta = .35$, $p = .002$), indicating a moderate stability in personality traits over time. However, autoregressive effects within Parenting Quality were not significant, suggesting less stability in this construct over the study period.

Cross-lagged effects indicated a minimal yet statistically significant influence of General Personality at Wave 4 on subsequent Parenting Quality at Wave 5 ($\beta = .10$, $p = .042$). However, subsequent effects from Wave 5 to Wave 6 were non-significant ($\beta = .05$, $p = .387$). The influence of Parenting Quality on General Personality Similarity was also explored, showing no significant predictive effects across the waves, indicating that variations in Parenting Quality do not predict changes in General Personality within the observed timeframe.

The covariance between the random intercepts of General Personality and Parenting Quality was non-significant ($\beta = -.18$, $p = .346$), suggesting that the latent constructs are influencing their respective measures independently, without significant overlap across time. This is further supported by the minimal and mostly non-significant observed residuals between General Personality and Parenting Quality at each wave, underscoring the distinct developmental trajectories of these constructs.

These findings highlight the stability and individuality of General Personality traits across time in mother-child interactions and suggest complex, yet limited influences of these traits on the dynamics of Parenting Quality. The robust model fit indices and the specificity of the cross-lagged influences underscore the nuanced relationships within mother-child dyads, emphasizing the potential for targeted interventions that consider the stability of personality traits and their subtle influences on parenting practices.

**Figure 1**

*RI-CLPM with estimates for child-mother dyads*
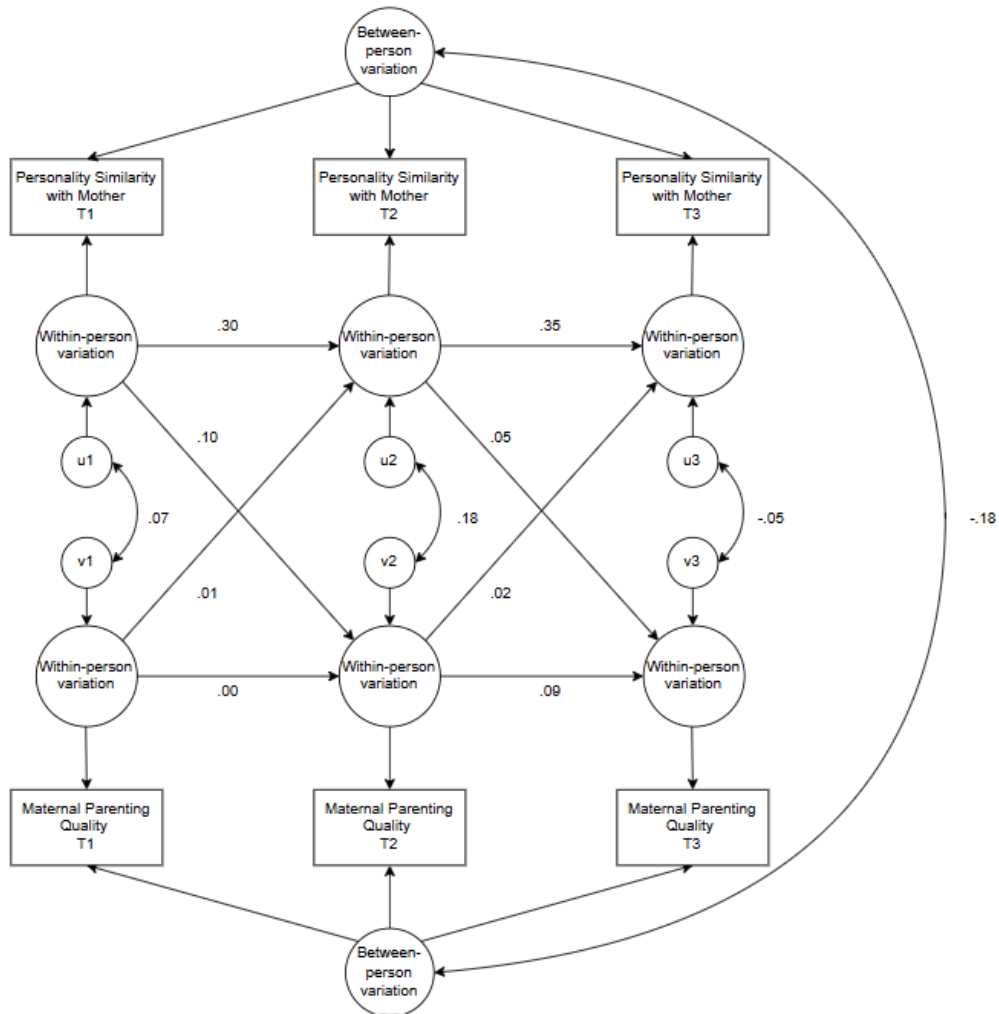


*Note.* Arrows between within-person variation on the same rows are autoregressive paths. Diagonal paths represent cross-lagged paths. The latent factors make up the random-intercepts which account for between-person variation. u and v = error terms. The double headed arrows indicate covariance. Covariance between error terms will account for the same co-movement whereas covariance between random intercepts account stable individual differences that may be correlated between the variables measured across different time points.

In the second RI-CLPM (Figure 2) examining the dynamic interactions between father-child personality similarity and parenting quality in father-child dyads, the model demonstrated a good fit ($\chi^2(1) = 2.405$, $p = .121$; RMSEA = 0.051, 90% CI [0.000, 0.132]; CFI = 0.996; TLI = 0.947; SRMR = 0.013). The model revealed significant autoregressive paths within father-child personality similarity from Wave 5 to Wave 6 ($\beta = .38$, $p < .001$), indicating moderate stability across these waves. However, the autoregressive path from

Wave 4 to Wave 5 was not significant ($\beta = .12$, $p = .158$). Parenting quality also showed stability with non-significant autoregressive effects from Wave 4 to Wave 5 ($\beta = .02$, $p = .711$) and from Wave 5 to Wave 6 ($\beta = .00$, $p = .957$).

Cross-lagged effects demonstrated minimal and non-significant influences between father-child personality similarity and parenting quality. Specifically, the influence from personality similarity at Wave 4 on parenting quality at Wave 5 was not significant ($\beta = .02$, $p = .753$), and neither was the effect from Wave 5 to Wave 6 ($\beta = -.05$, $p = .378$). Reciprocal effects from parenting quality on subsequent personality similarity were also non-significant, with minimal influence from Wave 4 to Wave 5 ($\beta = -.02$, $p = .762$) and from Wave 5 to Wave 6 ($\beta = -.03$, $p = .625$).

Correlations between the residuals of personality similarity and parenting quality at each wave were not significant, indicating minimal direct interaction between these constructs at each wave (Wave 4: $\beta = -.06$, $p = .405$; Wave 5: $\beta = -.10$, $p = .224$; Wave 6: $\beta = -.08$, $p = .466$). The association between the latent variables for random intercepts of personality similarity and parenting quality was also non-significant ($\beta = .06$, $p = .719$), suggesting that these constructs are independently influencing their respective measures across time without significant overlap.

These results indicate that while father-child personality similarity and parenting quality show stability over time, their inter-relationships do not demonstrate consistent directional influences across the time points studied. The analysis highlights the complexity of the relationships between these constructs in father-child interactions, showing that while they remain stable over time, their interactions are not strongly predictive of each other's subsequent measures.

**Figure 2**

*RI-CLPM with estimates for child-father dyads*
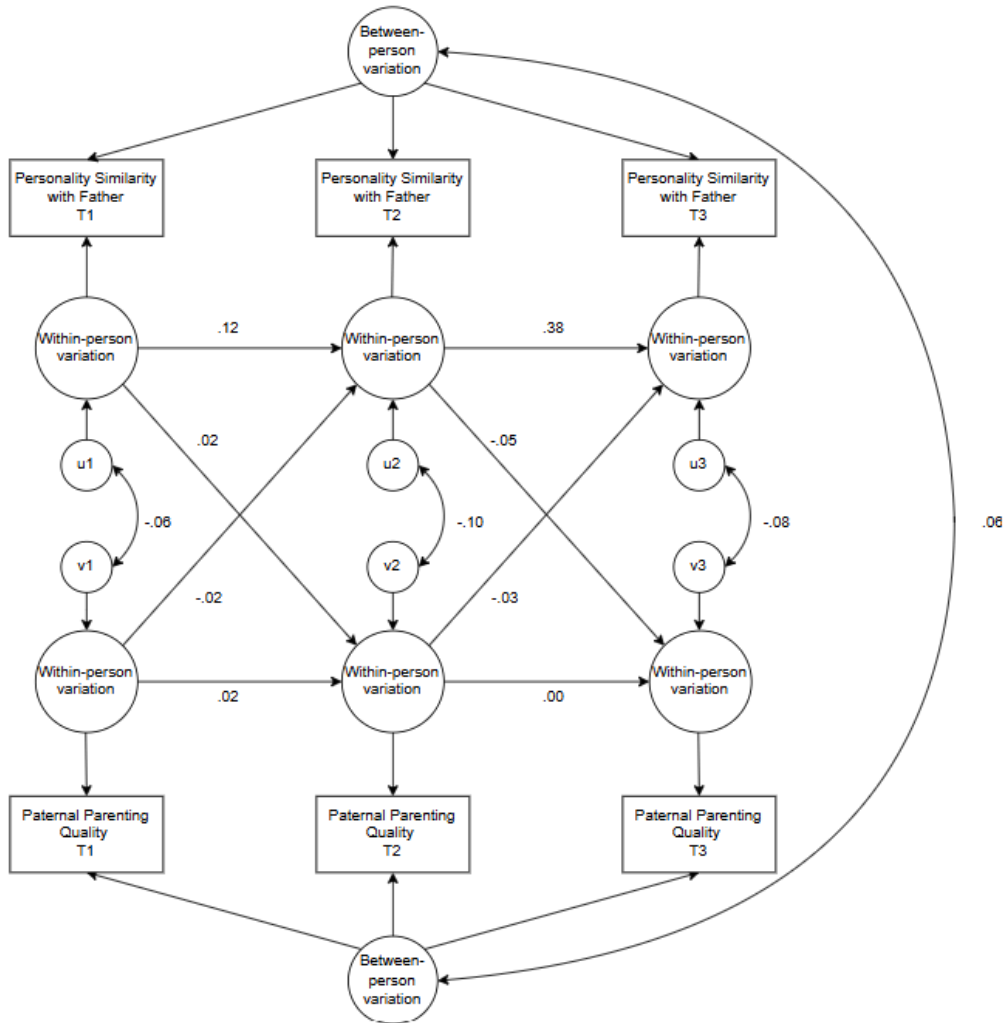


*Note.* Arrows between within-person variation on the same rows are autoregressive paths. Diagonal paths represent cross-lagged paths. The latent factors make up the random-intercepts which account for between-person variation. u and v = error terms. The double headed arrows indicate covariance. Covariance between error terms will account for the same co-movement whereas covariance between random intercepts account stable individual differences that may be correlated between the variables measured across different time points.

**Personality Similarity explaining Relationship Quality and Attachment Styles in Partial Correlations**

In the analysis of the influence of parental qualities on Relationship Quality with Parents and Attachment, significant changes in correlations are observed when accounting for familial controls, as shown in Table 4. When assessing parenting quality's effect on

Relationship Satisfaction with mother without controls, the correlation is $r = .25$ ($p < .001$), explaining 6% of the variance. Controlling for maternal individual differences drops the correlation to $r = .20$ ($p < .001$), meaning that the decrease in explained variance drops 34%. Under paternal controls, there are no findings of decreased variance.

For Emotional Support from the mother, the correlation without controls is $r = .28$ ($p < .001$), with 8% of the variance explained. Controlling for child and maternal individual differences separately both decreases the relationship to $r = .23$ ($p < .001$), meaning that there is a decrease of .38% in explained variance. For fathers, the correlation without controls is $r = .17$ ($p < .05$), with 3% of the variance explained. Under paternal controls, this drops to $r = .15$ ($p < .05$), explaining 2% of the variance, resulting in a 33% loss in explained variance.

Anxious attachment relationships show no explained variances or effects. However, Avoidance in relation to mothers shows an initial correlation of $r = -.17$ ($p < .01$) which drops to $r = -.13$ ($p < .05$) when controlled for child personality, decreasing by 33% of explained variance. Dyadic relations show no effects on the relationship between attachment and parenting quality relationship. Further analysis with child-mother dyad controls, reflecting child-mother personality similarity, shows no effects for any relationships between life outcomes and parenting qualities. Similarly, controlling for child-father dyads also shows no effects.

These findings highlight the insignificant role of personality similarities within familial dyads in shaping the impact of parenting on child outcomes. The observed reductions in explained variance when controlling for personality traits suggest that individual personality differences significantly influence how parenting effects are perceived, indicating that personality can sometimes confound the effects of parenting behaviors.

**Table 4**

*Correlation Matrix on Relationship Quality with Parent, Well-being, and Attachment Styles with respective control variables*

| Independent variable | Dependent variable | Coefficient | Zero-order | Maternal Controls | | | Zero-order | Paternal Controls | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | NA(M) | A(M) | M | AM | NA(F) | A(F) | F | AF |
| PPQ | Sat | r | .25*** | .24*** | .20*** | .24*** | .18** | .18** | .16** | .18*** |
| | Sup | r | .28*** | .23*** | .23*** | .27*** | .17** | .17* | .15* | .19** |
| | Avo | r | -.17** | -.13* | -.11 | -.17** | -.05 | -.03 | -.02 | -.06 |
| | Anx | r | .06 | .03 | .10 | .06 | .02 | .02 | .03 | .01 |
| Avoidance | Sat | r | -.19*** | -.11 | -.15* | -.18** | -.25*** | -.14* | -.26*** | -.26*** |
| | Sup | r | -.12* | .02 | -.06 | -.09 | -.15** | -.01 | -.11 | -.12* |
| | Life Sat | r | -.35*** | -.20*** | -.32*** | -.34*** | -.35*** | -.20*** | -.33*** | -.30*** |
| | Neg Aff | r | .36*** | .19*** | .33*** | .35*** | .36*** | .19*** | .37*** | .37*** |
| Anxiety | Sat | r | -.14* | .10 | -.12* | -.14* | -.14* | -.09 | -.16* | -.15* |
| | Sup | r | -.03 | -.04 | -.02 | -.04 | -.07 | -.04 | -.06 | -.04 |
| | Life Sat | r | -.35*** | -.20*** | -.32*** | -.34*** | -.35*** | -.20*** | -.33*** | -.30*** |
| | Neg Aff | r | .36*** | .19*** | .33*** | .35*** | .36*** | .19*** | .37*** | .37*** |

*Note.* * $p<.05$, ** $p<.01$, *** $p<.001$. NA = No Control, A = Child/Adolescent, M = Mother, AM = Child-mother dyad, F = Father, AF = Child-father dyad, Sat = Relationship Satisfaction, Sup = Emotional Support, Avo = Avoidance Attachment, Anx = Anxious Attachment, Life Sat = Life Satisfaction, Neg Aff = Negative Affect, PPQ = Parenting Quality (Warmth/Reasoning). $r^2$ represents the proportion of variance in the dependent variable that is explained by the independent variable(s). It is calculated by squaring the correlation coefficient (r) between the independent and dependent variables.

**Correlations among Avoidant Attachment, Relationship Quality, and Well-being, Accounting for Personality Similarity**

When analyzing the impact of Avoidant Attachment on Relationship Quality with Parents and Subjective Well-being, discernible changes in correlations emerge upon implementing familial controls, as shown in Table 4. Initially, Avoidant Attachment negatively correlates with Relationship Satisfaction with mothers at $r = -.19$ ($p < .001$), accounting for 4% of the variance. This relationship had the most significant decrease when controlled for maternal personality with $r = -.15$ ($p < .05$), lowering the explained variance by 50%. With fathers, the correlation between perceived relationship satisfaction and avoidance is $r = -.25$ ($p < .001$), explaining 6% of the variance. Unlike maternal controls, the strongest significant drop is due to child personality with a correlation of $r = -.14$ ($p < .05$) and a decrease of 68% in explained variance.

For Emotional Support from the mother, the initial negative correlation of $r = -.12$ ($p < .05$) becomes non-significant under maternal controls, explaining less than 1% of the variance. This alteration underscores the potential moderating effect of maternal characteristics on the link between avoidant attachment and perceived support. Similarly, the initial correlation of perceived Emotional Support from fathers has no significant reduction when using paternal controls.

In the context of Life Satisfaction, Avoidant Attachment with mothers and fathers shows a stable negative correlation, starting at $r = -.35$ ($p < .001$), consistently explaining 12% of the variance. This suggests a persistent influence of avoidant attachment on life satisfaction, regardless of parental inputs. However, controlling for child personality in the relationship between Avoidance for both parents separately and Life Satisfaction shows a strong decrease with $r = .20$ ($p < .001$) and a drop of 68% of explained variance. Controlling for child-father dyads reduced the explained variance by 28% with a significant effect of $r = -.30$ ($p < .001$).

Conversely, the relationship between Avoidant Attachment with both parents and Negative Affect begins strongly positive at $r = .36$ ($p < .001$), explaining 13% of the variance. This relationship drops in both cases to $r = .19$ ($p < .001$), decreasing the explained variance by 70%. These findings emphasize the significant role of individual differences in shaping the effects of avoidant attachment on well-being and perceived relationship satisfaction. The

varying degrees of change in explained variance under different controls illustrate the complex interplay between family context and individual attachment styles.

**Correlations between Anxious attachment, Relationship Quality and Well-being, Partialling out for Personality Similarity**

For Relationship Satisfaction with both parents, the initial correlation of Anxious Attachment is $r = -.14$ ($p < .05$), which accounts for 2% of the variance. When controlled for the maternal personality, this relationship decreases slightly to $r = -.12$ ($p < .05$), with a variance-explained reduction of 50%. No other controls show any significant effects. In the case of Emotional Support, the original correlation is negligible.

For Life Satisfaction, the correlation with Anxious Attachment to both parents starts strongly negative at $r = -.35$ ($p < .001$). After adjusting for the child's personality, the effect decreases to $r = -.20$ ($p < .001$), with a decrease in explained variance of 68%. Highlighting the influence of the child's personality on the perception of life satisfaction linked to anxious attachment. Lastly, the correlation between Anxious Attachment to both parents and Negative Affect begins at $r = .36$ ($p < .001$), with 13% of the variance explained. Controlling for the child's personality decreases this correlation to $r = .19$ ($p < .001$), indicating a decrease of 70% explained variance.

These findings emphasize the significant role of the child's personality in moderating the effects of Anxious Attachment on life outcomes. Particularly, the reduction in explained variance when controlling for personality traits suggests that individual differences in child personality substantially influence the observed relationships, highlighting the necessity to consider such personal characteristics in developmental and attachment studies.

## Discussion

**Longitudinal effects of personality similarity**

The minimal cross-lagged effects observed between personality similarity and parenting quality, alongside stable autoregressive paths for both variables, indicate that while personality traits consistently influence over time, their direct impact on parenting practices is limited. This observation challenges traditional attachment theories suggesting a direct developmental trajectory influenced by early parental interactions and underscores the potential predominance of genetic factors over environmental influences (Polderman et al., 2015; Young et al., 2019). The results not only question the traditional views that familial dynamics significantly influence personality development but also contrast with theories emphasizing the formative role of early parenting (Hazan & Shaver, 1987; Bowlby, 1982).

This suggests that personality development may be more entrenched and influenced more by genetic factors than previously believed (Waters et al., 1991). The limited impact of personality traits on parenting quality highlights the resilience of personality against environmental molding, supporting the notion that personality development is less affected by family dynamics than theories like the prototype hypothesis would suggest (Crowell et al., 1999). Seeing that there has been studies on transmission of family attachment patterns (Verhage et al., 2016), parental quality could be seen as a trait or pattern which transmits the way personality traits do (Polderman et al., 2015).

The RI-CLPM analyses further explored these dynamics over time, confirming that while prior studies have linked personality similarity to favorable parenting outcomes like reduced behavioral problems and enhanced emotional closeness (Heijkoop et al., 2009; Loehlin et al., 2010; van Tuijl et al., 2005), my findings suggest these effects are more indirect and may be moderated by stronger individual parental personalities (Prinzie et al., 2009), rather than a straightforward 'goodness of fit' (Lerner, 1984; Seifer, 2000; Thomas & Chess, 1977). The findings from the longitudinal study presents a potential redundancy in using personality similarity when researching parental qualities. This could be the reason for the minimal cross-lagged path effects. Personality similarity may not explain more of individual outcomes - such as parental quality - than the personality of said parent.

Lastly, the research of controversial and novel research questions is crucial for the growth and development of psychology as a field. It challenges researchers to move beyond the safety of established questions and innovate their methodologies. Longitudinal studies are particularly valuable for exploring dynamics because they allow for better inference of causal relationships compared to cross-sectional studies. For instance, examining the dynamic interplay between personality similarity and parenting quality longitudinally can inform targeted interventions that could enhance child well-being, attachment security, and relationship quality with parents. This approach not only advances academic knowledge but also has significant real-world applications, such as improving developmental and relational outcomes within families.

In summary, while personality similarity plays a role in the dynamics of relationships, its influence within the parent-child context is part of a broader behavioral pattern characterized by stability rather than transformation. This implies that parenting qualities might be less susceptible to modification through personality similarity than previously assumed and are likely influenced more by genetic predispositions and the specific personality traits of parents. Additionally, the results may show that using personality

similarity is redundant and will not explain more than individual differences. From a practical standpoint, understanding the stability of personality traits and their subtle yet significant impacts on parenting provides a valuable foundation for developing interventions that focus on adapting parenting styles to suit the inherent personality traits of children rather than attempting to modify traits through parenting (Mikulincer & Shaver, 2007).

**Partialling out Personality Similarity in Later Life Outcomes**

Instances where personality similarity reduced explained variance suggest nuanced effects in specific familial relationships, such as child-father dynamics influencing the relationship between Avoidant attachment and Life Satisfaction. This illustrates how the social environment, characterized by child-father similarities, impacts subjective well-being. However, individual personality traits generally had a stronger influence on outcomes than personality similarity, indicating that genetic factors may play a more substantial role in shaping these dynamics than previously considered (Brezo et al., 2006; Carnelley et al., 1994). Contrary to findings from romantic contexts (Ben-Ari & Lavee, 2005; Bouchard et al., 1999; Gaunt, 2006), my investigation did not reveal substantial effects of personality similarity on relationship quality with parents.

My results reveal that personality traits significantly modulate the perceived quality of parental relationships and attachments, corroborating research that individual traits influence perceptions and behaviors in intimate relationships (Feeney & Noller, 1990; Simpson et al., 2007). This underscores the notion that broader personality frameworks play a critical role in manifesting attachment styles and impacting later life relationships (Diener et al., 1985; Watson et al., 1988). Contrary to what might be expected from attachment theory (van IJzendoorn, 1995), which underscores the formative nature of early relationships in shaping adult relational and emotional outcomes (Ainsworth et al, 2015; Hazan & Shaver, 1987), our findings highlight the predominance of inherent personality (Polderman et al., 2015). This resonates with critiques in attachment research (Fraley et al., 2004), which suggest that the influence of early experiences, while significant, may not rigidly determine adult relationship patterns as once thought (Crowell et al., 1999; Fraley et al., 2004; Waters et al., 1991; Zimmermann, 2004).

The decision to control for Big Five traits rather than focus solely on attachment styles stems from an intent to delineate the effects of personality interactions within familial dynamics more accurately. Although attachment styles contribute to predicting relational outcomes, personality traits offer a robust, non-redundant framework for understanding these outcomes (Becker et al., 1997; Bäckström & Holmes, 2001; Griffin & Bartholomew, 1994;

Roisman et al., 2007; Shaver & Brennan, 1992). This distinction challenges the prevailing assumption that attachment styles are the primary drivers of relationship quality and well-being, reinforced by findings that personality traits often explain relationship outcomes more effectively than attachment measures (Noftle & Shaver, 2006; Shaver & Brennan, 1992).

Incorporating these insights into practical applications, interventions aimed at enhancing familial relationships might more fruitfully focus on recognizing and adapting to the inherent personality traits of family members. By acknowledging the stable and limited malleability of personality traits across the lifespan (Roberts & DelVecchio, 2000), professionals can design more effective strategies that cater to individual differences within family dynamics.

In summary, while the attachment framework provides a valuable lens for understanding interpersonal dynamics, our findings advocate for a broader perspective that recognizes the significant influence of genetic personality factors. This study not only introduces a novel approach to examining the complex interplay between inherited traits and environmental factors but also sets the stage for future research to further clarify how these elements interact to shape relationship quality and well-being across different family structures and cultural contexts.

**Study Limitations**

While standardization is essential for comparing individual scores within a normalized framework, this process can potentially minimize true differences between personalities, especially when differences are significant but opposing. Standardizing scores to z-scores adjusts all data points relative to the sample mean and standard deviation, potentially compressing extreme values toward the mean. This can lead to misleading interpretations of similarity, as substantial opposite deviations from the mean may appear less pronounced.

The use of absolute differences in z-scores to calculate personality similarity is innovative but also presents challenges related to normativeness (Furr, 2008). When extreme personality traits from parent and child converge towards zero in the standardized form, their actual psychological divergence might be underrepresented. This scenario underscores the potential limitation of using z-score based absolute differences in assessing true personality congruence or divergence within family dynamics.

Further, different scales were used for parents (FFPI) and children (HiPIC), raising concerns about the comparability of measured traits. While constructs like benevolence in

HiPIC and agreeableness in FFPI might be similar, the divergence in other traits such as autonomy (FFPI) and imagination (HiPIC) could skew similarity indices (De Raad & van Heck, 1994; Hendriks et al., 1999; Perugini & Ercolani, 1998; Rodríguez-Fornells et al., 2001; Verplanken & Herabadi, 2001). However, the choice of calculating personality similarity with these scales albeit having one different factor, was justified with the potential outcome of using novel and advanced methodological approaches. Nonetheless, these discrepancies suggest a need for uniform measurement tools in future studies to enhance the accuracy of personality similarity assessments.

Our approach diverges from previous methodologies in personality similarity between children and parents (van Tuijl et al., 2005), which relied on fewer personality items, by employing comprehensive personality scales and a more detailed similarity assessment method. However, the reliance on z-scores and absolute differences warrants cautious interpretation. Future studies might benefit from exploring additional or alternative methods such as correlational approaches with more items, which might offer deeper insights into the dynamic interplay of traits between individuals.

The significant temporal gap between the measurements of personality similarity and the later life outcomes introduces potential confounds that might affect the interpretation of these relationships. However, the stability of personality traits highlighted by the first study supports the relevance of using earlier measurements to predict later outcomes. Nonetheless, this approach assumes that the influence of personality similarity remains constant over time, based on the results from study 1, an assumption that may not fully capture the dynamic nature of developmental processes.

One limitation of this study is the potential autocorrelation in the error terms, leading to endogeneity issues. This situation arises when the causes of unobserved variables (u) correlate with the dependent variable over time, creating ambiguity in whether the lagged dependent variable is influenced by its past values or by unmodeled causes (Zyphur et al., 2019). To address this, the models could have assumed that one autocorrelation path is zero, which is sufficient to identify the model but depends on the nature of the dependent variable. Parenting qualities tend to correlate over time due to their relationship with personality (Prinzie et al., 2009). Thus, parenting quality correlations over time may not result from past parenting quality influencing current parenting quality but from correlated determinants across time points.

Another limitation is the consideration of stable between-person differences when estimating cross-effects in cross-lagged panel models (Hamaker et al., 2015). While our study

found substantial agreement between the standard CLPM and RI-CLPM, differences also emerged. These differences are attributable to the distinct interpretations of cross-lagged paths in the two approaches. RI-CLPM separates longitudinal associations into stable between-person associations (differences between individuals) and temporal within-person dynamics (changes within an individual over time), estimating within-person prospective effects. In contrast, the standard cross-lagged panel model estimates prospective effects for combined associations, meaning it merges both between-person differences and within-person changes. This is a limitation because it creates ambiguity in interpreting the results: the standard CLPM might overestimate or underestimate the true within-person effects by not distinguishing them from between-person differences. Consequently, more empirical and theoretical work is needed to clarify which modeling approach offers a better understanding of the longitudinal interplay between personality and parenting qualities.

The reliability of measuring child personality may still be susceptible to parental influence, which could have implications for interpreting the degree of personality similarity and its impact on relationship dynamics. This is related to not controlling for variables such as age and gender in our CLPM, which could have introduced biases or confounded the results. While adding these controls could potentially complicate model interpretation and risk overfitting, their exclusion might oversimplify the developmental and interpersonal dynamics being studied.

A notable limitation of this study revolves around the perspective from which relationship quality and well-being are assessed. Our findings primarily reflect the child's perception of these dynamics, which might differ significantly from a parent's perception. The potential discrepancy between child-reported and parent-reported relationship quality emphasizes that perceptions are inherently subjective and can be deeply influenced by individual personality traits and existing family dynamics. This subjective nature of data collection may lead to results that reflect more about the child's interpretations or feelings towards their parents rather than an objective measure of relationship quality or parental behavior.

The influence of parental personality on child well-being and the perceived quality of parental relationships suggests that personality traits of parents might shape not only the actual parenting behaviors but also the child's perception of these behaviors. This can be particularly critical in understanding why individual differences between mother and child impact perceived relationship quality, yet measures of personality similarity do not show the same effect. It points to potential flaws in how personality similarity is conceptualized and

measured, perhaps failing to capture the interactive or reciprocal nature of these relationships adequately.

Given these insights, future research should aim to include multiple perspectives within family studies—capturing both parent and child views—to provide a more balanced and comprehensive understanding of family dynamics. Additionally, refining measures of personality similarity to better reflect the dynamic and reciprocal nature of parent-child interactions could lead to more accurate depictions of how personalities interact within families. Researchers might also explore the differential impacts of perceived versus actual behaviors and traits to dissect the subjective influences on study outcomes further.

The study's findings are constrained by the sample and data collection methods used. Without control over the demographic diversity and the data collection process, it is challenging to generalize results across different populations or cultural contexts. Future research could address these limitations by employing a more diverse sample and standardized data collection procedures to enhance the external validity of the findings.

**Conclusion**

Our findings reveal a stronger influence of inherent personality traits over personality similarities. This challenges the prevailing attachment paradigm by suggesting that genetic factors may play a more substantial role in shaping personal and relational development than environmental factors such as parenting styles. Practically, these insights are particularly relevant in contexts such as adoption, where understanding the compatibility of personality traits between parents and children could enhance emotional bonds and attachment security. Moreover, this research suggests that interventions aimed at improving familial relationships should prioritize accommodating inherent personality traits, which appear to be less malleable and more influenced by genetic factors than previously believed. However, our study is not without limitations. The methodology for measuring personality similarity, while robust, involved the use of standardized scores and absolute differences, which may not fully capture the nuanced dynamics of personality interactions within families. Regardless, the results present a potential redundancy in the use of personality similarity.

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**Appendix**

**Figure 3**

*CLPM with estimates for child-mother dyads*
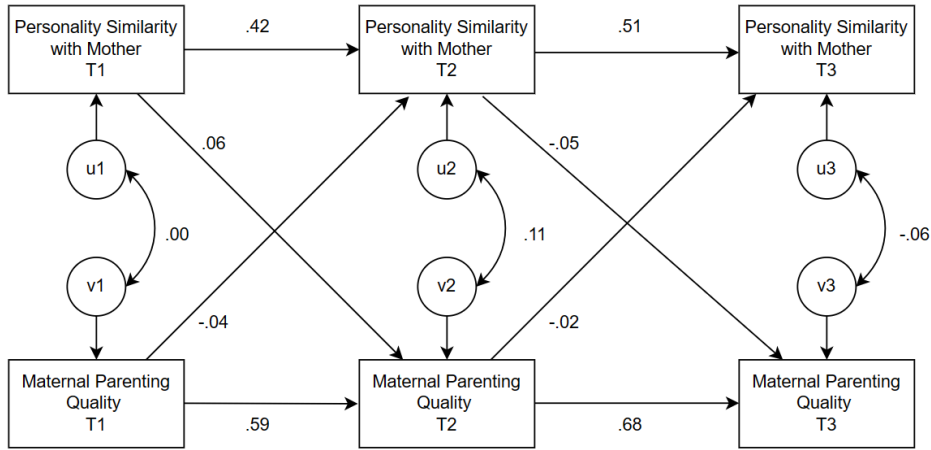


*Note.* This model does not include any random intercepts or additional control variables. The model achieved a poor fit to the data ($\chi^2(4) = 46.578$, $p < .001$; RMSEA = 0.138, 90% CI [0.107, 0.172]; CFI = 0.923; TLI = 0.713; SRMR = 0.043)
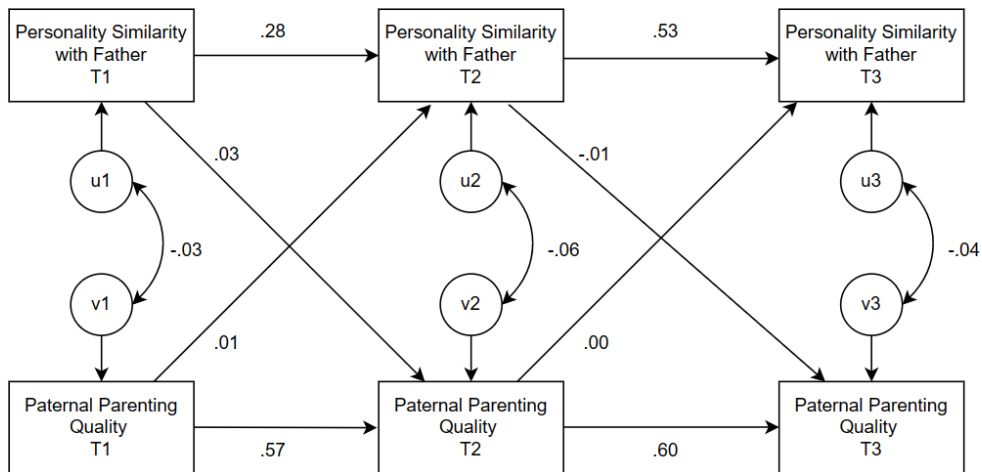
**Figure 4**

*CLPM with estimates for child-mother dyads*



*Note.* This model does not include any random intercepts or additional control variables. The model revealed a poor fit to the data ($\chi^2(4) = 39.986$, $p < .001$; RMSEA = 0.130, 90% CI [0.098, 0.165]; CFI = 0.909; TLI = 0.657; SRMR = 0.045).

**Table 5**

*Descriptives from personality variables in wave 4*

| Family Member | Trait | N | Missing | Mean | SD | Minimum | Maximum | Reliability (α) |
|---|---|---|---|---|---|---|---|---|
| Mother | Extraversion | 522 | 377 | 3.75 | .53 | 1.80 | 4.85 | .91 |
| | Agreeableness | 522 | 377 | 4.05 | .48 | 2.34 | 5.15 | .89 |
| | Conscientiousness | 522 | 377 | 3.72 | .52 | 1.90 | 5.00 | .90 |
| | Emotional Stability | 522 | 377 | 3.70 | .48 | 2.25 | 4.95 | .89 |
| | Autonomy | 522 | 377 | 3.41 | .45 | 1.85 | 4.90 | .87 |
| Father | Extraversion | 453 | 446 | 3.65 | .54 | 2.05 | 5.00 | .91 |
| | Agreeableness | 453 | 446 | 3.88 | .49 | 1.95 | 5.40 | .90 |
| | Conscientiousness | 453 | 446 | 3.62 | .51 | 1.80 | 4.95 | .89 |
| | Emotional Stability | 453 | 446 | 3.80 | .47 | 2.25 | 4.95 | .89 |
| | Autonomy | 453 | 446 | 3.53 | .45 | 1.61 | 4.95 | .87 |
| Child | Extraversion | 523 | 376 | 3.56 | .46 | 1.91 | 4.88 | .85 |
| | Benevolence | 523 | 376 | 3.56 | .44 | 1.97 | 4.98 | .88 |
| | Conscientiousness | 523 | 376 | 3.34 | .50 | 1.50 | 4.69 | .87 |
| | Emotional Stability | 523 | 376 | 3.52 | .61 | 1.44 | 4.88 | .83 |
| | Imagination | 523 | 376 | 3.64 | .52 | 1.46 | 4.92 | .84 |

*Note.* α = Cronbach's Alpha

**Table 6**

*Descriptives from personality variables in Wave 5*

| Family Member | Trait | N | Missing | Mean | SD | Minimum | Maximum | Reliability (α) |
|---|---|---|---|---|---|---|---|---|
| Mother | Extraversion | 479 | 420 | 3.66 | .49 | 1.95 | 4.95 | .89 |
| | Agreeableness | 479 | 420 | 4.14 | .37 | 2.74 | 5.06 | .84 |
| | Conscientiousness | 479 | 420 | 3.86 | .39 | 2.60 | 4.85 | .84 |
| | Emotional Stability | 479 | 420 | 3.71 | .52 | 1.85 | 4.95 | .92 |
| | Autonomy | 479 | 420 | 3.46 | .43 | 2.00 | 4.70 | .86 |
| Father | Extraversion | 444 | 455 | 3.56 | .51 | 1.95 | 4.90 | .90 |
| | Agreeableness | 444 | 455 | 3.91 | .39 | 2.64 | 5.11 | .85 |
| | Conscientiousness | 444 | 455 | 3.75 | .43 | 2.20 | 4.90 | .87 |
| | Emotional Stability | 444 | 455 | 3.88 | .44 | 2.30 | 4.80 | .88 |
| | Autonomy | 444 | 455 | 3.60 | .40 | 2.20 | 4.90 | .84 |
| Child | Imagination | 478 | 421 | 3.47 | .48 | 1.92 | 5.00 | .85 |
| | Emotional Stability | 478 | 421 | 3.47 | .42 | 1.44 | 4.94 | .87 |
| | Conscientiousness | 478 | 421 | 3.22 | .53 | 1.53 | 4.63 | .90 |
| | Benevolence | 478 | 421 | 3.51 | .64 | 1.70 | 4.63 | .89 |
| | Extraversion | 478 | 421 | 3.47 | .50 | 1.34 | 4.59 | .88 |

*Note.* α = Cronbach's Alpha

**Table 7**

*Descriptives from personality variables in Wave 6*

| Family Member | Trait | N | Missing | Mean | SD | Minimum | Maximum | Reliability (α) |
|---|---|---|---|---|---|---|---|---|
| Mother | Extraversion | 445 | 454 | 3.65 | .49 | 1.70 | 4.80 | .86 |
| | Agreeableness | 445 | 454 | 4.16 | .36 | 2.95 | 5.14 | .83 |
| | Conscientiousness | 445 | 454 | 3.86 | .40 | 2.62 | 4.90 | .85 |
| | Emotional Stability | 445 | 454 | 3.73 | .50 | 2.00 | 5.00 | .91 |
| | Autonomy | 445 | 454 | 3.45 | .41 | 2.15 | 4.75 | .84 |
| Father | Extraversion | 411 | 488 | 3.53 | .52 | 1.50 | 4.80 | .91 |
| | Agreeableness | 411 | 488 | 3.92 | .42 | 1.87 | 5.03 | .87 |
| | Conscientiousness | 411 | 488 | 3.74 | .45 | 1.85 | 4.80 | .87 |
| | Emotional Stability | 411 | 488 | 3.87 | .47 | 1.40 | 5.00 | .90 |
| | Autonomy | 411 | 488 | 3.61 | .42 | 2.55 | 4.90 | .87 |
| Child | Extraversion | 449 | 450 | 3.46 | .53 | 1.38 | 4.72 | .92 |
| | Benevolence | 449 | 450 | 3.48 | .41 | 2.13 | 4.88 | .89 |
| | Conscientiousness | 449 | 450 | 3.22 | .55 | 1.59 | 4.81 | .92 |
| | Emotional Stability | 449 | 450 | 3.42 | .67 | 1.31 | 4.88 | .90 |
| | Imagination | 449 | 450 | 3.46 | .48 | 2.13 | 4.88 | .86 |

*Note.* α = Cronbach's Alpha

**Table 8**

*Descriptives from PQ variables across waves*

| Wave | PQ | Parent | N | Missing | Mean | SD | Minimum | Maximum | Reliability (α) |
|---|---|---|---|---|---|---|---|---|---|
| Wave 4 | Warmth/ Involvement | Mother | 521 | 378 | 4.04 | .43 | 2.09 | 5.00 | .81 |
| | Reasoning/ Induction | | 520 | 379 | 4.09 | .46 | 2.50 | 5.00 | .71 |
| | Warmth/ Involvement | Father | 487 | 412 | 3.61 | .53 | 1.82 | 5.00 | .82 |
| | Reasoning/ Induction | | 485 | 414 | 3.66 | .58 | 1.67 | 5.00 | .74 |
| Wave 5 | Warmth/ Involvement | Mother | 480 | 419 | 4.03 | .50 | 1.91 | 5.00 | .85 |
| | Reasoning/ Induction | | 479 | 420 | 4.03 | .62 | 2.00 | 5.00 | .90 |
| | Warmth/ Involvement | Father | 445 | 454 | 3.60 | .56 | 1.55 | 4.91 | .86 |
| | Reasoning/ Induction | | 445 | 454 | 3.78 | .66 | 1.50 | 5.00 | .90 |
| Wave 6 | Warmth/ Involvement | Mother | 445 | 454 | 4.00 | .52 | 2.45 | 5.00 | .86 |
| | Reasoning/ Induction | | 445 | 454 | 3.96 | .64 | 1.33 | 5.00 | .91 |
| | Warmth/ Involvement | Father | 411 | 488 | 3.44 | .58 | 1.00 | 4.91 | .87 |
| | Reasoning/ Induction | | 411 | 488 | 3.63 | .70 | 1.00 | 5.00 | .90 |

*Note.* PQ = Parenting Quality, α = Cronbach's Alpha