




Cultural consonance as a mediator between maternal adversity and parenting practices across family contexts in the Dominican Republic

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ABSTRACT

Background: Adversity is linked to compromised parenting, but the mechanisms remain unclear. This study examines cultural consonance—the extent to which individuals' lives align with shared cultural models—as a mediator between maternal adversity and three parenting practices: violent discipline, positive discipline, and cognitive stimulation.

Methods: We collected and analyzed data from 1019 mothers living in poverty in 2024–25 in the Dominican Republic. Maternal adversity was modeled as a latent construct including adverse childhood experiences, intimate partner violence, and depression symptoms. Cultural consonance was assessed across material-social and family dynamics domains. Structural equation models tested mediation; regressions explored predictors by family structure and maternity onset age.

Results: Adversity lowered material-social ($\beta = -.56, p < .001$) and family dynamics consonance ($\beta = -.87, p < .001$). For violent discipline, family dynamics consonance was protective ($\beta = -.37, p = .013$), while material-social consonance increased its use ($\beta = .22, p < .001$); adversity's effect was fully mediated. For positive discipline, adversity had a positive direct effect ($\beta = .39, p = .014$) but negative indirect effects ($\beta = -.31, p = .025$), suggesting suppression. For stimulation, adversity's positive direct effects ($\beta = .44, p = .018$) were offset by stronger negative indirect effects ($\beta = -.61, p < .001$), yielding a negative total effect. Family structure and age at first childbirth shaped these pathways. Households with both parents and other adults had better outcomes; single mothers with multiple children faced the greatest challenges. Paternal consonance consistently predicted cognitive stimulation; consonance in all family domains were protective against violent discipline.

Conclusions: Interventions that enhance cultural consonance may complement traditional parenting programs, but they should be tailored to the family composition and the mother's age.

1. Introduction

Parenting practices play a critical role in child development, with both immediate and long-term consequences for children's health, cognitive growth, and socioemotional functioning (Arnold et al., 2023; Kingston et al., 2012; Lansford et al., 2010; Ma et al., 2018; Pace et al., 2019; Racine et al., 2018; Sánchez-Vincitore and Castro, 2022; Seeman et al., 2010; Shonkoff et al., 2009; Steptoe et al., 2005; Urizar and Muñoz, 2022). These practices span multiple dimensions, including positive and violent discipline, cognitive stimulation, and emotional support (Lansford, 2022). A substantial body of research has shown that

adverse experiences, such as childhood trauma, intimate partner violence, and maternal depression, can undermine these dimensions by compromising parenting capacities (Hugill et al., 2017; Lange et al., 2019). Mothers who experienced childhood maltreatment often display higher rates of harsh discipline, less sensitive responsiveness to their children's needs, and difficulty providing developmentally appropriate stimulation (Berlin et al., 2011; Dellor et al., 2025; Leite Ongilio et al., 2023; Madigan et al., 2019; Savage et al., 2019; Suor et al., 2015). Intimate partner violence is similarly associated with inconsistent discipline and disrupted parent-child interactions (Gustafsson et al., 2017; Jofre-Bonet et al., 2024), while maternal depression correlates

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with lower levels of positive parenting and increased use of violent discipline (Lovejoy et al., 2000; Taraban et al., 2017; Vázquez-Echeverría et al., 2022).

However, these associations are not uniform, with considerable heterogeneity in parenting outcomes among individuals exposed to similar adversities (Mistry et al., 2016). In the Dominican Republic, mothers who rejected the need for physical punishment provided more stimulating activities, and those who believed in physical punishment employed both violent and positive disciplinary strategies, demonstrating that these are not mutually exclusive and highlighting the need to examine multiple parenting dimensions simultaneously (Sánchez-Vincitore and Castro, 2022). Some parents with adverse histories exhibit remarkable capacity to provide supportive and effective parenting practices despite their experiences (Conger et al., 2013), which suggests the presence of mediating factors that shape how adversity translates into parenting practices. Understanding these mechanisms is crucial for developing effective interventions that support positive parenting in contexts of adversity.

Cultural consonance (CC)—the degree to which individuals can approximate widely shared cultural models in their own beliefs and behaviors (Dressler et al., 2014)—offers a critical yet understudied framework for understanding variability in the relationship between adversity and parenting. Cultural consonance theory posits that individuals' well-being depends not merely on possessing resources or knowledge, but on their ability to enact culturally shared models of a successful life (Dressler et al., 2017). Cultural models encompass various life domains, including family relationships, material possessions, social support, and leisure activities (Dressler et al., 2005), and this enactment occurs through both material and symbolic means. Providing a nurturing environment can be challenging in settings of poverty (Shonkoff et al., 2009), where low socio-economic position can lead to low CC (Dressler et al., 2014). Adverse experiences can disrupt an individual's ability to achieve CC through multiple pathways: economic hardship may limit access to material resources necessary for material consonance; psychological distress may impair relationship skills essential for family life consonance; and social isolation may restrict access to support networks that facilitate consonance in leisure activities and social support (Dressler, 2017). The biocultural approach recognizes that cultural models operate largely out-of-awareness as shared cognitive frameworks within communities (Bennardo, 2024), requiring ethnographic discovery techniques to identify them (Bennardo, 2024; Weller et al., 2024). This perspective highlights how culture becomes embodied, with low cultural consonance resulting in chronically stressful circumstances that impact both psychological and physiological outcomes (Balieiro et al., 2011).

In parenting contexts, we theorize that cultural consonance operates through three key mechanisms. First, cultural models provide interpretive frameworks that shape how parents understand and respond to child behaviors. High consonance in family dynamics may offer alternative scripts for managing challenging behaviors without resorting to violence. Conversely, low consonance in family life may reflect difficulties in enacting culturally appropriate family dynamics, including parenting roles. Second, cultural consonance facilitates access to both material and social resources. Parents with higher consonance may be more effective in navigating social networks to obtain support, thereby reducing isolation and stress that contribute to harsh parenting. Conversely, limited consonance in material domains may create stress and restrict access to resources that support optimal parenting. Third, achieving consonance reinforces positive parental identity and self-efficacy. The inability to approximate cultural ideals—particularly prevalent in poverty contexts—may generate identity strain, which manifests in compensatory control through violent discipline. Meanwhile, low consonance in social support and leisure domains may limit opportunities for co-regulation, social learning, and stress reduction that support positive parenting. Given that higher CC has been associated with greater family cohesion (Dressler et al., 2007), these mechanisms

suggest that cultural consonance is not simply a risk or protective factor, but rather a fundamental organizing principle that shapes how adversity translates into parenting practices. While research on CC has primarily focused on health outcomes (Dressler et al., 2014; Reyes-García et al., 2010; Sweet, 2010), no studies to date have explicitly examined CC as a mediator between adversity and parenting practices.

In this study, we examine whether CC mediates the relationship between maternal adversity (measured via adverse childhood experiences, intimate partner violence, and depressive symptoms) and three parenting practices: cognitive stimulation, positive discipline, and violent discipline. We further assess whether these mediation pathways vary by family structure and maternal age at the time of first giving birth. We hypothesize that: (1) adversity is negatively associated with CC; (2) lower CC predicts more violent discipline and less positive discipline and cognitive stimulation; (3) CC mediates the effects of adversity on parenting; and (4) these mediation pathways vary by family structure and maternal age. By addressing these hypotheses, this study offers a novel application of CC theory to parenting and identifies potential leverage points for intervention in contexts of poverty and adversity.

2. Method

2.1. Participants

We studied mothers of children aged 24–48 months enrolled in the social programs provided by the National Institute for Early Childhood Comprehensive Care (INAIPI) of the Dominican Republic. Since 2015, INAIPI has offered, free of charge, two types of programs for children aged 45 days to 5 years who live in the areas of highest poverty and social vulnerability in the country: the Comprehensive Care Centers for Children and the Family (CAFI), which offer accompaniment and care through home visits, and the Comprehensive Care Centers for Early Childhood (CAIPI), which are childcare centers. Between November 11, 2024, and January 24, 2025, we recruited 1019 participants in 18 CAIPIs and 5 CAFIs in Santo Domingo, the capital city.

2.2. Materials

From each participant, we first collected demographic data focused on family structure and age at first and any subsequent childbirths. Second, we administered the Dominican Cultural Consonance Measurement Tool (DCCMT), which is a Likert-scale instrument that assesses participants' perceptions of where they view themselves in comparison to the characteristics valued and desirable across six cultural domains: material goods, leisure activities, social support, family life, maternal role, and paternal role (of the 24–48 months old child's biological father). We developed the DCCMT between 2017 and 2025 in several steps, following the methodology proposed by Dressler and others for measuring cultural consonance (Dressler et al., 2005). (1) We selected Dressler et al.'s four core cultural domains (material goods, leisure activities, social support, and family life) and we added two more (maternal role and paternal role) based on our hypotheses developed through home visits and community engagement through workshops and unstructured discussions in Domingo Savio—the neighborhood in the metropolitan area of Santo Domingo with the highest concentration of extreme poverty—and statistical analyses (Sánchez-Vincitore and Castro, 2022; Sánchez-Vincitore et al., 2019). We grouped the six cultural domains in two larger categories: material-social and family dynamics, as shown in Table 1 with the list of questions. (2) To elicit the elements of each domain, we conducted free listing exercises with 181 adults from four Santo Domingo neighborhoods with a high concentration of poverty and extreme poverty (Domingo Savio, Los Mina, Villas Agrícolas, and Los Ríos) and from the only public children's library in the city. This library, mostly visited by families with high literacy skills, allowed us to expand the socioeconomic diversity of our sample. For

Table 1
Free list instruments to elicit responses on six cultural domains.

| Material-social domains | |
|-------------------------|--|
| Material goods | 1 List the material goods or possessions that people must have to live a good life |
| Leisure activities | 2 List the activities that people typically do in their free time |
| Social support | 3 List the problems for which people typically ask other people for help |
| | 4 List the types of people one can ask for help |
| Family dynamics domains | |
| Family life | 5 Imagine a family that you admire and list the characteristics of that family |
| | 6 Imagine a family that you do not admire and list the characteristics of that family |
| Maternal role | 7 Imagine a mother that you admire and list the characteristics of that mother |
| | 8 Imagine a mother that you do not admire and list the characteristics of that mother |
| Paternal role | 9 Imagine a father that you admire and list the characteristics of that father |
| | 10 Imagine a father that you do not admire and list the characteristics of that father |

each cultural domain, we asked participants to answer the questions in [Table 1](#). This approach enabled us to capture culturally salient features across income groups and subsequently test for shared cultural models. (3) Based on the analysis of the free lists, we developed a cultural consensus analysis instrument, comprised of a Likert-scale questionnaire for the material goods and leisure domains, a rank-order questionnaire for the social support domain, and a pile sort instrument for the family dynamics domains. (4) We administered the cultural consensus analysis instrument to 97 adults in the waiting area of a private teaching hospital in Santo Domingo that serves populations with and without health insurance from varied socioeconomic positions. In this step, participants rated the importance of each element within each domain, enabling us to assign culturally weighted values (cultural salience scores) to each item. (5) Based also on the analysis of the free lists, we created the DCCMT. To compute individual consonance scores, we assigned each item within a domain the cultural salience weight derived from the consensus analysis. We then scored participants' responses using these weights, such that higher scores reflected greater alignment with culturally valued characteristics.

Third, we administered four validated instruments. To measure parenting practices, we used the Multiple Indicator Cluster Survey Questionnaire for Children Under 5, Modules Early Childhood Development and Child Discipline, an adapted version from the Parent-Child Conflict Tactics Scale ([Straus et al., 1998](#)). To measure maternal adversity, we used the Adverse Childhood Experience (ACE) questionnaire ([Felitti et al., 1998](#)), the Hurt, Insulted, Threatened with Harm and Screamed (HiTS) screening tool ([Sherin et al., 1998](#)), and the Edinburgh Postnatal Depression Scale (EPDS) ([Cox et al., 1987](#)).

This study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for reporting cross-sectional studies ([von Elm et al., 2008](#)).

2.3. Sequential exploratory design leading to family structure classification

The classification of family types and the decision to include age at first childbirth, in addition to current age, were informed by the prior phase of the study, which involved analyzing 102 life history interviews we conducted from March to June 2023 with caregivers of children aged 2 to 4 enrolled in INAPI centers in three Santo Domingo neighborhoods: Los Mina, Villas Agrícolas, and Los Ríos. We used stratified purposive sampling to ensure balanced representation across child sex (51 female, 51 male) and age groups (33 two-year-olds, 38 three-year-olds, 31 four-

year-olds). We conducted all interviews in private offices within INAPI's childcare centers, a location that was private and convenient for study participants who were dropping off or picking up their children. Ninety-nine caregivers were the child's biological mothers, with ages ranging from 19 to 43 years, and the remaining three included two relatives (grandmother, aged 52; aunt, aged 20) and one neighbor (aged 76). The sample included 92 Dominican nationals, seven Haitian immigrants, and three Venezuelan immigrants. Forty-three women had their first child as adolescents.

The life histories reflected marked contrasts between their childhood experiences and family structures at the time of the interview. We identified three critical inflection points that repeatedly structured women's narratives: early parental loss or abandonment, adolescent pregnancy, and intimate partner violence—events that disrupted educational and economic trajectories while simultaneously shaping contemporary approaches to motherhood and family formation. The women's childhood environments were characterized by severe material deprivation and household instability. Most women reported growing up in overcrowded conditions with six or more siblings sharing one or two rooms, with multiple children per bed. Fifty-two women experienced paternal abandonment or death during their early childhood, creating both economic precarity and shifts in household structure, with grandmothers, stepparents, or older siblings assuming caregiving roles. In response to absent male providers, participants' mothers engaged in poorly compensated informal labor—domestic work or street vending—often incorporating daughters into these economic activities since childhood. Educational access was severely limited; some participants discontinued schooling due to economic pressures or early pregnancy, and others never enrolled due to a lack of documentation. Sexual education was notably absent from family conversations, leaving adolescent girls unprepared for romantic relationships that typically began between ages 14–17, often with significantly older partners.

At the time of the interview, the women were heads of household or cohabited with partners while raising one to more children, many born during the participants' adolescence. Despite persistent housing precarity—with numerous families occupying single-room dwellings—participants articulated deliberate departures from their childhood experiences. Many reported commitments to nonviolent discipline practices, open communication about sexuality and contraception, and prioritizing children's education despite their own educational disruption. While economic necessity required some women to remain in extended family arrangements, most had formed small nuclear households. Economic survival strategies remained concentrated in the informal sector, including domestic work, street vending, and operating betting shops, with limited formal employment opportunities such as school support staff positions or the police force.

The three identified inflection points structured temporal narratives across interviews. Early parental loss or abandonment introduced material instability and emotional disruption, often creating conditions for subsequent abuse by stepfathers or extended family members while necessitating premature entry into labor markets. The second inflection point—adolescent pregnancy—was rarely planned, with many participants reporting pregnancy recognition only in the second or third trimesters. These pregnancies precipitated permanent educational discontinuation and entry into unstable cohabitation arrangements, further constraining autonomy and economic opportunities. The third inflection point, intimate partner violence, often characterized current or past relationships. Participants described partners exhibiting controlling behaviors, physical and emotional abuse, and systematic isolation from support networks. Economic dependency and concerns for children's welfare trapped some women in violent relationships, while others had successfully established independent households.

Intergenerational transmission patterns emerged in the interviews, with childhood exposure to paternal absence and violence correlating with early pregnancy and partner violence in adulthood. The absence of

protective figures during childhood facilitated premature assumption of adult responsibilities, while the lack of sexual education contributed to adolescent pregnancy. Witnessing or experiencing household violence normalized similar dynamics in participants' initial romantic relationships. However, the narratives also demonstrated conscious resistance to intergenerational patterns, with many women articulating deliberate decisions to reject violent discipline, pursue economic independence surmounting structural constraints, and provide their children with educational opportunities they lacked. Despite persistent material deprivation, participants demonstrated agency in navigating and contesting legacies of abandonment, poverty, adolescent motherhood, and gender-based violence, reflecting complex negotiations between structural constraints and aspirational motherhood practices.

2.4. Procedure

We convened participants at their respective CAIPI or CAFI. Following a comprehensive explanation of the study protocol, obtaining informed consent, and explaining the data collection method, we provided each participant with a tablet with headphones. We collected data using an Audio Computer-Assisted Self-Interview (ACASI) via Tangerine, an open-source software platform capable of offline functionality. The tablet application featured an interactive avatar that orally and visually guided participants through the survey instrument. Therefore, literacy was not a prerequisite for participation, while the self-interview with headphones ensured participant privacy during data collection. Data collection lasted approximately 20–40 min. None of the participants reported technical difficulties when using the tablets, as all were knowledgeable smartphone users.

All procedures complied with applicable laws and institutional guidelines. The study protocol, including all subsequent amendments, was approved by the institutional review boards of the Celia Scott Weatherhead School of Public Health and Tropical Medicine at Tulane University (study 2023-174, originally approved March 10, 2023) and Universidad Iberoamericana (study CEI2023-2, originally approved March 6, 2023). The privacy rights of study participants have been observed.

2.5. Data analysis

Data analysis proceeded in four stages. First, we conducted Pearson correlation analyses to examine bivariate associations between all measured variables. This provided a foundational understanding of the relationships between adversity indicators, CC measures, and parenting outcomes. All analyses were conducted using IBM SPSS Statistics version 29.0 and JASP .19.3. The significance level was set at $p < .05$.

Second, we conducted one-way analyses of variance (ANOVAs) to assess differences in CC and parenting practices across family structure categories. Drawing on our prior analysis of 102 life histories of women interviewed in Santo Domingo in 2023, we constructed three primary categories of family structure based on the number of additional adults in the household: none, one, or two or more. We further subdivided the categories into 10, considering the presence of other children, the child's biological father, a different partner, the grandmother, or other adults. We performed post-hoc comparisons using Tukey's HSD test to identify significant differences between family categories and conducted independent samples t-tests to compare outcomes between homes with and without the biological father present.

Third, we used structural equation modeling (SEM) to test the mediating role of CC in the relationship between maternal adversity and parenting outcomes. The model included: a) three independent variables: adverse childhood experiences, intimate partner violence, and symptoms of depression; b) two mediators: material-social CC (composed of consonance in material goods and leisure activities) and family dynamics CC (composed of consonance in family life, maternal role, and paternal role); c) three parenting outcomes: violent discipline,

positive discipline, and cognitive stimulation. We tested three separate structural equation models, one for each outcome. We assessed model fit using the comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). We used maximum likelihood estimation and 5000 sample bootstrapping to assess the significance of indirect effects. Missing data were addressed using full information maximum likelihood (FIML). We did not include CC in social support in these models due to low factor loadings.

Fourth, we conducted forward stepwise regression analyses to identify significant predictors of parenting practices across different family categories and maternity onset groups. In these models, we entered all measured variables (not latent constructs) as predictors in steps based on statistical significance, with the entry criterion set at $p < .05$.

2.6. Role of the funding source

The authors declare that the funding source had no role in the study design, data collection, data analysis, data interpretation, writing of the report, or the decision to submit for publication.

3. Results

3.1. Reliability of measures

The CC measures demonstrated acceptable reliability, with coefficients α ranging from .563 to .594 and coefficients ω ranging from .575 to .614 across the subscales. The three adversity indicators showed good internal consistency, with coefficients $\alpha = .625$ and $\omega = .602$.

3.2. Characterization of the sample

We collected data from 1019 participants. Ninety-one mothers (9.1 %) were under the age of 20 when they gave birth to the study child aged 24–48 months old, 316 mothers (31.4 %) were under 20 when they had their first child but were 20 or older when they gave birth to the study child, and 598 (59.5 %) mothers were 20 or older when they had their first child. Table 2 presents the distribution of participants by their family structure. In addition to living with their child, 27.3 % lived with no other adults, 62.7 % lived with one adult, and 10.0 % lived with two or more adults. The nuclear family, composed of the mother, the biological father, and the study child, was the most frequent family structure (53.0 %). However, family structure varied significantly across the maternity onset groups. Compared to women aged 20 and older, adolescent mothers were significantly less likely to live with the child's biological father, whether alone or with other adults (46.2 % total), than former adolescent mothers (58.2 %) or adult-onset mothers (59.8 %) ($\chi^2(2) = 6.10, p = .047$). Adolescent mothers were also the least likely to live alone with their children, either with one child (17.6 %) or multiple children (3.3 %), totaling 20.9 %. In contrast, 29.1 % of former adolescent mothers and 27.1 % of adult-onset mothers lived without other adults ($\chi^2(2) = 5.34, p = .069$), although the difference was not significant. Multigenerational arrangements were significantly more common among adolescent mothers: 16.5 % lived with the child's grandmother, either without (3.3 %) or with other adults (13.2 %), compared to 5.1 % of former adolescent mothers and 7.4 % of adult-onset mothers ($\chi^2(2) = 13.37, p = .001$). Likewise, 11.0 % of adolescent mothers cohabited with a different partner, compared to 3.8 % of former adolescent and 3.0 % of adult-onset mothers ($\chi^2(2) = 13.42, p = .001$). None of the adolescent mothers lived in households with both a partner and additional adults (0 %), in contrast to 5.3 % of former adolescent and 6.2 % of adult-onset mothers ($\chi^2(2) = 5.63, p = .060$), a non-significant difference but indicative of more complex arrangements in older age groups. Former adolescent and adult-onset mothers had highly similar living arrangements. They showed comparable rates of

Table 2
Family structure distribution.

| Category | Subcategory | N | % | Adolescent mothers N = 91 (9.1 %) | Former adolescent mothers N = 316 (31.4 %) | Adult-onset mothers N = 598 (59.5 %) |
|-------------------------------------|--|------------|---------------|--------------------------------------|---|---|
| A. Mother alone | | 278 | 27.3 % | 20.9 % | 29.1 % | 27.1 % |
| | 1. Mother + child | 118 | 11.6 % | 17.6 % | 8.5 % | 12.0 % |
| | 2. Mother + multiple children | 160 | 15.7 % | 3.3 % | 20.6 % | 15.1 % |
| B. Mother + 1 adult | | 639 | 62.7 % | 63.8 % | 63.7 % | 62.1 % |
| | 3. Mother + biological father | 540 | 53.0 % | 46.2 % | 53.5 % | 53.8 % |
| | 4. Mother + other partner | 37 | 3.6 % | 11.0 % | 3.2 % | 2.8 % |
| | 5. Mother + child's grandmother | 38 | 3.7 % | 3.3 % | 3.8 % | 3.7 % |
| | 6. Mother + other adult | 24 | 2.4 % | 3.3 % | 3.2 % | 1.8 % |
| C. Mother + 2 or more adults | | 102 | 10.0 % | 15.4 % | 7.2 % | 10.7 % |
| | 7. Mother + biological father + other adult(s) | 51 | 5.0 % | .0 % | 4.7 % | 6.0 % |
| | 8. Mother + other partner + other adult(s) | 3 | .3 % | .0 % | .6 % | .2 % |
| | 9. Mother + child's grandmother + other adult(s) | 39 | 3.9 % | 13.2 % | 1.3 % | 3.7 % |
| | 10. Mother + other adult(s) | 9 | .9 % | 2.2 % | .6 % | .8 % |

cohabitation with the biological father (58.2 % vs. 59.8 %; $\chi^2(1) = .20, p = .655$), single motherhood (29.1 % vs. 27.1 %; $\chi^2(1) = .28, p = .600$), and living with a different partner (3.8 % vs. 3.0 %; $\chi^2(1) = .38, p = .539$).

The age gap between mothers and their current partners differed significantly across groups, $F(2, 966) = 25.43, p < .001, \eta^2 = .050$. Former adolescent mothers had the largest age gap with their partners ($M = 8.97$), followed by adult-onset mothers ($M = 7.31$), and adolescent mothers, who reported the smallest gap ($M = 5.24$). Post hoc Bonferroni comparisons revealed that the difference between former adolescent and adolescent mothers was significant ($p = .002$), as was the difference between former adolescent and adult-onset mothers ($p < .001$). The difference between adolescent and adult-onset mothers was not statistically significant ($p = 1.000$).

The mothers in our sample showed varied levels of educational attainment, with the majority having completed secondary education (50.6 %, $n = 516$), followed by those with a bachelor's degree (24.7 %, $n = 252$). Primary education was the highest level for 11.3 % ($n = 115$), while 1.1 % ($n = 11$) reported no formal education. Technical education was completed by 10.9 % ($n = 111$), 1.4 % ($n = 14$) held master's degrees, and 37.0 % had post-secondary education (technical degree or higher). The biological father of each study child showed similar but somewhat lower educational patterns. Among the 943 fathers with available data (92.5 % response rate), 52.5 % ($n = 495$) had completed secondary education, while 20.1 % ($n = 190$) had only primary education—nearly double the rate among mothers. Bachelor's degrees were held by 15.8 % ($n = 149$) of fathers, technical education by 8.5 % ($n = 80$), and 2.3 % ($n = 22$) reported no formal education. Only .7 % ($n = 7$) held master's degrees. Educational homogamy was moderate, with 49.1 % of couples having the same education level. However, a pronounced gender difference emerged: mothers were three times more likely to have higher education than their partners (38.0 %, $n = 358$) compared to fathers having higher education than mothers (12.9 %, $n = 122$).

Material resources varied considerably across households. More than 90 % of them owned items including beds (98.7 %), clothing (98.3 %), gas tanks (97.9 %), stoves (96.1 %), kitchen utensils (95.7 %), and fans (94.6 %). Moderate possession rates (50–90 %) were observed for ten items, including groceries (89.6 %), refrigerators (89.3 %), chairs (85.3 %), washing machines (83.5 %), running water (82.9 %), and televisions (81.2 %). Less common items, owned by fewer than half of families, included bank accounts (34.2 %), computers, laptops, or tablets (31.7 %), air conditioning (26.8 %), home ownership (22.6 %), vehicles (20.7

%), microwaves (18.1 %), and businesses (11.0 %). On average, households possessed 15.6 out of 23 assessed items (SD = 3.4), with the median household owning 16 items (IQR: 14–18).

Material goods possession showed a strong positive association with maternal education ($r = .42, p < .001, F(5,1013) = 48.07$), creating a socioeconomic gradient: mothers with no formal education owned an average of 11.0 items, increasing progressively through primary (13.1), secondary (15.2), technical (15.5), and bachelor's degree holders (17.6), to mothers with master's degrees who owned 19.9 items on average. This 9-item difference across the educational spectrum underscores the strong relationship between educational attainment and material well-being in this population.

3.3. Pearson correlation analyses

Pearson correlation analyses showed several statistically significant associations among the key variables (see Table 3). Cognitive stimulation showed negative associations with the three maternal adversity indicators ($r_s = -.06$ to $-.12$) and positive associations with all cultural consonance domains except social support ($r_s = .09$ to $.32$). Positive discipline was positively associated with ACEs ($r = .09$), material-social domains ($r_s = .07$ to $.15$), and both cognitive stimulation ($r = .15$) and violent discipline ($r = .13$). Violent discipline correlated positively with all maternal adversity measures ($r_s = .16$ to $.30$) and negatively with family dynamics consonance domains ($r_s = .18$ to $.30$) and leisure consonance ($r = .08$). Dimensions of CC were strongly intercorrelated. Maternal and paternal consonance were positively correlated ($r = .23, p < .001$), as were family life and maternal consonance ($r = .43, p < .001$) and family life and paternal consonance ($r = .33, p < .001$), indicating coherence across domains of cultural alignment. Full correlation coefficients are presented in Table 3.

3.4. One-way ANOVA by family structure

We performed a series of one-way ANOVAs to examine whether parenting practices, exposure to adversity, and levels of CC varied across ten distinct family structures. Using family structure as the independent variable, we examined differences in parenting strategies, indicators of adversity, and six dimensions of CC. Following significant omnibus results, we conducted post hoc comparisons using Tukey's HSD test.

Cognitive stimulation scores varied significantly by family structure, $F(9, 1009) = 6.66, p < .001, \eta^2 = .056$. Post hoc comparisons indicated

Table 3
Pearson correlation coefficients for parenting, adversity, and cultural consonance measures.

| | PARENTING | | | MATERNAL ADVERSITY | | | CULTURAL CONSONANCE | | | | | |
|-------------------------------|-----------------------|---------------------|--------------------|-------------------------------|---------------------------|------------------------|---------------------|--------------------|----------------|-------------|---------------|---------------|
| | Cognitive stimulation | Positive discipline | Violent discipline | Adverse childhood experiences | Intimate partner violence | Symptoms of depression | Material goods | Leisure activities | Social support | Family life | Maternal role | Paternal role |
| PARENTING | | | | | | | | | | | | |
| Cognitive stimulation | | | | | | | | | | | | |
| Positive discipline | .150** | | | | | | | | | | | |
| Violent discipline | -.009 | .129** | | | | | | | | | | |
| MATERNAL ADVERSITY | | | | | | | | | | | | |
| Adverse childhood experiences | -.064* | .091** | .296** | | | | | | | | | |
| Intimate partner violence | -.119** | .003 | .159** | .286** | | | | | | | | |
| Symptoms of depression | -.106** | .053 | .252** | .396** | .391** | | | | | | | |
| CULTURAL CONSONANCE | | | | | | | | | | | | |
| Material goods | .140** | .106** | -.044 | -.168** | -.253** | -.240** | | | | | | |
| Leisure activities | .237** | .071* | -.079* | -.142** | -.116** | -.177** | .392** | | | | | |
| Social support | .005 | .145** | .054 | .009 | -.053 | -.060 | .198** | .108** | | | | |
| Family life | .187** | -.009 | -.303** | -.428** | -.329** | -.443** | .262** | .250** | .052 | | | |
| Maternal role | .093** | .003 | -.287** | -.255** | -.217** | -.298** | .284** | .262** | .096** | .429** | | |
| Paternal role | .320** | -.013 | -.175** | -.157** | -.204** | -.242** | .223** | .115** | -.039 | .328** | .228** | |

Note: *p < .05, **p < .01, ***p < .001.

that households composed of a mother and child, the child’s biological father, and additional adult(s) (M = .68, SD = .22) reported significantly higher stimulation than those composed of a single mother alone with the study child (M = .51, SD = .22, $p < .001$) or with multiple children (M = .52, SD = .22, $p < .001$).

Exposure to intimate partner violence differed across family structures, $F(9, 1009) = 2.42, p = .010, \eta^2 = .021$. Mothers in nuclear families (M = 1.22, SD = .45) reported significantly less exposure to intimate partner violence than single mothers living with multiple children (M = 1.44, SD = .81, $p < .001$). Depressive symptoms also varied by family structure, $F(9, 1009) = 2.54, p = .007, \eta^2 = .022$. Although single mothers with multiple children (M = .94, SD = .61) reported higher levels of depressive symptoms than those in households with the child’s biological father and other adult(s) (M = .65, SD = .58), this difference did not reach statistical significance ($p = .081$).

Material goods CC differed significantly by family structure, $F(9, 1009) = 5.79, p < .001, \eta^2 = .049$. Households including the child’s biological father and other adult(s) (M = 57.95, SD = 9.21) reported higher material consonance than single mothers with multiple children (M = 50.80, SD = 11.43, $p < .001$). Family CC also showed significant variation, $F(9, 1009) = 2.03, p = .033, \eta^2 = .018$. Families with the biological father and other adult(s) (M = 159.95, SD = 17.53) reported higher scores than single mothers with multiple children (M = 152.79, SD = 21.73, $p = .033$). Paternal CC showed the largest differences across family structures, $F(9, 1009) = 37.60, p < .001, \eta^2 = .251$. Nuclear families (M = 231.76, SD = 20.10) or households with the biological father and other adult(s) (M = 230.93, SD = 17.74) reported substantially higher paternal consonance than single mothers with multiple children (M = 184.19, SD = 56.01, $p < .001$). No significant differences emerged for positive discipline, violent discipline, ACEs, leisure consonance, social support consonance, or maternal consonance ($p > .05$). Table 4 summarizes the main findings.

3.5. One-way ANOVA by age at first childbirth

We conducted a series of one-way ANOVAs to examine whether parenting practices, maternal adversity, and CC varied by age at first childbirth (adolescent mothers, former adolescent mothers, and adult-onset mothers). Age at maternity onset was significantly associated with several domains of family functioning.

Violent discipline differed significantly by maternity onset, $F(2, 1002) = 5.48, p = .004, \eta^2 = .011$. Post hoc analyses show that former adolescent mothers (M = .07) reported significantly lower use of violent discipline compared to both adolescent mothers (M = .10, $p = .003$) and adult-onset mothers (M = .10, $p = .003$); however, no significant difference was observed between adolescent and adult-onset mothers. Exposure to intimate partner violence differed significantly by maternity onset, $F(2, 1002) = 4.89, p = .008, \eta^2 = .010$. Post hoc analyses showed that adult-onset mothers (M = 1.23) reported significantly lower exposure compared to former adolescent mothers (M = 1.35, $p = .007$); however, adolescent mothers (M = 1.32) did not differ significantly from either group. Depressive symptoms also varied significantly across groups, $F(2, 1002) = 12.68, p < .001, \eta^2 = .025$. Adult-onset mothers (M = .74) reported significantly lower depressive symptoms than both former adolescent (M = .89, $p < .001$) and adolescent mothers (M = 1.01, $p < .001$). Adolescent mothers also reported significantly higher levels of depressive symptoms than former adolescent mothers ($p = .033$).

Material goods CC showed the largest difference across groups, $F(2, 1002) = 15.50, p < .001, \eta^2 = .030$. Adult-onset mothers (M = 55.38) reported significantly higher consonance than both former adolescent (M = 52.47, $p < .001$) and adolescent mothers (M = 49.21, $p < .001$); former adolescent mothers also reported significantly higher scores than adolescent mothers ($p = .009$). Social support CC varied significantly, $F(2, 1002) = 6.19, p = .002, \eta^2 = .012$. Adult-onset mothers (M = 16.11) reported higher consonance than adolescent mothers (M = 14.89, $p =$

Table 4
Effects of family structure and age at first childbirth on parenting, maternal adversity, and cultural consonance.

| Variable | F | df (Between, Within) | p | η^2 | Post Hoc Summary |
|-------------------------------|--------------------|----------------------|-------|----------|---|
| PARENTING | | | | | |
| Cognitive stimulation | 6.66 ^a | (9, 1009) | <.001 | .06 | Mother-child-biological father + others (M = .68, SD = .22) vs. single mothers with child (M = .51, SD = .22), p < .001 |
| Positive discipline | 2.64 ^b | (2, 1002) | .072 | .005 | Adult-onset (M = .59) > former adolescent (M = .57) > adolescent (M = .54); ns |
| | .46 ^a | (9, 1009) | .902 | .00 | – |
| Violent discipline | .22 ^b | (2, 1002) | .804 | <.001 | – |
| | .37 ^a | (9, 1009) | .950 | .00 | – |
| | 5.48 ^b | (2, 1002) | .004 | .011 | Former adolescent (M = .07) < adolescent (M = .10, p = .003), adult-onset (M = .10, p = .003) |
| MATERNAL ADVERSITY | | | | | |
| Adverse childhood experiences | 1.23 ^a | (9, 1009) | .273 | .01 | – |
| | 2.61 ^b | (2, 1002) | .074 | .005 | – |
| Intimate partner violence | 2.42 ^a | (9, 1009) | .010 | .02 | Nuclear family (M = 1.22, SD = .45) vs. single mothers with multiple children (M = 1.44, SD = .81), p < .001 |
| Symptoms of depression | 4.89 ^b | (2, 1002) | .008 | .010 | Adult-onset (M = 1.23) < former adolescent (M = 1.35, p = .007); adolescent (M = 1.32); ns |
| | 2.54 ^a | (9, 1009) | .007 | .02 | Single mothers with multiple children (M = .94, SD = .61) vs. mother-child-biological father + others (M = .65, SD = .58), p = .081; ns |
| | 12.68 ^b | (2, 1002) | <.001 | .025 | Adult-onset (M = .74) < former adolescent (M = .89, p < .001), adolescent (M = 1.01, p < .001); adolescent > former adolescent (p = .033) |
| CULTURAL CONSONANCE | | | | | |
| Material goods | 5.79 ^a | (9, 1009) | <.001 | .05 | Mother-child-biological father + others (M = 57.95, SD = 9.21) vs. single mothers with multiple children (M = 50.80, SD = 11.43), p < .001 |
| | 15.50 ^b | (2, 1002) | <.001 | .030 | Adult-onset (M = 55.38) > former adolescent (M = 52.47, p < .001) > adolescent (M = 49.21, p < .001); former adolescent > adolescent (p = .009) |
| Leisure activities | .70 ^a | (9, 1009) | .713 | .01 | – |
| | .70 ^b | (2, 1002) | .495 | .001 | – |
| Social support | 1.50 ^a | (9, 1009) | .143 | .01 | – |
| | 6.19 ^b | (2, 1002) | .002 | .012 | Adult-onset (M = 16.11) > former adolescent (M = 15.26, p = .049), adolescent (M = 14.89, p = .001) |
| Family life | 2.03 ^a | (9, 1009) | .033 | .02 | Mother-child-biological father + others (M = 159.95, SD = 17.53) vs. single mothers with multiple children (M = 152.79, SD = 21.73), p = .033 |
| | 3.22 ^b | (2, 1002) | .040 | .006 | Adult-onset (M = 156.76) > adolescent (M = 152.79, p = .033); former adolescent (M = 153.78); ns |
| Maternal role | 1.12 ^a | (9, 1009) | .344 | .01 | – |
| | 1.12 ^b | (2, 1002) | .328 | .002 | – |
| Paternal role | 37.60 ^a | (9, 1009) | <.001 | .25 | Nuclear family (M = 231.76, SD = 20.10) vs. single mothers with multiple children (M = 184.19, SD = 56.01), p < .001 |
| | 2.97 ^b | (2, 1002) | .052 | .006 | Former adolescent (M = 214.87), adult-onset (M = 213.95) > adolescent (M = 202.44); ns |

Note.

^a Between-subjects effect = family structure.

^b Between-subjects effect = age at first childbirth.

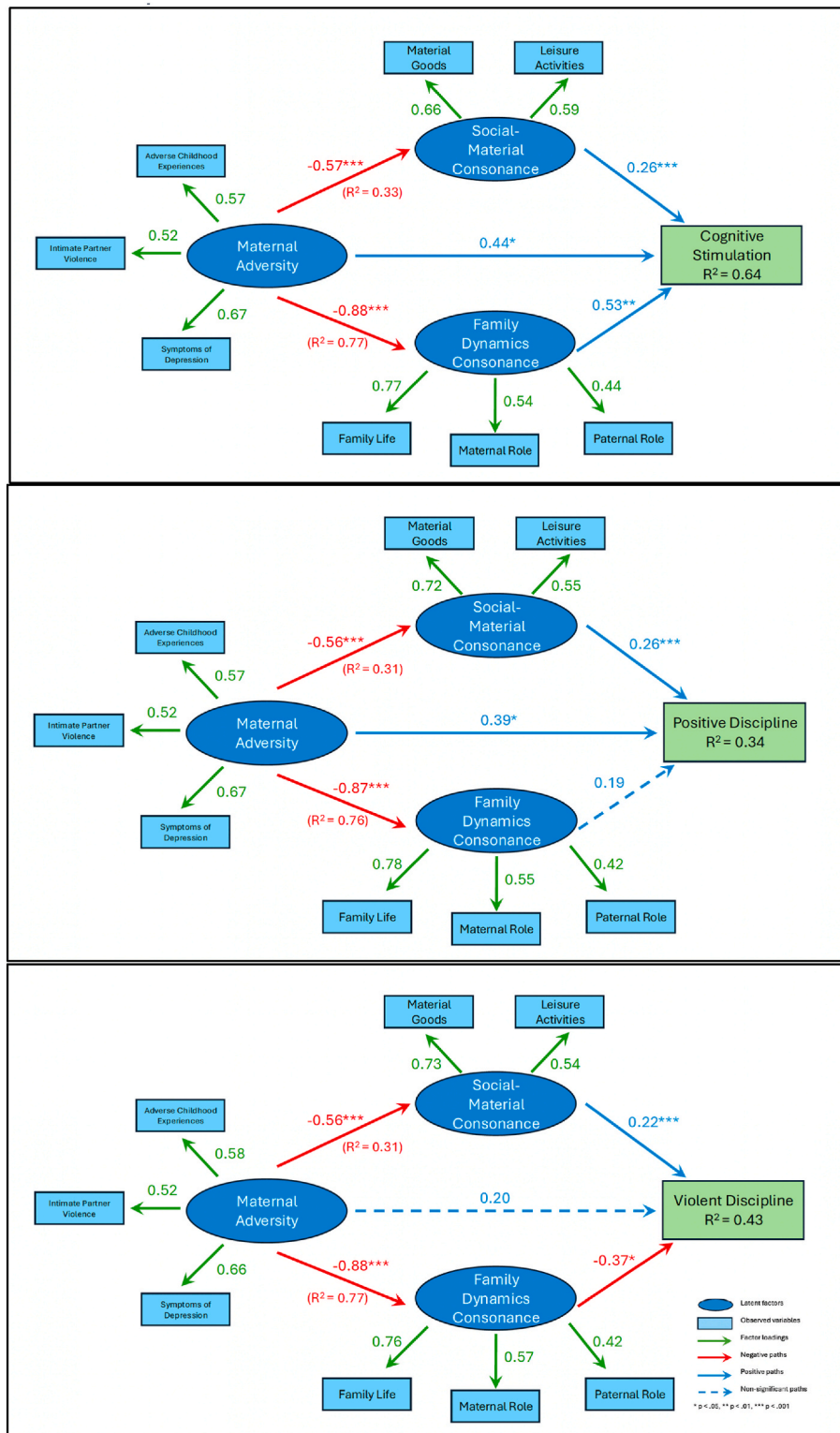


Fig. 1. Sequential structural modeling path diagrams for cognitive stimulation, positive discipline, and violent discipline
 Note: Path diagrams prepared by the authors.

.001) and former adolescent mothers ($M = 15.26, p = .049$); the difference between adolescent and former adolescent mothers was not statistically significant. Family CC showed significant differences across the groups, $F(2, 1002) = 3.22, p = .040, \eta^2 = .006$. Adult-onset mothers ($M = 156.76$) scored significantly higher than adolescent mothers ($M = 152.79, p = .033$); differences between adult-onset and former adolescent mothers ($M = 153.78$), and between adolescent and former

adolescent mothers, were not significant.

No significant group differences were observed for cognitive stimulation, positive discipline, adverse childhood experiences, leisure activities, maternal CC, and paternal CC ($p > .05$).

These results show that adult-onset motherhood is generally associated with more favorable outcomes across several domains, including reduced adversity and higher levels of CC. Former adolescent mothers

Table 5
Direct, indirect, and total effects of maternal adversity on parenting practices via cultural consonance.

| Parenting Practice | Direct Effect of Maternal Adversity | Indirect Effects via Cultural Consonance | Total Effect | Interpretation |
|------------------------------|-------------------------------------|---|------------------------------|--|
| Cognitive stimulation | $\beta = .44, p = .018$ | Material-social: $\beta = -.15, p < .001$ Family dynamics: $\beta = -.47, p = .004$ Total indirect: $\beta = -.61, p < .001$ | $\beta = -.17, p < .001$ | <ul style="list-style-type: none"> • Strong suppression. • Negative indirect paths through both consonance domains override the direct effect. |
| Positive Discipline | $\beta = .39, p = .014$ | Material-social: $\beta = -.15, p < .001$ Family dynamics: $\beta = -.17, p = .198$ (ns) Total indirect: $\beta = -.31, p = .025$ | $\beta = .08, p = .051$ (ns) | <ul style="list-style-type: none"> • Suppression effect. • Direct positive association offset by negative indirect paths through cultural consonance. |
| Violent Discipline | $\beta = .20, p = .221$ (ns) | Material-social: $\beta = -.12, p < .001$ Family dynamics: $\beta = .32, p = .015$ Total indirect: $\beta = .20, p = .158$ (ns) | $\beta = .40, p < .001$ | <ul style="list-style-type: none"> • Full mediation. • Family dynamics cultural consonance reduces violent discipline. • Material-social cultural consonance unexpectedly increases it. |

demonstrated the lowest use of violent discipline, indicating a distinct parenting profile despite greater adversity. Table 4 summarizes the main findings.

3.6. Structural equation modeling for parenting practices

We tested a structural equation model to examine the direct and indirect effects of adversity on cognitive stimulation, with mediation in family dynamics (family life, maternal role, and paternal role) and material-social (material goods and leisure activities) CC. The model demonstrated acceptable fit, $\chi^2(23) = 164.15, p < .001$; CFI = .91; TLI = .86; RMSEA = .078, 90 % CI [.067, .089]; SRMR = .049. Maternal adversity significantly predicted lower CC in family dynamics ($\beta = -.88, p < .001$) and material-social ($\beta = -.57, p < .001$). In turn, both family dynamics ($\beta = .53, p = .002$) and material-social consonance ($\beta = .26, p < .001$) significantly predicted higher cognitive stimulation. Maternal adversity also had a significant direct effect on stimulation ($\beta = .44, p = .018$). Bootstrapped estimates of indirect effects indicated suppression: the indirect path through family dynamics consonance was significant ($\beta = -.47, p = .004$), as was the path through material-social consonance ($\beta = -.15, p < .001$). The total indirect effect was $\beta = -.61$, resulting in an overall negative total effect of maternal adversity on cognitive stimulation ($\beta = -.17, p < .001$). These results suggest that while adversity may initially appear to have a positive direct association with stimulation, its broader impact through lower CC is associated with reduced stimulation provided to children. The SEM path diagram is in Fig. 1.

We tested a second SEM to evaluate whether maternal adversity predicted the use of positive discipline directly and indirectly through two dimensions of CC: family dynamics and material-social. The model showed good fit to the data, $\chi^2(23) = 81.02, p < .001$; CFI = .96; TLI = .94; RMSEA = .050, 90 % CI [.038, .062]; SRMR = .034; GFI = .98. All indicators loaded significantly onto their respective latent variables ($p < .001$). Maternal adversity significantly predicted lower family dynamics consonance ($\beta = -.87, p < .001$) and material-social consonance ($\beta = -.56, p < .001$). In turn, material-social consonance significantly predicted greater use of positive discipline ($\beta = .26, p < .001$), whereas the effect of family dynamics consonance was not significant ($\beta = .19, p = .19$). Maternal adversity also had a significant direct effect on positive discipline ($\beta = .39, p = .014$), suggesting that families experiencing higher maternal adversity may report greater use of positive discipline despite experiencing lower consonance. The indirect effect of adversity through material-social consonance was significant ($\beta = -.15, p < .001$), but the path through family dynamics consonance was not ($\beta = -.17, p = .20$). The total indirect effect was significant ($\beta = -.31, p = .025$), and the overall total effect approached significance ($\beta = .08, p = .051$), suggesting a potential suppression effect. Fig. 1 shows the SEM path diagram.

We estimated a third SEM to assess whether maternal adversity exerted indirect effects on the use of violent discipline through two domains of CC: family dynamics and material-social. The model demonstrated good fit, $\chi^2(23) = 98.11, p < .001$; CFI = .95; TLI = .93; RMSEA = .057, 90 % CI [.045, .068], p -close = .161; SRMR = .036. These indices indicate an acceptable to excellent fit. All factor loadings were statistically significant ($p < .001$). The latent construct of maternal adversity was defined by adverse childhood experiences ($\beta = .58$), exposure to intimate partner violence ($\beta = .52$), and depressive symptoms ($\beta = .66$). Family dynamics consonance was composed of CC scores in family life ($\beta = .76$), maternal role ($\beta = .57$), and paternal role ($\beta = .42$). Material-social consonance was defined by CC in material goods ($\beta = .73$) and leisure activities ($\beta = .54$). Adversity significantly predicted lower levels of family dynamics consonance ($\beta = -.88, p < .001$) and material-social consonance ($\beta = -.56, p < .001$). In turn, family dynamics consonance was negatively associated with violent discipline ($\beta = -.37, p = .013$), indicating a protective effect. Material-social consonance, however, was positively associated with violent discipline

Table 6
Key predictors of parenting practices by family structure and maternal age at first childbirth.

| | COGNITIVE STIMULATION | (R ² VALUE) | POSITIVE DISCIPLINE | (R ² VALUE) | VIOLENT DISCIPLINE | (R ² VALUE) |
|--|-------------------------------|-------------------------|-----------------------|-------------------------|-------------------------------|-------------------------|
| FAMILY STRUCTURE (n) | | | | | | |
| Mother + one child (n = 118) | Paternal role CC (+) | (R ² = .124) | - | | ACEs (+) | (R ² = .181) |
| Mother + multiple children (n = 160) | Paternal role CC (+) | (R ² = .186) | - | | Maternal role CC (-) | (R ² = .257) |
| | Material goods CC (+) | | | | Family life CC (-) | |
| Mother + child + biological father (n = 540) | Leisure CC (+) | (R ² = .092) | Social support CC (+) | (R ² = .046) | Depression (+) | |
| | Paternal role CC (+) | | Leisure CC (+) | | Family life CC (-) | (R ² = .124) |
| Mother + child + other partner (n = 37) | Paternal role CC (+) | (R ² = .380) | ACEs (+) | (R ² = .124) | Depression (+) | |
| | ACEs (+) | | | | Maternal role CC (-) | |
| | Family life CC (+) | | | | Material goods CC (+) | |
| Mother + grandmother (n = 38) | Social support CC (-) | (R ² = .116) | - | | Maternal role CC (-) | (R ² = .550) |
| MATERNAL AGE AT FIRST CHILDBIRTH (n) | | | | | | |
| Adolescent mothers (n = 91) | Leisure CC (+) | (R ² = .308) | Social support CC (+) | (R ² = .196) | Intimate partner violence (+) | (R ² = .274) |
| | Paternal role CC (+) | | ACEs (+) | | Maternal role CC (-) | |
| | Intimate partner violence (+) | | Leisure CC (+) | | Leisure CC (+) | |
| Former adolescent mothers (n = 316) | Paternal role CC (+) | (R ² = .126) | ACEs (+) | (R ² = .033) | ACEs (+) | (R ² = .156) |
| | Leisure CC (+) | | Material goods CC (+) | | Maternal role CC (-) | |
| Adult-onset mothers (n = 598) | Paternal role CC (+) | (R ² = .152) | Social support CC (+) | (R ² = .023) | Family life CC (-) | (R ² = .201) |
| | Leisure CC (+) | | | | Depression (+) | |
| | Intimate partner violence (-) | | | | Maternal role CC (-) | |
| | | | | | Material goods CC (+) | |
| | | | | ACEs (+) | | |

Note: (+) indicates positive relationship; (-) indicates negative relationship. CC: cultural consonance.

($\beta = .22, p < .001$). The direct effect of adversity on violent discipline was not statistically significant ($\beta = .20, p = .221$), suggesting full mediation. Bootstrapped indirect effects confirmed this mediation pattern. The indirect effect through family dynamics consonance was significant ($\beta = .32, 95\% \text{ CI } [.06, .58], p = .015$), as was the negative indirect effect through material-social consonance ($\beta = -.12, 95\% \text{ CI } [-.19, -.05], p < .001$). Although the total indirect effect was not significant ($\beta = .20, p = .158$), the direction and magnitude of the pathways suggest potential mediation. The overall total effect of adversity on violent discipline remained significant ($\beta = .40, p < .001$). Fig. 1 shows the SEM path diagram.

Table 5 summarizes the direct, indirect, and total effects of adversity on parenting outcomes.

3.7. Forward linear regression analyses to identify predictors of parenting practices

We conducted a series of forward linear regressions to identify predictors of cognitive stimulation, positive discipline, and violent discipline among caregivers. The model predicting stimulation was statistically significant and accounted for 14.3 % of the variance, $R^2 = .143, F(2, 1016) = 84.80, p < .001$. Higher levels of CC in the paternal role ($\beta = .297, p < .001$) and leisure activities ($\beta = .203, p < .001$) were associated with greater stimulation.

The model predicting positive discipline accounted for 3.8 % of the variance, $R^2 = .038, F(3, 1015) = 13.43, p < .001$. Significant predictors included CC in social support ($\beta = .124, p < .001$), adverse childhood experiences (ACEs; $\beta = .106, p < .001$), and material goods ($\beta = .100, p = .002$), suggesting a potentially compensatory parenting pattern.

The model predicting violent discipline demonstrated the strongest explanatory power, accounting for 17.1 % of the variance, $R^2 = .171, F(7, 1011) = 29.84, p < .001$. More frequent use of violent discipline was associated with higher levels of ACEs ($\beta = .168, p < .001$), symptoms of depression ($\beta = .087, p = .010$), and CC in material goods ($\beta = .091, p = .004$) and social support ($\beta = .061, p = .038$). In contrast, higher CC in the maternal role ($\beta = -.183, p < .001$), paternal role ($\beta = -.065, p =$

$.037$), and family life ($\beta = -.120, p < .001$) was associated with lower use of violent discipline. Together, these findings underscore the protective role of CC in maternal and paternal figures and family life, highlighting the consistent impact of early maternal adversity on parenting practices.

3.8. Family structure

We conducted a series of forward stepwise regression analyses to identify predictors of parenting practices on the different types of family structure separately. For cognitive stimulation, models varied by household type. Among single mothers with one child, paternal consonance significantly predicted greater stimulation, $\beta = .352, p < .001$, with the model accounting for 12.4 % of the variance, $R^2 = .124$. In single-mother households with multiple children, both paternal consonance ($\beta = .358, p < .001$) and material goods consonance ($\beta = .174, p = .019$) were significant predictors, $R^2 = .186$. In nuclear family households, leisure consonance ($\beta = .250, p < .001$) and paternal consonance ($\beta = .141, p < .001$) predicted greater stimulation, $R^2 = .092$.

For positive discipline, in nuclear family households, social support consonance ($\beta = .158, p < .001$), leisure consonance ($\beta = .121, p = .005$), and maternal depressive symptoms ($\beta = .085, p = .048$) significantly predicted positive discipline, $R^2 = .046$. In households composed of the mother, the child, and a partner, maternal ACEs ($\beta = .352, p = .033$) emerged as the only significant predictor, $R^2 = .124$.

For violent discipline, among single mothers with one child, maternal ACEs were strongly associated with greater use of violent discipline, $\beta = .426, p < .001, R^2 = .181$. Among single mothers with multiple children, maternal consonance ($\beta = -.295, p < .001$) and family life consonance ($\beta = -.193, p = .012$) were protective factors, while depressive symptoms increased violent discipline ($\beta = .179, p = .022$), $R^2 = .257$. Among mothers living with their child and a partner, maternal consonance ($\beta = -.589, p < .001$) predicted reduced violent discipline, whereas maternal ACEs ($\beta = .415, p = .001$) increased it, $R^2 = .550$. Together, these findings indicate that CC in parental roles and material resources are key predictors of caregiving practices across

household types, with early maternal adversity consistently linked to violent discipline. Table 6 summarizes these findings.

3.9. Maternal age at first childbirth

We conducted a series of forward regression analyses to examine predictors of parenting practices on the different groups of motherhood onset. For cognitive stimulation, among adolescent mothers, the model accounted for 30.8 % of the variance, $R^2 = .308$, $F(3, 228) = 33.74$, $p < .001$. Leisure consonance ($\beta = .485$, $p < .001$), paternal consonance ($\beta = .279$, $p = .003$), and intimate partner violence ($\beta = .235$, $p = .012$) were significant predictors. Among former adolescent mothers, the model explained 12.6 % of the variance, $R^2 = .126$, $F(2, 408) = 29.23$, $p < .001$. Both paternal consonance ($\beta = .263$, $p < .001$) and leisure consonance ($\beta = .205$, $p < .001$) were significant predictors. For adult-onset mothers, the model explained 15.2 % of the variance, $R^2 = .152$, $F(3, 388) = 23.23$, $p < .001$. Paternal consonance ($\beta = .294$, $p < .001$) and leisure consonance ($\beta = .145$, $p < .001$) positively predicted stimulation, while intimate partner violence negatively predicted it ($\beta = -.126$, $p = .001$).

For positive discipline, among adolescent mothers, the model explained 19.6 % of the variance, $R^2 = .196$, $F(3, 222) = 18.02$, $p < .001$. Social support consonance ($\beta = .280$, $p = .005$), adverse childhood experiences ($\beta = .256$, $p = .010$), and leisure consonance ($\beta = .252$, $p = .011$) were significant predictors. Among former adolescent mothers, the model accounted for 3.3 % of the variance, $R^2 = .033$, $F(2, 404) = 6.89$, $p = .001$. Adverse childhood experiences ($\beta = .140$, $p = .013$) and material goods consonance ($\beta = .134$, $p = .017$) were significant predictors. Among adult-onset mothers, the model explained 2.3 % of the variance, $R^2 = .023$, $F(1, 388) = 9.08$, $p = .003$, with social support consonance ($\beta = .150$, $p < .001$) emerging as the only significant predictor.

For violent discipline, among adolescent mothers, the model accounted for 27.4 % of the variance, $R^2 = .274$, $F(3, 223) = 28.04$, $p < .001$. Intimate partner violence ($\beta = .389$, $p < .001$) positively predicted violent discipline, while maternal consonance ($\beta = -.255$, $p = .009$) reduced it. Leisure consonance was also a significant positive predictor ($\beta = .204$, $p = .031$). For former adolescent mothers, the model explained 15.6 % of the variance, $R^2 = .156$, $F(2, 406) = 37.51$, $p < .001$. Adverse childhood experiences ($\beta = .259$, $p < .001$) increased violent discipline, whereas maternal consonance ($\beta = -.238$, $p < .001$) reduced it. Among adult-onset mothers, the model accounted for 20.1 % of the variance, $R^2 = .201$, $F(5, 382) = 19.22$, $p < .001$. Family life consonance ($\beta = -.210$, $p < .001$), maternal consonance ($\beta = -.167$, $p < .001$), and symptoms of depression ($\beta = .122$, $p = .005$) were significant predictors. Additionally, consonance in material goods ($\beta = .125$, $p = .002$) and adverse childhood experiences ($\beta = .131$, $p = .002$) were associated with greater use of violent discipline. Table 6 summarizes the findings.

4. Discussion

This study investigated cultural consonance as a mediator between maternal adversity and parenting practices among 1019 mothers living in poverty in the Dominican Republic. Our findings show complex mediational pathways that challenge simple linear models of how maternal adversity affects parenting, demonstrating that CC operates through distinct mechanisms across parenting dimensions and

is shaped by family structure and maternal age at first childbirth. These relationships highlight the central role of CC in connecting adversity and parenting across diverse family and developmental contexts.

4.1. The central role of cultural consonance in adversity-parenting relationships

We found that maternal adversity disrupts CC across multiple domains. A fundamental finding across all structural equation models was

that maternal adversity, comprising adverse childhood experiences, intimate partner violence, and maternal depression, substantially predicted lower CC in family dynamics and material-social domains. This robust negative relationship suggests that adverse experiences systematically undermine mothers' ability to approximate culturally valued ways of living. The disruption likely occurs through interconnected pathways: economic strain limits access to material resources that define material-social consonance, psychological distress impairs the relationship skills necessary for consonance in family life, and social isolation reduces access to support networks that facilitate cultural participation. Understanding these pathways requires recognizing that the social environment encompasses both material environments and social relationships, each embedded with cultural meanings and affordances—possibilities for action and perception that are learned and recognized through culturally informed repertoires of adaptive responses that are either socially appropriate, normative, or transgressive—that shape how people act and perceive (de Munck, 2024; Kirmayer, 2024; Ramstead et al., 2016). The strength of these associations indicates that maternal adversity operates as a fundamental disorganizing force in cultural life, creating cascading effects that extend far beyond immediate psychological or economic impacts. This finding aligns with perspectives that emphasize culture as a resource for coping with adversity (Balieiro et al., 2011; Copeland, 2018; Dressler, 1985; Dressler et al., 2005; Schetter and Dolbier, 2011; Ungar, 2013), while demonstrating quantitatively how adversity can deplete this crucial resource through its effects on the culturally constructed environment that mothers navigate.

Our hypothesis that CC would uniformly mediate the relationship between adversity and parenting was partially supported. We found distinct mediational patterns for each parenting dimension, revealing the complexity of how cultural contexts shape parenting practices. The relationship between maternal adversity and violent discipline, involving harsh physical punishment and psychological aggression, was fully mediated by CC in material-social and family dynamics, with no significant direct effect remaining. However, the two CC domains operated in opposite directions. Family dynamics consonance served as a protective factor, suggesting that mothers who maintain alignment with cultural models of family dynamics, even in the face of adversity, are significantly less likely to use violent discipline. This protective effect may reflect the regulatory function of cultural models, providing mothers with alternative frameworks for understanding and responding to challenging child behaviors.

Conversely, material-social consonance unexpectedly increased violent discipline, indicating that greater alignment with material and leisure expectations was associated with more punitive parenting. This counterintuitive finding may reflect the stress of maintaining material-social consonance in contexts of poverty, where efforts to approximate cultural ideals around possessions and leisure can generate additional pressure, manifesting in controlling parenting practices. Such patterns may reflect aspirational strain, as limited resources constrain the pursuit of socially valued lifestyles. Alternatively, mothers navigating upward mobility may encounter competing cultural expectations regarding child behavior, feeling pressure to ensure their children meet behavioral standards associated with higher socioeconomic positions. These dynamics suggest that material-social consonance, while often viewed as beneficial, may carry hidden psychosocial costs under conditions of scarcity, as individuals attempt to align with dominant cultural ideals without the material capital to sustain them (Bourdieu, 1972). Our findings contribute to this understanding by examining how cultural consonance operates in parenting contexts, where we found that material-social consonance—contrary to expectations—was associated with increased violent discipline. This suggests that the stress of striving for material ideals in poverty contexts may have unique manifestations in parent-child relationships. Although the direct and component indirect paths were significant, the total indirect effect was not, suggesting that opposing mechanisms may offset each other. Nonetheless, the

direction and strength of individual pathways indicate a potential mediating role that warrants further investigation. It is also possible that material-social consonance is linked to aspirational parenting strategies that emphasize behavioral control as a route to future success.

The model for positive discipline exhibited a suppression pattern, where maternal adversity had a direct positive effect alongside negative indirect effects through lower CC. This pattern reflects a suppression effect, where the direct and indirect effects operate in opposite directions, partially canceling each other out and potentially obscuring the actual relationship between variables. Positive discipline, which includes reasoning and non-punitive consequences, requires cognitive and emotional resources that may be compromised by maternal adversity and low CC. This pattern suggests that some mothers experiencing adversity actively employ positive disciplinary strategies, possibly reflecting conscious efforts to break the cycle of harsh parenting or exposure to parenting interventions that commonly target vulnerable families. However, their lower CC simultaneously undermines these positive intentions, creating competing forces that result in modest overall effects. This compensatory pattern highlights the agency of mothers facing adversity and challenges deficit-focused models that assume adversity uniformly impairs parenting capacity. Instead, our findings suggest that maternal adversity may activate both detrimental and protective processes simultaneously, with CC serving as a crucial mediating factor that determines which processes predominate. This aligns with evidence that some mothers with adverse histories provide protective, compensatory care that buffers the intergenerational impact of early maternal adversity (Morris et al., 2021).

For cognitive stimulation, adversity again showed a positive direct effect, but this was overwhelmed by strong negative indirect effects through both family dynamics and material-social consonance, resulting in an overall negative total effect. This pattern suggests that while some mothers experiencing adversity make deliberate efforts to provide cognitive and developmental stimulation to their children, their compromised CC, particularly in family dynamics, substantially undermines these efforts. The particularly strong role of CC in family dynamics in predicting stimulation underscores how cultural models of family dynamics provide crucial scaffolding for parent-child interactions that promote child development. When maternal adversity disrupts mothers' ability to enact culturally appropriate family roles, it may impair their capacity to engage in the sustained, responsive interactions that characterize effective stimulation practices.

4.2. Family structure as a fundamental contextual factor

Our ANOVA and regression analyses showed that maternal adversity, CC, and parenting practices varied across different family structures. The most consistent finding was the protective effect of extended families, particularly when biological fathers cohabited with the mother and child alongside other adults. Households composed of a mother and child, the child's biological father, and additional adult(s) consistently showed the most positive outcomes: highest cognitive stimulation provision, lowest intimate partner violence exposure, reduced maternal symptoms of depression, and elevated CC across multiple domains. This pattern suggests that extended family structures may buffer the effects of adversity by providing multiple pathways for achieving CC despite adversity, as found in other settings (Dressler, 1985, 2017). Additional adults may contribute material resources that support material-social consonance, offer practical support that reduces stress on primary caregivers, and provide models for culturally appropriate family roles. The particularly strong protective effects for stimulation in these households may reflect the availability of multiple caregivers who can engage in developmentally supportive activities with children. Conversely, single mothers with multiple children consistently showed the most challenging outcomes, including elevated depression, increased exposure to intimate partner violence, and lower CC. This family structure may represent a "perfect storm" where single mothers

face the dual burdens of sole caregiving responsibility and economic strain, while lacking the social resources necessary to maintain CC across domains. Single-mother families may encounter additional barriers to achieving CC in domains that presuppose a partner's presence.

One of the most striking findings was that CC in the paternal role consistently predicted cognitive stimulation across all family structures, even in households where fathers did not live. This suggests that cultural models of fatherhood remain salient for mothers regardless of their actual cohabitation status, possibly serving as internalized standards that guide parenting practices. Single mothers who rated higher paternal consonance may engage in more stimulating activities as a way of compensating for the father's absence, or because the positive models of fatherhood provided by non-cohabiting biological fathers extend to expectations about child-centered activities. This finding has significant implications for understanding how cultural models function in contexts where desired family structures are not attainable. Rather than becoming irrelevant, cultural models of absent family members may continue to affect parenting through internalized expectations and compensatory behaviors.

4.3. Maternal age at first childbirth: developmental timing and cultural resources

Our analyses showed that maternal adversity, CC, and parenting practices varied across maternal age at first childbirth, with distinct patterns emerging for each age group. Adult-onset mothers (those who had their first child at age 20 or older) generally showed the most positive outcomes, including lower exposure to adversity, higher CC, and more optimal parenting practices. This pattern likely reflects the developmental advantages of delayed childbearing, including greater educational attainment, economic stability, and relationship maturity that facilitate both CC achievement and effective parenting. Former adolescent mothers (those who had their first child as adolescents but were adults when they had the study child) showed intermediate outcomes, with the notable exception that they demonstrated the lowest use of violent discipline. This finding suggests that early parenting experience, combined with developmental maturation, may lead to more reflective and less punitive parenting approaches. Current adolescent mothers showed the most complex patterns, with intimate partner violence serving as a significant predictor of both increased cognitive stimulation and increased violent discipline. This paradoxical relationship suggests that violent intimate relationships may create particularly intense pressures for adolescent mothers, simultaneously motivating compensatory parenting efforts and undermining emotional regulation in parent-child interactions. Adolescent mothers face unique developmental challenges that may affect both their ability to achieve CC and positive parenting practices (Britto et al., 2017; de Souza et al., 2007; Hubert et al., 2021; Nelson et al., 2025; Wuermli et al., 2021).

The regression analyses showed that different CC domains became salient for different maternity onset groups. For adolescent mothers, consonance in leisure activities was the strongest predictor of cognitive stimulation, possibly reflecting the continued importance of peer-related cultural models in this developmental stage. For adult mothers, family dynamics consonance played a more prominent role, suggesting greater integration of family-centered cultural models with increasing maturity. These age-related differences highlight the dynamic nature of CC across the lifespan and suggest that interventions may need to target different cultural domains depending on mothers' developmental stage. For adolescent mothers, interventions addressing peer relationships and leisure activities may be particularly relevant, while family-centered approaches may be more effective for adult mothers.

4.4. Theoretical implications

This study represents the first systematic application of cultural

consonance theory to parenting practices, extending its established relevance to health outcomes (Dressler et al., 2014) into the domain of family functioning. Our findings demonstrate that CC operates as a complex mediating mechanism in parenting contexts, with differential effects across parenting dimensions that reflect the multifaceted nature of cultural patterns. The finding that different CC domains (family dynamics and material-social) can have opposing effects on the same parenting outcome challenges the assumption that cultural impact is uniformly beneficial. Instead, our results suggest that CC should be understood as a multidimensional construct, where different domains may create varying pressures and resources for parents. These mechanisms support the findings that different family compositions and dynamics may either buffer or exacerbate the effects of maternal adversity on parenting practices (Suor et al., 2015). The finding that material-social consonance increased violent discipline while family dynamics consonance decreased it reveals the theoretical importance of disaggregating cultural domains. This pattern suggests competing cultural logics within the Dominican Republic: aspirational materialism that emphasizes control and achievement versus family values that prioritize harmony and respect. Parents navigating poverty may experience these cultural models as contradictory rather than complementary, creating what we term cultural cross-pressures. This complexity extends current cultural consonance theory by demonstrating that cultural consonance is not uniformly protective. Rather, the impact of cultural alignment depends on: (a) which cultural models are activated, (b) the resources available for their enactment, and (c) the degree of compatibility between different cultural domains. In contexts of scarcity, striving for material-social consonance may exact psychological costs that manifest in parenting stress, while family dynamics consonance provides compensatory meaning and behavioral guidance.

Our findings contribute to developmental psychopathology models by demonstrating multifinality—that is, different outcomes can emerge from exposure to the same risk factor—in adversity-parenting relationships (Hawes and Allen, 2023). The consistent finding that maternal adversity can simultaneously activate compensatory parenting practices while undermining cultural resources that support optimal parenting illustrates the complex and often contradictory processes that characterize positive adaptation and vulnerability in family contexts. The identification of CC as a key mediating mechanism provides a new framework for understanding heterogeneity in parenting outcomes among families experiencing similar adversities. Rather than focusing solely on individual psychological or family system factors, our results highlight the importance of considering how adversity affects parents' ability to participate in culturally meaningful ways of living, which in turn shapes their parenting capacity.

Parenting research has often treated culture as a static background variable or focused on broad ethnic or national differences. Our findings suggest a dynamic understanding of culture as an active resource that individuals can access to varying degrees depending on their circumstances. This perspective aligns with viewing culture not simply as group membership but as participation in socially constructed niches and larger systems where cultural meanings mediate and maintain the effects of social structure (Kirmayer, 2024). CC would therefore represent the degree to which individuals can engage with cultural affordances that are marked as socially appropriate, normative, or transgressive in ways that add meaning and consequence to parenting actions. This shift in perspective moves attention from cultural group membership to cultural participation and alignment, offering new avenues for understanding and supporting positive parenting across diverse contexts.

This interpretation is supported by findings from Dressler et al. (2016), who examined gene-environment interactions in Brazil and found that cultural consonance in family life mediated the relationship between childhood adversity and depressive symptoms, particularly among individuals genetically predisposed to be more sensitive to social contexts (Dressler et al., 2016). Similar to our findings, their study emphasized that low cultural consonance arises when individuals are

unable to achieve culturally valued family ideals due to adversity and structural constraints, and that this misalignment contributes to psychological distress. Their results underscore that cultural models can become both guiding frameworks and sources of vulnerability, depending on individuals' capacity to realize them in practice—an insight that parallels our findings in parenting contexts.

Our use of structural equation modeling to examine cultural consonance as a hierarchical construct advances both theoretical and methodological frameworks in cultural consonance research. While cultural consonance domains were initially examined independently, later studies quickly demonstrated their convergence, with multiple domains loading onto single principal components representing general cultural consonance (Dressler et al., 2005, 2007). Our approach—theoretically organizing specific consonance domains into meaningful higher-order constructs (family dynamics and material-social)—advances these insights while introducing important innovations. Rather than combining all domains into a single measure or examining them independently, we preserved the ability to detect differential effects while recognizing domain convergence. Critically, our finding that family dynamics consonance protects against violent discipline while material-social consonance increases it aligns with evidence that cultural consonance operates through complex, domain-specific pathways (Balieiro et al., 2011; Dengah, 2014; Dressler et al., 2007; Monocello and Dressler, 2022; Pessa et al., 2022; Snodgrass et al., 2013). This multidimensional understanding and this pattern of cultural consonance affecting well-being is consistent with findings across diverse populations, ranging from women with HIV in Nairobi (Copeland, 2011), to African American adolescents (Sweet, 2010), to indigenous Amazonian communities where changes in cultural consonance has been shown to predict psychological well-being and mood states longitudinally (Reyes-García et al., 2010). These studies collectively suggest that the relationship between cultural alignment and well-being depends critically on which domains are examined and how they interact within specific cultural contexts. Multiple factors beyond individual circumstances shape intracultural variation in cultural consonance. Socioeconomic position can moderate the association between CC and health, as groups with lower socioeconomic position may have less access to or delayed exposure to evolving cultural models, resulting in greater variability in their cultural knowledge and practices (Pessa et al., 2022).

4.5. Clinical and policy implications

Our findings suggest that interventions aiming to improve parenting practices should consider addressing cultural consonance as a complementary pathway to traditional skill-building approaches. To prevent violent discipline, interventions that strengthen CC in family dynamics—helping parents align with cultural models of positive family dynamics—may be more effective than approaches that focus solely on discipline techniques. This could involve helping parents identify and connect with cultural values around family harmony, respect, and nurturing relationships. The unexpected finding that material-social consonance predicted increased violent discipline suggests caution in intervention approaches that emphasize material advancement without addressing the potential stressors associated with aspirational material-social goals. Interventions may be needed to help parents navigate the tensions between cultural ideals and practical realities in ways that support, rather than undermine, positive parenting.

The differential effects of predictors across family structures suggest that interventions should be tailored to specific family structures. For single mothers, interventions that address multiple stressors simultaneously—including economic support, mental health services, and social connection—may be necessary to address the complex vulnerabilities associated with this type of family arrangement. For households composed of a mother, child, and partner, interventions focused on strengthening maternal consonance may be particularly important for preventing violent discipline. The consistent importance

of paternal consonance across all family structures, even when the biological father does not cohabit, suggests that interventions should emphasize the significance of positive paternal involvement. However, our findings suggest that interventions aimed at increasing cultural consonance should be implemented with extreme caution, as enhancing certain domains may inadvertently exacerbate harmful parenting practices. Specifically, programs that emphasize material advancement or social mobility without addressing the psychological pressures these aspirations create may unintentionally increase violent discipline. The stress of striving for material-social consonance in contexts of poverty appears to manifest in controlling behaviors toward children. Therefore, interventions should prioritize strengthening family dynamics consonance—which consistently showed protective effects—while helping parents critically examine and potentially reframe materialistic cultural models that may be unattainable or psychologically costly. This nuanced approach requires careful assessment of which cultural models are activated in specific communities and how they interact with structural constraints.

The distinct patterns observed across maternal age groups suggest that interventions should be developmentally informed. For adolescent mothers, addressing intimate partner violence appears crucial, as it was significantly associated with both positive and violent parenting outcomes in complex ways. Interventions for this group may need to simultaneously address safety concerns while supporting the compensatory parenting motivations that violent relationships may paradoxically activate. The enactment of cultural consonance involves complex motivational pathways beyond mere knowledge. Internalization—the degree to which cultural standards become integrated into self-concept—can powerfully drive behavior (Dengah et al., 2022; Maltseva, 2018). Additionally, social network conformation, where perceived adherence within one's social network compels conformity (Dengah et al., 2022), represents another key motivational pathway. These motivations interact with structural constraints, as poverty and social inequalities can impede individuals' ability to achieve consonance even when they possess cultural knowledge (Copeland, 2018). For adult mothers, interventions targeting family dynamics consonance may be most effective, as this domain showed the strongest associations with positive parenting outcomes in this group. This could involve helping families strengthen their sense of cultural alignment in family life and relationships. Our recommendations align with those of Sánchez-Vincitore and Castro, who found that Dominican mothers who rejected the need for physical punishment provided more cognitive stimulating activities, even without physical resources such as books or toys, and that a psychosocial model, including opportunities for early learning components, mediated the relationship between socioeconomic gradient and early childhood development outcomes (Sánchez-Vincitore and Castro, 2022).

4.6. Limitations and future directions

Several limitations should be considered in interpreting these findings. Some regression models accounted for only a small proportion of the variance in parenting practices, suggesting that additional unmeasured factors, such as neighborhood conditions, caregiving load, or child temperament, likely play a role. The cross-sectional design precludes causal inferences about the relationships between maternal adversity, CC, and parenting practices. Longitudinal research is necessary to investigate how these relationships evolve over time and whether changes in CC mediate improvements in parenting practices. Additionally, our measures of CC, while theoretically grounded, showed modest reliability coefficients, suggesting the need for continued refinement of these instruments. While reliability coefficients for consonance subscales were modest, these levels are acceptable for conceptually grounded instruments developed in field settings. However, this limitation should be interpreted with caution. We did not conduct exploratory or confirmatory factor analysis during scale development, and

future work should assess the dimensionality and construct validity of the instrument through formal psychometric testing. Future research should address the challenge of operationalizing cultural salience—the importance collectively bestowed on cultural elements—which requires systematic identification beyond traditional ethnography (Balieiro et al., 2011). Additionally, integrating narrative analyses with cultural consensus analysis could develop more sensitive and nuanced measures of cultural consonance (Balieiro et al., 2011), particularly important when examining out-of-awareness cultural models that individuals cannot directly articulate (Bennardo, 2024).

Several research directions emerge from these findings. First, longitudinal studies examining how CC changes over time and whether these changes predict improvements in parenting practices would help establish causal relationships and inform the timing of interventions. Second, qualitative research exploring how parents experience and navigate cultural expectations in the face of adversity would provide crucial insights into the mechanisms underlying our quantitative findings. Third, intervention studies directly targeting CC as a pathway to improved parenting would help establish whether enhancing cultural alignment is a viable strategy for supporting positive parenting. Such studies could investigate whether interventions that help parents enhance their consonance result in improvements in parenting practices and, ultimately, early childhood development outcomes. Fourth, research examining how CC relates to children's developmental outcomes would help establish the functional significance of these parenting differences. If CC affects parenting in ways that matter for child development, this will provide additional support for intervention approaches targeting cultural alignment. Finally, cross-cultural research examining whether similar mediational patterns occur in other cultural contexts would help establish the generalizability of CC as a framework for understanding adversity in parenting.

5. Conclusion

This study demonstrates that cultural consonance plays a critical but complex mediating role in the relationship between maternal adversity and parenting practices. Distinct patterns across parenting dimensions—full mediation for violent discipline, suppression effects for positive discipline, and strong indirect effects for cognitive stimulation—underscore the multifaceted ways in which cultural context shapes parenting practices under conditions of adversity. These effects were not uniform; instead, they varied significantly depending on family structure and maternal age at the time of first birth, highlighting that parenting processes must be understood within their specific social and family contexts.

Importantly, the findings show that different domains of CC exert contrasting impacts: family dynamics CC consistently protected against violent parenting and supported cognitive stimulation, while material-social CC, although often viewed as a marker of well-being, was at times associated with greater use of violent discipline, possibly reflecting the pressures of maintaining material-cultural ideals in conditions of scarcity. This duality suggests that CC functions both as a resource and, under certain conditions, as a source of strain. The differential effects across domains reflect the complex relationship between cultural models and actual parenting practices, where alignment with certain cultural expectations, such as material success, may inadvertently create stress that undermines positive parenting practices.

By demonstrating that maternal adversity disrupts cultural alignment—undermining access to both symbolic and practical support—this study expands traditional models of risk by incorporating the cultural scaffolding that enables effective parenting. Rather than focusing solely on psychological symptoms or individual-level skills, our findings suggest that interventions should also aim to restore or reinforce CC in caregiving roles and family dynamics, particularly by strengthening alignment with culturally valued models of parenting, co-parenting, and household functioning. The effects of family structure and maternal age

at first childbirth further underscore the need for contextually tailored interventions. Extended families provided crucial buffers against maternal adversity, while single mothers with multiple children faced compounded challenges that require comprehensive support approaches. Similarly, the developmental stage at which mothers begin childbearing shapes both their vulnerability to adversity and their capacity to maintain CC across different domains.

Our findings advance cultural consonance theory by highlighting its domain-specific and sometimes contradictory effects. This suggests that interventions cannot simply aim to increase cultural consonance broadly but must carefully consider which cultural models to reinforce and how different domains interact. The protective effects of family dynamics consonance, even in the absence of material resources, offer hope that culturally grounded interventions can support positive parenting by working with existing cultural strengths rather than imposing external standards. Interventions must recognize that cultural competence (knowledge) and cultural consonance (behavior) are distinct, with the greatest benefits observed when both align (Copeland, 2018). Programs should address both knowledge transmission and the motivational pathways—internalization and social network conformation—that drive cultural enactment (Dengah et al., 2022; Maltseva, 2018).

Finally, while the cross-sectional design limits causal claims, the robust and consistent patterns observed suggest that cultural consonance is a key mechanism through which maternal adversity shapes parenting. Future longitudinal and intervention studies should investigate how strengthening cultural alignment can buffer the effects of maternal adversity and support positive parenting. Such investigations should acknowledge that individuals play an active role in negotiating cultural meanings and hence in their own trajectories of adaptation, while operating within complex cultural-ecosocial systems where mind, brain, and culture are mutually co-constructed across multiple time-scales (Kirmayer, 2024). This perspective offers a path toward culturally grounded, context-sensitive interventions that work with the values and expectations that give structure and meaning to caregivers' lives, recognizing that CC itself may serve as a resource for coping with stress and vulnerability. Understanding these dynamics can inform the design of interventions that help families maintain cultural alignment in the face of adversity, ultimately promoting more effective parenting and improved developmental outcomes for children.

CRedit authorship contribution statement

Arachu Castro: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Laura V. Sánchez-Vincitore:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Ethics approval/statement

All procedures complied with applicable laws and institutional guidelines. The study protocol, including all subsequent amendments, was approved by the institutional review boards of the Celia Weatherhead School of Public Health and Tropical Medicine at Tulane University (study 2023-174, originally approved March 10, 2023) and Universidad Iberoamericana (study CEI2023-2, originally approved March 6, 2023). The privacy rights of study participants have been observed.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used ChatGPT to improve the readability and language of the manuscript. After using this

tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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Declaration of competing interest

We have nothing to declare.

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Data availability

The de-identified data are preserved in OSF (<https://osf.io/wfdzu>), a free and secure cloud-based repository.

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