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Does Parenthood Foster Psychological Growth? Investigating Big Five and Autotelic Personality Trait Differences in Adulthood

Promueve la parentalidad el crecimiento psicológico? Investigación de las diferencias en los rasgos de los 'Big Five' y la personalidad autotélica en la adultez

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ABSTRACT

Parenthood and personality development are increasingly examined within the Big Five framework and flow-related constructs. This cross-sectional study investigated whether parenthood is associated with differences in Big Five personality traits and autotelic personality in adulthood, as well as the role of gender and sociodemographic factors. Data were collected from 708 adults (77.1% women) using the Ten-Item Personality Inventory and the Autotelic Personality Questionnaire. Parents (n=330) showed significantly higher levels of extraversion, conscientiousness, and emotional stability compared to non-parents (n=378), alongside elevated autotelic traits, including persistence, intrinsic motivation, low self-centeredness, and attentional control. Within-group analyses revealed that education, employment, and socioeconomic status were positively associated with adaptive personality profiles, while gender differences varied across parental status. Parents with higher education, employment, or multiple children demonstrated stronger self-regulation and resilience indicators. Among non-parents, employment and education were linked to improved emotional stability and attentional control. These findings suggest that parenthood is associated with enhanced adaptive personality traits and psychological resources, supporting its role as a developmental context for adult personality maturation, although causal inferences remain limited due to the cross-sectional design .

Keywords: Personality Development; Parenthood; Big Five Model; Autotelic Personality; Intrinsic Motivation; Emotional Regulation; Adult Development

RESUMEN

La parentalidad y el desarrollo de la personalidad se analizan cada vez más dentro del modelo de los Cinco Grandes y los constructos asociados al flow. Este estudio transversal examinó si la parentalidad se asocia con diferencias en los rasgos de personalidad Big Five y en la personalidad autotélica en la adultez, así como el papel del género y factores sociodemográficos. Se recopilaron datos de 708 adultos (77,1% mujeres) mediante el Ten-Item Personality Inventory y el Autotelic Personality Questionnaire. Los progenitores (n=330) presentaron niveles significativamente más altos de extraversión, responsabilidad y estabilidad emocional en comparación con los no progenitores (n=378), junto con mayores niveles de rasgos autotélicos, incluyendo persistencia, motivación intrínseca, bajo egocentrismo y control atencional. Los análisis intragrupales mostraron que la educación, el empleo y el nivel socioeconómico se asociaron positivamente con perfiles de personalidad más adaptativos, mientras que las diferencias de género variaron según el estatus parental. Los progenitores con mayor educación, empleo o más hijos evidenciaron mayores indicadores de autorregulación y resiliencia. Entre los no progenitores, el empleo y la educación se vincularon con mayor estabilidad emocional y control atencional. Estos hallazgos sugieren que la parentalidad se asocia con el desarrollo de rasgos adaptativos y recursos psicológicos, apoyando su papel como contexto de maduración de la personalidad adulta, aunque las inferencias causales están limitadas por el diseño transversal .

Palabras Clave: Desarrollo de la personalidad; Parentalidad; Modelo de los Cinco Grandes; Personalidad autotélica; Motivación intrínseca; Regulación emocional; Desarrollo adulto

INTRODUCTION

Personality is a central construct in psychology, extensively studied for its role in shaping behaviors, attitudes, and interpersonal relationships (Achtergarde et al., 2015; Roberts & Yoon, 2022). Research indicates that personality traits significantly influence how individuals interact with others and perceive social situations (OCDE, 2025; Kuzikova et al., 2018). These traits evolve over the lifespan, often influenced by environmental changes and intentional interventions (Roberts et al., 2017). These findings offer a strong basis for researchers to further explore the sources and mechanisms driving personality trait development (Bleidorn et al., 2021; Roberts et al., 2017). Some investigations suggests that personality changes during major life transitions, like becoming a parent, although they

tend to be subtle and not extreme. Becoming a parent is a life-changing experience that can significantly impact personality traits due to the emotional, social, and behavioral demands associated with raising children (Achtergarde et al., 2015; Parker & Wang, 2013; Yao et al., 2023). Parenthood in the contemporary world has undergone significant transformations, influenced by various social, economic, and cultural factors (Uysal & Pohlmeier, 2011). A study by van Scheppingen et al. (2016) who examined personality development during the transition to parenthood found that while there were no significant differences between new parents and non-parents in traits like emotional stability, agreeableness, and conscientiousness, there were changes in agreeableness and openness depending on the duration in the parent role. This suggests that the responsibilities associated with child-rearing might influence certain personality traits over time. This study also found that the transition to parenthood is associated with increased conscientiousness and emotional stability, supporting the social investment theory, which posits that investing in social roles like parenthood can lead to personality maturation (Roberts et al., 2005). Another investigation found that parental warmth and behavioral control were positively associated with extraversion, conscientiousness, openness, agreeableness, and low neuroticism. Additionally, agreeableness and low neuroticism were linked to greater autonomy support. (Prinzie et al., 2009).

Personality is a complex construct in psychology, with no universal consensus regarding its definition. Researchers often adopt perspectives that align with their theoretical frameworks, leading to variations in how personality is conceptualized (Bergner, 2020; Tellegen, 1991). Meta-analytic findings consistently demonstrate the long-term stability of personality traits (Anusic & Schimmack, 2016; Bazana & Stelmack, 2004; Ferguson, 2010). However, there is increasing interest in investigating whether personality traits can undergo change (Roberts et al., 2017). People exhibit significant continuity in their personalities, reinforcing the most used definition of personality. At the same time, they undergo developmental changes across various domains, with unique individual trajectories shaped by life experiences (Schwaba & Bleidorn, 2018). The coexistence of stability and change can seem paradoxical, especially given the long-standing theoretical division between these two concepts. However, extensive longitudinal research clearly demonstrates that personality is both stable and evolving, influenced by experience, and plays a crucial role in understanding human nature (Bleidorn et al., 2021; Caspi et al., 2005; Roberts & Yoon, 2022).

Personality traits are significant predictors of key life outcomes, including career success, relationship dynamics, mental and physical health, and well-being (Caspi et al., 2005; Roberts et al., 2006). Traits are typically defined as enduring patterns of thought, emotion, and behavior that remain relatively consistent across time and situations (Roberts, 2009).

Research linking life experiences to personality changes has focused particularly on relationships, work, and health domains. Achievements in education or career advancement are associated with increases in conscientiousness (Göllner et al., 2017), extraversion (Le et al., 2014; Roberts et al., 2003), and emotional stability (Scollon & Diener, 2006). Leadership roles have been linked to greater extraversion (Wille et al., 2012), while job commitment has been associated with heightened conscientiousness (Roberts & Yoon, 2022). Similarly, family experiences such as marriage and parenthood have been shown to shape personality, often leading to reduced neuroticism and increased conscientiousness and self-esteem (Lehnart et al., 2010; Hopwood & Bleidorn, 2018; Mroczek & Spiro, 2003).

One of the most studied and widely accepted models within the scientific community for explaining personality is the Five Factor Model (FFM) or the Big Five. This model explores the multifaceted structure of personality and postulates the existence of five broad factors, representing personality at its most general level, with independent dimensions that distinctly characterize each person's personality. It is the most widely accepted framework for understanding personality traits (Roberts et al., 2007; Roberts & Yoon, 2022; Soto, 2019). The five key factors, often summarized by the acronym OCEAN, include openness to experience (O), conscientiousness (C), extraversion (E), agreeableness (A), and neuroticism (N) (Roberts & Yoon, 2022). Each factor exists on a spectrum (e.g., extraversion vs. introversion) and encompasses multiple specific facets (e.g., sociability), which further include even more detailed traits (e.g., talkative, outgoing). This framework proposes that the majority of individual differences in human personality can be grouped into these five empirically established domains (Gosling et al., 2003).

Neuroticism is characterized by emotional instability and a predisposition to psychological distress, including anxiety, depression, and mood fluctuations. Extraversion encompasses sociability, assertiveness, and high levels of positive emotionality. Openness to experience reflects cognitive flexibility, intellectual curiosity, and a proclivity for novel experiences and ideas. Agreeableness includes traits such as altruism, trust, and interpersonal cooperation. Conscientiousness denotes self-discipline, organization, and a strong orientation toward goal-directed behavior (McCrae & Costa, 1997, 2008). The Big Five personality traits represent fundamental dimensions of human personality that shape patterns of thought, emotion, and behavior. This framework proposes that while individuals across different genders, ages, and cultures possess the same core traits, they vary in how strongly these traits are expressed (Power & Pluess, 2015; Rantanen et al., 2007). The FFM has significantly shaped personality psychology. It has encouraged a more disciplined approach to identifying new traits and provided an organizing structure that has advanced the field. This framework has been crucial in demonstrating how personality traits influence life outcomes (Bazana & Stelmack, 2004; Roberts et al., 2007; Soto, 2019). Extensive research over the years has led to the development of reliable and well-validated assessment tools (Bleidorn, 2024).

Evidence suggests that the Big Five framework is applicable across various populations and measurement approaches, enabling researchers to align and compare findings across different studies. The widespread recognition of this model is reflected in its use as a foundational structure for numerous meta-analyses and reviews on personality trait development (Caspi et al., 2005; Roberts et al., 2006). Additionally, self-report questionnaires based on the Big Five are both accessible and cost-efficient, making them a popular choice for large-scale, nationally representative studies (Bleidorn, 2024).

For the purpose of this study it was also considered the concept of autotelic personality. This stems from Csikszentmihalyi's research on flow, a psychological state characterized by deep immersion and peak experience in activities (Csikszentmihalyi et al., 2014; Nakamura & Csikszentmihalyi, 2002). An autotelic activity is one that is undertaken purely for the joy of doing it, without seeking external rewards. When someone immerses themselves in an activity with the sole purpose of enjoying the process, they are experiencing what is known as an autotelic state (Baumann, 2021). Flow theory, through the concept of an autotelic personality, recognizes that some individuals are naturally more inclined to experience flow than others (Csikszentmihalyi & LeFevre, 1989; Nakamura & Csikszentmihalyi, 2002). Flow is a deeply engaging and fulfilling state that individuals experience when they become fully immersed in a challenging activity, as long as they possess the skills needed to navigate it (Peifer et al., 2022). The enjoyment of discovering challenges and the dedication required to develop skills along with qualities, such as curiosity, perseverance, and a natural inclination to engage in activities that bring satisfaction, are common in autotelic personality (Csikszentmihalyi & LeFevre, 1989; Tse et al., 2020). These individuals excel at reframing potential stressors as stimulating challenges, allowing them to frequently enter a state of flow (Busch et al., 2013). This intrinsic motivation propels them to seek out and immerse themselves in challenging activities that foster personal growth and fulfillment (Peifer et al., 2022; Tse et al., 2020).

An autotelic personality combines openness to new experiences with persistence and active engagement, balancing receptivity with determination to tackle challenges (Nakamura & Csikszentmihalyi, 2002; Tse et al., 2020). However, this engagement is pursued for its own sake rather than as a mean to a particular end (Baumann, 2021). Engaging in flow activities demands both concentration and a readiness to explore the boundaries of one's abilities (Nakamura & Csikszentmihalyi, 2002, 2014). While individuals without an autotelic mindset may perceive only difficulty, those with an intrinsic motivation to learn, see challenges as opportunities to enhance their skills (Nakamura & Csikszentmihalyi, 2002). They remain open to new information, identifying potential challenges, and directing their focus toward tasks that slightly exceed their current abilities, making skill development achievable (Baumann, 2021; Peifer et al., 2022). Csikszentmihalyi theory suggests that the pursuit of challenges and the development of skills are driven by distinct, and at times

even contrasting, traits or processes that coexist within autotelic personalities (Nakamura & Csikszentmihalyi, 2002). These include a blend of pure curiosity and the drive to achieve, enjoyment paired with persistence, openness to novelty alongside focused concentration, integration balanced with differentiation, and a combination of independence and cooperation (Baumann, 2021; Nakamura & Csikszentmihalyi, 2014). The essence of an autotelic personality lies in a person's ability to approach life with enthusiasm and commitment, experiencing a state of flow and deriving satisfaction from the experience itself. This state of flow can enhance psychological well-being and evoke positive emotions (Lynch & Troy, 2021), manifesting in professional settings, social interactions, or moments of solitude. As a result, these individuals are less reliant on external validation, such as wealth, power, or recognition, because they already find joy in their own pursuits. Their strong sense of autonomy and independence makes them less vulnerable to manipulation through threats or incentives while fostering a deeper connection with the world around them (Nakamura & Csikszentmihalyi, 2002). However, it is only in recent years that researchers have begun to empirically investigate the connection between personality traits and flow experiences.

Some studies strongly support the idea that flow is systematically linked to individual differences, such as achievement motivation (Engeser & Rheinberg, 2008; Schüler, 2007) and self-regulatory competencies (Keller & Bless, 2008; Keller & Blomann, 2008). Ongoing research continues to elucidate the mechanisms by which autotelic traits influence various aspects of human functioning, offering insights into how cultivating such characteristics can lead to a more fulfilling and engaged life (Ross & Keiser, 2014).

Being a parent has undergone significant transformations, influenced by various social, economic, and cultural factors (Ulferts, 2020). Empirical data provides insights into these changes and their implications for families today. Factors such as economic conditions, parental roles and time allocation, parenting styles and child development, labor force participation, work family balance and cultural norms, all play a role in shaping contemporary perceptions of parenting. Economic instability has become a key factor in explaining the delay of childbearing in developed societies, representing a significantly impact decisions about parenthood (Neuberger & Preisner, 2018; van Wijk et al., 2022). An American study found that most adults aged 50 and older without children, as well as younger adults under 50 who are unlikely to have children, recognize economic advantages to remaining child-free. Among those 50 and older, 79% reported being able to afford the things they want, compared to 61% of younger adults. Additionally, 75% of older adults stated they could save for the future, while only 57% of those under 50 reported the same (Minkin et al., 2024).

Recent analyses highlight a shift in parental roles and time allocation, revealing notable changes in how parents divide their time between work and childcare (Ishizuka, 2019; Parker

& Wang, 2013). Fathers have become more involved, spending an average of seven hours per week on childcare, while mothers dedicate approximately 14 hours weekly. However, mothers continue to shoulder a larger share of childcare responsibilities (Parker & Wang, 2013). Interestingly, another study found that 68% of mothers feel they spend the right amount of time with their children, suggesting a perceived balance in their parenting roles (Ishizuka, 2019). The OECD (2025) underscores the crucial role of effective parenting in shaping child development. Their research reveals that supportive and nurturing parenting practices contribute to improved cognitive and emotional outcomes in children. In contrast, inconsistent or harsh parenting can negatively impact a child's development.

Parenthood impacts labor force participation differently for men and women. Studies show that fatherhood generally boosts men's workforce participation, while motherhood often results in a decline in women's labor force involvement (Moosavian, 2021; Waszkiewicz & Bogusz, 2023). This contrast reinforces existing gender disparities in income and career progression. Many mothers experienced guilt while trying to balance work and family responsibilities. The transition back to work after parental leave was particularly challenging, especially in the absence of employer support (Moosavian, 2021). Access to reliable and high-quality childcare played a crucial role in maintaining work-family balance, which varied based on job flexibility and social support (Wiens et al., 2023). Supportive workplaces and dependable childcare were key factors in facilitating a smoother return to work after maternity leave (Wiens et al., 2023). There is also evidence that mothers experience an income decline of approximately 20% after childbirth, whereas fathers tend to earn more than non-fathers both before and after becoming parents (Waszkiewicz & Bogusz, 2023). This suggests that the fatherhood premium may largely stem from selection factors. Furthermore, fathers generally increase their working hours after parenthood, while mothers reduce theirs, further exacerbating gender disparities in the labor market (Waszkiewicz & Bogusz, 2023).

Cultural norms continue to shape parenting practices, with variations observed across different societies. A study by Ishizuka (2019) in the USA examed social class and gender and found that expectations around parenting roles can differ significantly, influencing how parents engage with their children and the types of support they seek. Contemporary parenthood is shaped by evolving gender roles, economic factors, and cultural influences. Understanding these dynamics is essential for developing effective policies and support systems that address the needs of modern families. Within this complex landscape, individual psychological variables—such as personality traits—play a significant role in influencing parental experiences and outcomes. The impact of personality traits across different stages of parenthood was examined by Piotrowski and colleagues (2023). Their study revealed that higher levels of parental burnout were associated with difficulties in task-switching, heightened sensitivity to intense stimulation, low emotional stability,

reduced conscientiousness, and weak identification with the parental role. Furthermore, these personality characteristics were more strongly correlated with parental burnout among individuals raising children in early developmental stages (i.e., infancy to preschool age, under seven years) compared to those in later stages of parenthood.

Regarding gender differences, Łada-Maśko and Kaźmierczak (2021) found that women exhibited significantly higher levels of maturity to parenthood than men across the valence, behavioral, and cognitive–emotional dimensions. The same study showed that the Big Five personality traits—extraversion, agreeableness, and conscientiousness—were positively associated with overall maturity to parenthood, while neuroticism and openness to experience were not significantly related. Consistent with prior findings, extraversion and agreeableness were linked to greater involvement and higher quality in parent–child relationships. The absence of a negative correlation between neuroticism and overall maturity to parenthood suggests that emotional instability may not influence the anticipation of parenthood maturity, but could become more relevant during the actual transition to and enactment of parenting roles (Maliszewska et al., 2018).

This study aims to investigate whether parenthood is associated with differences in personality traits, focusing on the Big Five and Autotelic Personality traits. Using a quantitative approach, the study addresses the following research questions: (1) Are there differences between parents and non-parents regarding Big Five and Autotelic personality traits? (2) Are there gender differences within the two samples (parents and non-parents)? (3) What differences are observed regarding variables such as socioeconomic status, marital status, professional status, and educational level in relation to personality traits?

METHOD

Participants

The final sample consisted of 708 participants, of whom 77.1% identified as women and 22.9% as men. For analytical purposes, participants were classified into two groups based on parental status: parents (n = 330) and non-parents (n = 378), allowing for comparative analyses of personality traits across these samples.

Parents: This group comprised 330 individuals (81.2% women, 18.8% men) with a mean age of 47.44 years (SD = 9.91). Most were married or in a common-law partnership (68.6%), while 21.8% were divorced or widowed and 9.7% were single. In terms of education, 79.2% had completed secondary education and 20.8% held a university degree. Most were employed (81%), with 16% unemployed or retired, and 3% students or student-workers. SES was reported as medium by 67.7%, low/lower-middle by 18.1%, and upper-middle/high by 14.2%.

Non-parents: This group included 378 individuals (73.5% women, 26.5% men) with a mean age of 26.66 years (SD = 8.22). The majority (90.5%) were single, 7.9% were married or in a common-law relationship, and 1.6% were divorced or widowed. Regarding education, 81.7% had completed secondary education, and 18.3% held a university degree. In terms of employment, 38.1% were employed, 53.7% were students or student-workers, and 8.2% were unemployed or retired. Socioeconomic status (SES) was predominantly perceived as medium (64.3%), followed by low/lower-middle (24.6%) and upper-middle/high (11.1%).

Measures

Sociodemographic Questionnaire

Participants completed a brief questionnaire assessing age, gender, occupation, socioeconomic status, education level, parental status (including number of children), and marital status.

Big Five Personality Traits

Personality traits were measured using the portuguese version of the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003; Nunes et al., 2018), a brief instrument assessing the Big Five dimensions: extraversion, agreeableness, conscientiousness, emotional stability and openness to experience. Each trait is measured using two items—one positively and one negatively keyed—on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). The TIPI has shown acceptable reliability and convergent validity with longer Big Five measures.

Autotelic Personality

The portuguese version of the Autotelic Personality Questionnaire (APQ; Tse et al., 2020; Ferreira et al., 2022) was used to assess traits associated with intrinsic motivation and flow proneness. The APQ comprises 26 items rated on a 7-point Likert scale, grouped into seven subscales: Curiosity, Persistence, Low Self-Centeredness, Intrinsic Motivation, Engagement and Transformation of Challenges, Engagement and Transformation of Boredom, and Attentional Control. Subscale and total mean scores were computed.

Procedure

This study is part of the broader project STRENGHPARENTS – The Role of Strength-Based Parenting in Positive Human Functioning and Mental Health. Ethical approval was obtained from the Ethics Committee of University of the authors affiliation.

Data were collected via an online questionnaire hosted on Google Forms. Participants were recruited using a nonprobability snowball sampling method, with initial respondents invited to disseminate the survey within their networks. Informed consent was obtained electronically, and participants were assured of anonymity and data confidentiality. The survey included a sociodemographic questionnaire, the portuguese version of the Ten-Item Personality Inventory (TIPI), and the short-form Autotelic Personality Questionnaire (APQ), presented in a fixed order.

Design and Data Analysis

A cross-sectional, quantitative design was employed. Descriptive statistics (means, standard deviations, ranges) were computed for all variables. Group comparisons based on parental status and sociodemographic characteristics were assessed using independent-samples t-tests and one-way ANOVAs, as appropriate. Gabriel's post hoc test was used to account for unequal group sizes (Martins, 2011). Assumptions of normality and homogeneity of variance were tested prior to each analysis. All analyses were conducted using IBM SPSS Statistics (Version 29), with statistical significance set at $p < .05$.

RESULTS

Significant differences were observed between parents and non-parents across several dimensions of the big five personality traits (table 1). Parents reported significantly higher levels of extraversion compared to non-parents, $t (706) = -2.64$, $p = .008$. Similarly, levels of conscientiousness were significantly higher among parents than non-parents, $t (706) = -4.81$, $p < .001$. Moreover, parents exhibited significantly higher levels of emotional stability (i.e., lower neuroticism) relative to non-parents, $t (706) = -4.86$, $p < .001$. Group comparisons also revealed significant differences in autotelic personality dimensions between parents and non-parents (table 1). Parents demonstrated significantly higher levels of persistence than non-parents, $t (706) = -3.22$, $p = .001$. Similarly, parents reported significantly greater low self-centeredness, $t (706) = -3.42$, $p < .001$, and higher levels of intrinsic motivation, $t (706) = -3.56$, $p < .001$. In addition, parents scored significantly higher on attentional control, $t (706) = -3.94$, $p < .001$. Finally, the total score for autotelic personality was significantly higher among parents compared to non-parents, $t (706) = -3.97$, $p < .001$ (table 1).

Table 1.
Differences between Parents and Non Parents regarding Big Five Personality and Autotelic Personality

	Parents (*n*= 330) Mean (*SD*)	**Non-Parents** (*n*= 378) Mean (*SD*)	***t*** (706)
Big5_ Extroversion	4.95 (1.40)	4.65 (1.59)	- 2.64*
Big5_ Agreeableness	6.09 (.93)	6.01 (.95)	- 1.09
Big5_ Conscientiousness	5.85 (1.13)	5.42 (1.27)	- 4.81***
Big5_ Neuroticism	4.17 (1.51)	3.63 (1.48)	- 4.86***
Big5_ Openness to Experience	5.59 (1.19)	5.54 (1.16)	- .55
AP_ Curiosity	5.63 (.86)	5.60 (.92)	- .277
AP_ Persistence	5.77 (.98)	5.52 (1.08)	- 3.22***
AP_ Low self-centeredness	3.84 (1.50)	3.44 (1.53)	- 3.42***
AP_ Intrinsic motivation	5.84 (.83)	5.60 (.93)	- 3.56***
AP_ Engagement and transformation of challenges	5.33 (1.11)	5.17 (1.21)	- 1.81
AP_ Engagement and transformation of boredom	4.85 (1.01)	4.81 (1.08)	- .54
AP_ Attentional control	4.46 (1.26)	4.07 (1.38)	- 3.94***
AP_Total Score	5.10 (.68)	4.89 (.74)	- 3.97***

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

Parent group

In the parent group (n= 330), marginally significant results were found in the big five domain of agreeableness, t (328) = -1.96, p = .051, with women scoring higher than men. Regarding autotelic personality traits women demonstrated significantly higher intrinsic motivation compared to men, t (328) = -2.32, p =.021 (table 2).

Table 2.
Gender differences in Big Five and Autotelic Personality traits among parents

	Men (*n*= 62) Mean (*SD*)	**Women** (*n*= 268) Mean (*SD*)	***t*** (328)
Big5_ Extroversion	4.70 (1.55)	5.01 (1.36)	-1.57
Big5_ Agreeableness	5.88 (.99)	6.14 (.92)	-1.96+
Big5_ Conscientiousness	5.69 (1.16)	5.89 (1.12)	-1.31
Big5_ Neuroticism	4.40 (1.34)	4.12 (1.54)	1.29
Big5_ Openness to Experience	5.60 (1.06)	5.59 (1.22)	.102
AP_ Curiosity	5.59 (.72)	5.63 (.89)	-.33
AP_ Persistence	5.77 (.84)	5.77 (1.01)	-.39
AP_ Low self-centeredness	3.61 (1.44)	3.89 (1.51)	-1.32
AP_ Intrinsic motivation	5.62 (.88)	5.89 (.81)	-2.32*
AP_ Engagement and transformation of	5.37 (1.18)	5.32 (1.11)	.29
challenges	4.66 (1.11)	4.90 (.98)	-1.71
AP_ Engagement and transformation of	4.23 (1.32)	4.51 (1.24)	-1.63
boredom			
AP_ Attentional control			
AP_ Total Score	4.98 (.57)	5.13 (.70)	-1.62

**p<.05*

Regarding educational level, parents with an university degree presented significantly higher scores in the big five personality traits in the domains of extraversion, t (328) = -2.32, p = .021, and openness to experience, t (328) = -2.95, p = .003. In the autotelic personality traits the domains of persistence, t (328) = -2.53, p = .012, low self-centeredness, t (328) = -2.67, p = .008, engagement and transformation of challenges, t (328) = -2.32, p = .021, curiosity, t (328) = -3.20, p = .002, and in the total score, t (328) = -3.03, p = .003 were higher among parents with an university degree.

Parents with more than one child showed significantly higher results than those with only one child in the big five emotional stability (i.e low neuroticism), t (328) = -2.25, p = .025. Marginally significant results were also found in the big five domain of openness to experience, t (328) = -1.91, p = .058, with parents of two or more children with higher results. Regarding the autotelic personality domains parents with more than one child also scored significantly higher in persistence, t (328) = -2.06, p = .040, low self-centeredness, t (328) = -2.04, p = .042 and in the total score, t (328) = 2.64, p = .009.

Regarding the variable professional status, the parents group exhibited significant differences in several big five personality traits. Specifically, differences were observed in extraversion, $F(2, 33) = 6.82$, $p = .001$; emotional stability (neuroticism), $F(2, 33) = 3.62$, $p = .028$; and openness to experience, $F(2, 33) = 7.87$, $p < .001$. With respect to the autotelic personality, significant differences emerged in the engagement and transformation of challenges domain, $F(2, 33) = 4.26$, $p = .015$. Post hoc analysis using Gabriel's test revealed that employed individuals scored significantly higher than unemployed or retired individuals on extraversion, neuroticism, openness to experience, and engagement and transformation of challenges.

Regarding marital status, significant differences were found in emotional stability (neuroticism) domain of the big five, $F(2, 33) = 3.65$, $p = .027$, as well as in engagement and transformation of boredom from the autotelic personality dimensions, $F(2, 33) = 5.42$, $p = .005$. Gabriel's post hoc test indicated that divorced individuals scored significantly higher in emotional stability (neuroticism) compared to single individuals, and in engagement and transformation of boredom compared to married individuals.

In relation to the variable socioeconomic status, significant differences were observed within the parents group regarding the big five personality traits. Specifically, differences were found in extraversion, $F(2, 33) = 9.28$, $p < .001$; conscientiousness, $F(2, 33) = 3.67$, $p = .027$; neuroticism, $F(2, 33) = 3.06$, $p = .048$; and openness to experience, $F(2, 33) = 13.00$, $p < .001$. Gabriel's post hoc test revealed that participants with a middle socioeconomic status scored higher in conscientiousness and emotional stability (neuroticism) compared to those with a low/low-middle socioeconomic status. Regarding extraversion and openness to experience, both participants with high/middle-high and middle socioeconomic status scored significantly higher than those with low socioeconomic status. With respect to the autotelic personality, significant differences were also found in the domains of curiosity, $F(2, 33) = 14.15$, $p < .001$; persistence, $F(2, 33) = 6.99$, $p = .001$; engagement and transformation of challenges, $F(2, 33) = 8.56$, $p < .001$; engagement and transformation of boredom, $F(2, 33) = 5.00$, $p = .007$; and in total score, $F(2, 33) = 9.10$, $p < .001$. Gabriel's post hoc analysis indicated that individuals with high/middle-high socioeconomic status scored significantly higher in curiosity, persistence, engagement and transformation of challenges, and in total score compared to participants with low/low-middle income. In the engagement and transformation of boredom domain, participants with a middle socioeconomic status obtained higher scores than those with low/low-middle income.

Non-parent group

Within the non-parent group (n= 378), significant gender differences were observed in several dimensions of the big five personality traits, where women scored higher than men

in agreeableness, t (376) = -3.53, p < .001, and conscientiousness, t (376) = -3.17, p = .002. However, men exhibited significantly higher levels of emotional stability compared to women, t (376) = 3.08, p = .002. Regarding the autotelic personality traits, men scored significantly higher than women in low self-centeredness, t (376) = 1.99, p = .047, and in engagement and transformation of challenges, t (376) = 2.17, p = .031. In contrast, women demonstrated significantly higher levels of intrinsic motivation compared to men, t (376) = -4.30, p < .001.

Table 3.
Gender differences in Big Five and Autotelic Personality traits among non-parents

	Men (*n*= 101) Mean (*SD*)	**Women (*n*= 277) Mean (*SD*)**	***t* (376)**
Big5_ Extroversion	4.69 (1.56)	4.64 (1.61)	.30
Big5_ Agreeableness	5.73 (1.01)	6.11 (.91)	-3.53***
Big5_ Conscientiousness	5.08 (1.45)	5.54 (1.18)	-3.17*
Big5_ Neuroticism	4.01 (1.37)	3.49 (1.49)	3.08*
Big5_ Openness to Experience	5.45 (1.15)	5.58 (1.16)	-.98
AP_ Curiosity	5.55 (.91)	5.63 (.92)	-.67
AP_ Persistence	5.42 (1.07)	5.56 (1.08)	-1.11
AP_ Low self-centeredness	3.70 (1.31)	3.35 (1.59)	1.99*
AP_ Intrinsic motivation	5.27 (1.06)	5.72 (.84)	-4.30***
AP_ Engagement and transformation of challenges	5.40 (1.12)	5.09 (1.23)	2.17*
AP_ Engagement and transformation of boredom	4.65 (1.11)	4.87 (1.07)	-1.79
AP_ Attentional control	3.88 (1.27)	4.14 (1.40)	-1.62
AP_ Total Score	4.84 (.72)	4.91 (.75)	-.82

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

Regarding educational level in the non-parent group, individuals with a university education showed significantly higher scores in the emotional stability domain of the big five personality traits, t (376) = -2.29, p = .023, when compared to the non-parent group with secondary education, as well as in the attentional control domain of autotelic personality, t (376) = -2.04, p = .042.

Regarding the variable professional status, the non-parents group showed significant differences in the domain of emotional stability from the big five personality traits, F (2, 38)

= 7.72, p < .001. Gabriel's post-hoc test indicated that employed individuals demonstrated higher emotional stability compared to both students/working-students and unemployed/retired individuals. In relation to autotelic personality, significant differences were observed in the domains of low self-centeredness, F (2, 38) = 4.27, p = .015, attentional control, F (2, 38) = 6.98, p = .001, and total score, F (2, 38) = 4.40, p = .013. Gabriel's post-hoc test revealed that employed individuals exhibited higher levels of low self-centeredness compared to students/student-workers. In the domain of attentional control, employed individuals also showed significantly higher scores compared to both unemployed participants and students/student-workers. For the total score, Gabriel's test indicated that employed individuals had higher overall scores than students/student-workers.

Regarding marital status, no significant differences were found within the non-parents group, either in big five personality dimensions or in the autotelic personality traits.

In the non-parents group, differences in autotelic personality traits were observed across socioeconomic status, specifically in the domains of curiosity, F (2, 38) = 3.36, p = .04; persistence, F (2, 38) = 4.87, p = .008 and engagement and transformation of challenges, F (2, 38) = 6.44, p = .002. Post-hoc analyses using Gabriel's test indicated that individuals with a medium socioeconomic status exhibited higher levels of curiosity compared to those with a low/low-medium socioeconomic status. Similarly, individuals with a high/upper-middle socioeconomic status demonstrated greater persistence than those with a low/lower-middle socioeconomic status. Finally, in the domain of engagement and transformation of challenges, participants with a high/upper-middle socioeconomic status showed significantly higher scores compared to those with both medium and low/lower-middle socioeconomic status.

DISCUSSION/CONCLUSION

This study adds to a growing body of evidence suggesting that parenthood represents a significant life transition capable of subtly yet meaningfully shaping personality development (Galdiolo & Roskam, 2019; van Scheppingen et al., 2016). Consistent with prior research, our results indicate that personality changes associated with parenthood are particularly evident within the Big Five framework (Bleidorn et al., 2018, 2021; Leikas & Salmela-Aro, 2015; Leikas et al., 2023). Adopting the parental role likely demands behavioral and identity adjustments, fostering gradual personality shifts over time, especially in traits like conscientiousness and agreeableness. In contrast, early parenting stress may temporarily affect neuroticism and self-perception (Roberts & Wood, 2006). However, it is important to note that the cross-sectional design of this study does not support causal claims, and the following discussion should be interpreted as identifying associations rather than direct causal effects.

Parents in this study scored significantly higher on both big five and autotelic traits compared to non-parents. Differences in extraversion, conscientiousness, and emotional stability are aligned with existing literature (Avison & Furnham, 2015; Ross & Keiser, 2014). Conscientiousness emerged as particularly salient, possibly reflecting adaptive responses to the planning and self-regulation demands of parenting.

Increases in agreeableness and emotional stability may stem from the cooperative and emotionally supportive nature of childrearing, while higher extraversion could be linked to the social engagement parenting often entails (Avison & Furnham, 2015).

Nevertheless, a major methodological concern that may confound these results is the substantial age difference between parents and non-parents in our sample. Since this variable was not statistically controlled, these differences might partially reflect normative personality maturation rather than the specific experience of parenthood.

Autotelic traits such as persistence, low self-centeredness, intrinsic motivation, and attentional control were also more pronounced among parents, aligning with previous work linking these traits to low neuroticism and high conscientiousness (Ross & Keiser, 2014). While openness to experience showed a weaker relationship, its interplay with agreeableness suggests complex individual differences in flow-proneness.

Sociodemographic variables revealed further distinctions. Female parents scored higher in intrinsic motivation and agreeableness, potentially reflecting gendered socialization patterns (Weisberg et al., 2011). Higher educational attainment was associated with elevated levels of persistence, openness, and extraversion—traits linked to positive parenting practices (Prinzie et al., 2009). Parents with multiple children showed higher persistence, emotional stability, and openness, possibly due to increased adaptive demands. Employed parents displayed greater extraversion and emotional stability, likely reflecting the psychological benefits of structured roles and financial security (Paul & Moser, 2009). Higher socioeconomic status was associated with a broader range of adaptive traits, consistent with literature linking enriched environments to positive personality outcomes (Bradley & Corwyn, 2002; Evans & Fuller-Rowell, 2013).

Interestingly, divorced or widowed parents exhibited greater engagement and transformation of boredom, potentially reflecting increased autonomy and self-direction. In contrast, stable routines in married households may reduce perceived need for novelty-seeking behaviors (Deci & Ryan, 2000).

Among non-parents, gender, employment, and education shaped personality in nuanced ways. Men scored higher in emotional stability, low self-centeredness and engagement and transformation of challenges, while women exhibited greater intrinsic motivation and agreeableness—differences potentially influenced by sociocultural norms (Weisberg et al., 2011). Education and employment were linked to higher attentional control and emotional stability, suggesting these domains can support personality development

outside the context of parenthood. These variables may serve as alternative pathways for personality development and self-actualization outside the context of parenthood. Education and occupational involvement, in particular, appear to act as developmental catalysts for non-parents, potentially fulfilling roles traditionally attributed to the parenting experience (Abma & Martinez, 2006; Waren & Pals, 2013). These findings underscore the importance of adopting a broader ecological framework when investigating adult personality development. Overall, the findings underscore the multifaceted pathways of adult personality development, emphasizing both parental and non-parental life contexts.

The findings support the notion that parenthood is a key life transition associated with changes in adult personality traits. Compared to non-parents, parents exhibited higher levels of conscientiousness, emotional stability, extraversion, and key autotelic traits such as intrinsic motivation, persistence, and attentional control. These findings suggest that, despite its demands, parenthood may foster psychological growth and the development of traits conducive to well-being.

Sociodemographic factors moderated these outcomes, with higher educational attainment, stable employment, and middle-to-upper socioeconomic status correlating with more adaptive personality profiles. Notably, parents with more than one child and those who were divorced or widowed showed increased psychological resilience and motivation, possibly reflecting adaptive responses to increased responsibilities.

The results underscore the potential of parenthood to support the development of traits associated with emotional regulation, self-discipline, and purpose, all of which are protective for mental health. Clinically, these findings can inform interventions aimed at supporting individuals during major life transitions, highlighting internal resources and promoting resilience.

However, several important limitations should be explicitly addressed. The cross-sectional design limits causal inference, and self-report measures may be influenced by bias. The use of a brief self-report measure (TIPI) also limits reliability compared to more comprehensive personality inventories. Additionally, the non-probabilistic sampling and significant gender imbalance (77.1% female) restrict the generalizability of these findings. Future reports would benefit from a clearer reporting of effect sizes to better convey the magnitude of the observed differences. Unmeasured variables—such as parenting style or quality of the parent–child relationship—also warrant consideration.

Future research would benefit from the use of longitudinal designs to track changes in personality across the transition to parenthood, thereby disentangling selection effects from genuine developmental shifts. Moreover, investigating variables such as parenting style, number of children, and the age of offspring may provide more nuanced insights into how different parenting experiences interact with personality trajectories over time. Finally, in terms of ethical transparency, the authors declare no conflicts of interest related to this research.

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