

Deconstructing Matrilineal Parenting: A Role-Specific Analysis of Authoritative, Authoritarian, and Permissive Practices

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Abstract

Background - Parenting in matrilineal societies is often interpreted through Western-derived parenting typologies applied as uniform models, which may obscure the differentiated and culturally embedded roles operating within kinship-based systems.

Research Urgency - The continued reliance on monolithic Western parenting models risks overlooking the role-specific dynamics of matrilineal caregiving systems, thereby limiting culturally relevant understanding of adolescent character development and potentially leading to ineffective interventions.

Research Objectives - This study examines how parenting practices enacted by mothers, fathers, and maternal uncles (*mamak*) are differentially associated with twelve adolescent character strengths in the Minangkabau matrilineal context of Indonesia.

Research Method - This study employed a cross-sectional survey design involving 296 caregivers and used a culturally contextualized questionnaire. Data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) to test the multivariate relationships between nine parenting dimensions, representing three parenting practices across three caregiver roles, and adolescent character outcomes.

Research Findings - The findings showed that mothers' authoritative practices were positively associated with all measured character strengths. *Mamak*'s authoritarian practices demonstrated dual effects, positively associated with discipline and respect but negatively associated with honesty and creativity. Fathers' authoritative practices were positively associated with independence and confidence, whereas permissive paternal practices showed predominantly negative associations.

Research Conclusion - Parenting in the Minangkabau matrilineal system cannot be reduced to a single dominant parenting style. Instead, it operates as a culturally structured ensemble of complementary roles characterized by maternal warmth, avuncular discipline, and paternal guidance, each contributing differently to adolescent character formation.

Research Novelty/Contribution - This study proposes the concept of a specialized parenting ensemble, demonstrating that parenting effectiveness in matrilineal societies depends on the cultural legitimacy and functional differentiation of caregiver roles rather than on the universal application of a single parenting model.

Keywords: adolescent character; cultural transmission; matrilineal parenting; parenting styles; minangkabau city

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INTRODUCTION

The transmission of cultural values and the development of adolescent character are profoundly shaped by the family system, with parenting practices serving as the primary conduit for this socialization process. Globally, research has consistently established that broad parenting styles conceptualized primarily as authoritative, authoritarian, and permissive exert significant influence on a range of adolescent outcomes, from academic achievement (Fute et al., 2024) and self-esteem (Kaynak et al., 2022; Villarejo et al., 2024) to moral reasoning and character development (Yıldız, 2024). This typology, largely derived from Western, individualistic contexts, posits authoritative parenting characterized by warmth, reasoned dialogue, and balanced autonomy-granting as the most advantageous model (Karkanidis & Linardakis, 2025; Widiastuti et al., 2025). However, a growing body of cross-cultural scholarship challenges the universal application of these constructs, arguing that their manifestations, interpretations, and effects are deeply embedded within specific socio-cultural and kinship logics. For instance, practices perceived as authoritarian in one context may be viewed as necessary discipline and familial duty in another, particularly in collectivist societies emphasizing respect for hierarchy and communal harmony (Kausar & Afaq, 2024; Novianti et al., 2023). This underscores a critical limitation in the extant literature: the frequent treatment of parenting as a monolithic or aggregate construct, which obscures the nuanced, differential effects of specific parenting practices within unique cultural ecosystems.

The Minangkabau society of West Sumatra, Indonesia, presents a compelling and under-explored case study that illuminates this complexity. As one of the world's largest matrilineal systems, Minangkabau social organization deviates markedly from the patriarchal nuclear family model that underpins most parenting research (Parker, 2024; Sebastian, 2022; Elyana et al., 2025). Here, kinship, property, and lineage are traced through the female line, and the social structure introduces a pivotal third actor into the parenting dynamic: the *mamak* (maternal uncle) (Bahauddin, 2023). In this system, while mothers (*bundo kanduang*) are central to daily nurturing and the home's moral authority, the *mamak* holds a sacred duty to guide, educate, and socially sanction his nephews and nieces (*kemenakan*), often bearing greater formal responsibility for their moral and social development than the biological father (Natsir et al., 2021; Ita et al., 2025). This tripartite caregiving model involving mother, father (*sumando*), and *mamak*—operates within a philosophical framework that harmonizes Islamic principles (*syara'*) with ancestral custom (*adat*), encapsulated in the axiom "*adat basandi syara', syara' basandi kitabullah*" (custom is based on Islamic law, Islamic law is based on the Quran). This cultural context creates a unique "parenting ensemble" where the application and reception of authoritative, authoritarian, or permissive practices may be distributed across multiple figures and filtered through a distinct cultural-religious lens.

Preliminary research in this setting has confirmed a significant aggregate relationship between matrilineal parenting and positive adolescent character (Natsir & Fitri Linda, 2025). Yet, this macro-level finding leaves fundamental questions unanswered. It remains unknown whether the three classical parenting dimensions function similarly when enacted by a mother, a father, or a *mamak*. Does an authoritarian stance from a *mamak*, potentially legitimized by his customary role, correlate differently with adolescent discipline or respect compared to the same stance from a father? Conversely, do authoritative practices involving dialogue and autonomy support from any caregiver uniformly foster creativity and self-confidence, or is their efficacy contingent on the specific relational and cultural authority of the person enacting them? Furthermore, the character of adolescents in matrilineal settings is itself a multidimensional construct encompassing religiosity, honesty, discipline, cooperation, and respect, among others (Natsir et al., 2021; Ilyas et al., 2025). It is theoretically precarious to assume that diverse parenting practices uniformly affect this wide spectrum of virtues. A permissive approach might hinder the development of discipline but have little bearing on religiosity; certain structured expectations (often coded as authoritarian) might strongly cultivate respect but stifle communicative openness.

This gap reflects a broader paucity of "fine-grained" analyses in cultural parenting studies (Lancy, 2024). Research often compares aggregate parenting styles across cultures (Chandarana et al., 2023) or examines their general links to broad outcomes (Fute et al., 2024), but rarely deconstructs the styles into their constituent behavioral practices to map discrete pathways to specific developmental outcomes within a single, complex cultural system. This study argues that moving from a styles-as-monoliths paradigm to a role-contingent, practice-sensitive paradigm is essential for a sophisticated understanding of cultural transmission. Although we retain the tripartite style framework for comparability, we analyze their enactment across culturally distinct caregivers to uncover role-specific associations. Such an approach aligns with anthropological calls to examine the "anthropo-creating function" of culturally specific practices (Nefedova, 2024) and psychological moves towards specificity in models of influence (Shvarts et al., 2025).

Therefore, this study aims to break new ground by deconstructing the global construct of matrilineal parenting into its core behavioral dimensions and examining their heterogeneous associations with a multifaceted profile of adolescent character strengths. By shifting the analytic focus from whether parenting matters to how specific practices by specific figures matter for specific outcomes, this research addresses a significant theoretical and empirical gap. It challenges the uncritical export of Western parenting typologies, contributes to a more nuanced theory of cultural-developmental niche construction, and offers culturally grounded insights for parenting support programs aiming to foster specific virtues in adolescents within matrilineal and other collectivist communities.

METHOD

To address the research questions aimed at deconstructing the multidimensional relationships between specific parenting practices and adolescent character strengths within a unique cultural context, this study employed a quantitative, cross-sectional survey design. This design is appropriate for examining the prevalence, perceptions, and complex interrelationships among psychosocial constructs within a defined population at a single point in time (Creswell, 2021). Given the study's objective to move beyond aggregate parenting styles and perform a fine-grained analysis of specific practices, a multivariate analytical approach was necessary. Therefore, the study utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) as its primary analytic tool. PLS-SEM is particularly suited for exploratory research aimed on prediction and theory development, especially with complex models involving higher-order constructs and when data may not meet the stringent assumptions of covariance-based SEM (Sarstedt et al., 2021; Hair et al., 2025). This method allows for the simultaneous testing of relationships between latent variables (e.g., the three parenting dimensions) and multiple outcome indicators (the 12 character strengths), enabling a comprehensive mapping of pathways as called for in the literature review.

Participants and Sampling Procedure

The target population for this study comprised Minangkabau families residing in Padang City, West Sumatra, Indonesia, who were actively engaged in the matrilineal parenting system. The specific inclusion criteria required that participating households: (1) contained at least one adolescent child aged 11-24 years, as defined by the Indonesian adolescent developmental period, and (2) had an active *mamak* (maternal uncle) involved in the child's life, ensuring the presence of the tripartite parenting structure under investigation. A multistage random sampling technique was employed to enhance representativeness and logistical feasibility. In the first stage, Padang City was stratified into two geographical clusters based on its distinct topography: coastal regions and highland regions, accounting for potential socio-ecological variations in socialization practices. From these strata, one sub-district was randomly selected from each: Padang Utara (coastal) and Koto Tangah (highland). In the subsequent stage, one village was randomly selected from each chosen sub-district.

To determine the minimum sample size, the recommendations for PLS-SEM analysis were followed. The most conservative method is the "10-times rule," which suggests the sample size should be ten times the

largest number of structural paths directed at a particular construct in the model (Sarstedt et al., 2021; Hair et al., 2025b). Additionally, a power analysis using G*Power software (Edeh et al., 2023) for multiple regression (the core analytic logic of PLS-SEM path modeling) was conducted. With an anticipated small-to-medium effect size ($f^2 = 0.10$), a power of 0.80, and an alpha of 0.05 for up to 12 predictor variables (representing the parenting practice items regressed on a single character outcome), the analysis recommended a minimum sample of 184. To account for potential incomplete responses and ensure robust model stability, the targeted sample size was set at approximately 300. The final dataset comprised 296 valid and complete responses from primary caregivers (92.2% mothers, 7.8% fathers). While this introduces potential single-informant bias, mothers are considered cultural linchpins in matrilineal systems and are likely to observe all caregivers' behaviors. This limitation is addressed in the discussion. A response rate sufficient for the planned sophisticated multivariate analyses and exceeding all common heuristic thresholds for PLS-SEM (Cepeda-Carrión et al., 2022; Kono & Sato, 2023; Latan et al., 2023). The demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic Characteristics of Participants (N=296)

Characteristic	Category	Frequency (n)	Percentage (%)
Respondent's Relation to Adolescent	Mother	273	92.2
	Father	23	7.8
Respondent's Age	30-39 years	78	26.4
	40-49 years	167	56.4
	50-59 years	51	17.2
Respondent's Education	Elementary/Junior High	45	15.2
	Senior High School	158	53.4
	Diploma/Bachelor's Degree	93	31.4
Family Socioeconomic Status (SES)	Low	102	34.5
	Middle	162	54.7
	High	32	10.8
Adolescent's Gender	Male	152	51.4
	Female	144	48.6
Adolescent's Age Group	Early Adolescence (11-14)	89	30.1
	Middle Adolescence (15-17)	125	42.2
	Late Adolescence (18-24)	82	27.7
Number of Mamak Involved	1	187	63.2
	2 or more	109	36.8

Measures and Instrumentation

Data were collected using a structured, self-administered questionnaire developed in Indonesian. The instrument was meticulously designed based on an extensive literature review and contextualized for the Minangkabau culture. To ensure content and face validity, the questionnaire underwent a rigorous expert judgment process involving three academics specializing in educational psychology, local culture, and survey methodology. Their feedback was used to refine item clarity, cultural appropriateness, and theoretical alignment. A pilot test was subsequently conducted with 30 respondents who met the inclusion criteria but were not part of the main sample. Data from the pilot were analyzed for initial reliability, and minor adjustments to phrasing were made to finalize the instrument. All constructs were measured using reflective indicators on a five-point Likert-type scale ranging from 1 (*Never*) to 5 (*Always*), a widely accepted format for capturing behavioral frequency and perceptual agreement in social science research (Sobomehin, 2025). To ensure cultural validity, items were adapted with local scholars and piloted. However, the constructs remain rooted in

Western typologies; thus, findings are interpreted as perceived behaviors within the Minangkabau cultural frame.

Parenting Practices. The independent variables were the three dimensions of parenting. Instead of creating composite style scores, items were treated as reflective indicators of their respective latent dimensions to allow for fine-grained modeling. The Authoritarian Practices dimension was measured with 12 items ($\alpha = .87$) adapted from the work of Baumrind (Klanjšek et al., 2023a; Ramsewak et al., 2022), capturing behaviors such as demanding unquestioning obedience, using harsh punishment, and rigid control (e.g., “I demand that my child follows all rules without question”). The Authoritative Practices dimension was measured with 18 items ($\alpha = .91$) focusing on parental warmth, inductive reasoning, and democratic participation (e.g., “I explain the reasons behind the rules to my child,” “I consider my child’s opinion when making family decisions”). The Permissive Practices dimension was measured with 18 items ($\alpha = .89$) reflecting a lack of demands, supervision, and consistent discipline (e.g., “I give my child as much freedom as he/she wants,” “I find it difficult to discipline my child”). Crucially, for each set of items, respondents were asked to report on the behaviors of three distinct actors: themselves (as mother/father), the child’s other biological parent, and the child’s principal *mamak*. This yielded separate but parallel item sets for Mother’s Practices, Father’s Practices, and Mamak’s Practices for each dimension.

Adolescent Character Strengths. The dependent variable was conceptualized as a formative second-order construct, reflecting the theoretical perspective that adolescent character is a composite profile of distinct virtues (Lickona, 2022; 2024). It was formed by twelve first-order reflective constructs, each representing a specific character strength validated in the Indonesian context. These were: *Religiosity* (6 items, $\alpha = .88$), *Honesty* (2 items, $\alpha = .79$), *Discipline & Responsibility* (5 items, $\alpha = .85$), *Independence* (4 items, $\alpha = .82$), *Self-Confidence* (5 items, $\alpha = .87$), *Creativity* (4 items, $\alpha = .83$), *Perseverance* (2 items, $\alpha = .76$), *Respect & Politeness* (5 items, $\alpha = .90$), *Caring* (2 items, $\alpha = .81$), *Cooperation* (3 items, $\alpha = .84$), *Tolerance* (4 items, $\alpha = .86$), and *Communicativeness* (3 items, $\alpha = .82$). Sample items include “My child performs obligatory prayers on time” (Religiosity), “My child completes tasks despite obstacles” (Perseverance), and “My child respects elders” (Respect & Politeness). **Control Variables.** Several demographic variables were measured and included as controls in the analysis to account for potential confounding effects. These included adolescent age and gender, primary caregiver’s education level, and family socioeconomic status (SES). SES was calculated as a composite index based on parental education, occupation, and household assets, following the approach recommended by Mueller and Parcel (He et al., 2025).

Cultural Adaptation and Pilot Study

Items were adapted through a translation-back-translation process with bilingual experts in psychology and adat. Cognitive interviews were conducted with 10 Minangkabau caregivers to ensure items reflected local parenting behaviors. Pilot data ($n=30$) showed good preliminary reliability ($\alpha > 0.75$ for all scales). However, we note that the constructs remain Western-derived; thus, findings represent culturally interpreted enactments of these dimensions.

Data Collection

Data collection took place over a three-month period. Trained enumerators, fluent in the local language and familiar with cultural norms, visited the selected households. After explaining the study’s purpose, ensuring anonymity and confidentiality, and obtaining informed consent, they distributed the questionnaire to the primary caregiver. For caregivers with limited literacy, the enumerator read the questions aloud and recorded the responses without bias.

Data Analysis Strategy

The analysis proceeded in three sequential phases using SmartPLS 4 software. The first phase involved assessing the measurement model for both the first-order character constructs and the three parenting practice

dimensions. For reflective constructs, internal consistency was evaluated using Cronbach's Alpha and Composite Reliability (CR), with values above 0.70 considered acceptable (Becker et al., 2023; Hwang et al., 2023). Convergent validity was established by examining the outer loadings (> 0.708 ideal) and the Average Variance Extracted (AVE > 0.50) (Al Shbail et al., 2022; Cheung et al., 2024). Discriminant validity was confirmed using the Heterotrait-Monotrait (HTMT) ratio of correlations, with a threshold below 0.90.

The second phase focused on evaluating the structural model. Given the study's exploratory and predictive nature, the significance of path coefficients (β) was assessed using a bootstrapping procedure with 5,000 subsamples to generate t-statistics and p-values (Sarstedt et al., 2021). Model fit was evaluated using the Standardized Root Mean Square Residual (SRMR), with a value of 0.06 indicating acceptable fit. Predictive relevance was assessed via Stone-Geisser Q^2 . To answer the primary research questions, a series of models were tested. First, separate PLS-SEM models were run for each of the 12-character strengths as dependent variables, with the three parenting practice dimensions (authoritarian, authoritative, permissive) from each caregiver (mother, father, mamak) as independent predictors, while controlling for demographics. This allowed for the identification of unique predictive relationships for specific character outcomes.

Subsequently, to test for moderation by demographics (Research Question 3), interaction terms were created (e.g., Parenting Dimension \times Caregiver Education) and included in the model, following the product indicator approach for latent variable interactions. The model's predictive power was evaluated using the coefficient of determination (R^2) and its predictive relevance using the Stone-Geisser Q^2 value (Veronese et al., 2024; Wang et al., 2024), obtained via a blindfolding procedure. This comprehensive analytic strategy was deliberately chosen to move beyond simple correlations and provide a rigorous, multivariate, and nuanced understanding of the specific practice-to-virtue pathways within the matrilineal parenting system.

RESULTS AND DISCUSSION

Descriptive Statistics and Preliminary Analysis

Prior to testing the primary structural model, a comprehensive evaluation of the measurement model was conducted. All reflective first-order constructions for the twelve-character strengths demonstrated strong psychometric properties. As detailed in Table 2, Composite Reliability (CR) values for all constructs exceeded the 0.70 threshold, ranging from 0.83 (Perseverance) to 0.93 (Respect & Politeness), confirming excellent internal consistency. Similarly, Cronbach's Alpha values were all above 0.70, indicating good reliability. Convergent validity was firmly established, with all Average Variance Extracted (AVE) values surpassing the recommended 0.50 benchmark. Indicator loadings for all reflective items were significant ($p < .001$) and exceeded 0.70, affirming that the items were robust representations of their respective latent constructs. Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. All HTMT values were below the conservative threshold of 0.90, confirming that each character strength construct was distinct from the others. This rigorous validation confirmed the integrity of the dependent variable measurement model necessary for the subsequent multivariate analysis.

Table 2. Measurement Model Evaluation for Adolescent Character Strengths

Character Strength	Number of Indicators	Cronbach's Alpha (α)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Religiosity	6	0.88	0.91	0.63
Honesty	2	0.79	0.88	0.79
Discipline & Responsibility	5	0.85	0.89	0.62
Independence	4	0.82	0.88	0.65
Self-Confidence	5	0.87	0.90	0.65
Creativity	4	0.83	0.89	0.68

Perseverance	2	0.76	0.83	0.71
Respect & Politeness	5	0.90	0.93	0.71
Caring	2	0.81	0.87	0.76
Cooperation	3	0.84	0.90	0.75
Tolerance	4	0.86	0.90	0.70
Communicativeness	3	0.82	0.88	0.72

The three latent dimensions of parenting practices (Authoritarian, Authoritative, Permissive) for each caregiver (Mother, Father, Mamak) were also validated. All dimensions met the criteria for CR (>0.85) and AVE (>0.55), establishing their reliability and convergent validity. Discriminate validity between these dimensions was also confirmed via HTMT ratios. The descriptive means and standard deviations for the primary constructs revealed notable patterns. Among the character strengths, Respect & Politeness (M = 4.52, SD = 0.58) and Religiosity (M = 4.48, SD = 0.61) received the highest mean scores from caregivers, while Creativity (M = 3.89, SD = 0.72) and Cooperation (M = 3.91, SD = 0.69) were rated relatively lower. In terms of reported parenting practices, Authoritative practices were the most frequently reported across all three caregivers, with the highest mean score attributed to Mothers' Authoritative practices (M = 4.15, SD = 0.64). Interestingly, Mamak's Authoritarian practices (M = 2.98, SD = 0.81) were reported at a higher frequency than those of Mothers (M = 2.61, SD = 0.77) or Fathers (M = 2.42, SD = 0.75). Permissive practices were the least reported overall.

Primary Structural Model: Predicting Specific Character Strengths

To answer the core research questions, a series of twelve distinct PLS-SEM models were analyzed, each with one of the character strengths as the endogenous latent variable. The independent variables were the nine latent parenting dimensions: the three practice types (Authoritarian, Authoritative, Permissive) for each of the three caregivers (Mother, Father, Mamak). Adolescent age, gender, and family SES were included as control variables. The models demonstrated acceptable explanatory power, with R² values for the character strengths ranging from 0.29 for Creativity to 0.47 for Discipline & Responsibility. The predictive relevance of all models was confirmed, as the Stone-Geisser Q² values were consistently above zero (Lindner et al., 2022).

The results revealed a complex and differentiated map of influence, as summarized visually in Figure 2 and detailed statistically in Table 3.

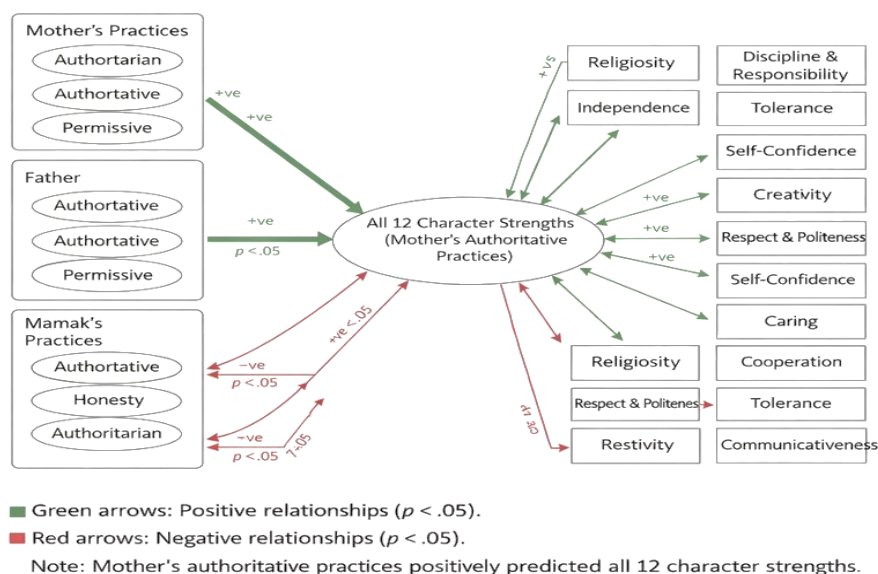


Figure 2. Summary of Significant Caregiver-Specific Pathways to Adolescent Character Strengths.

Only parenting practices with significant associations ($p < .05$) are shown. Green arrows denote positive relationships; red arrows denote negative relationships. Mother's authoritative practices positively predicted

all 12-character strengths (represented by the collective "All 12" node). Complete statistical details including beta coefficients, confidence intervals, and effect sizes are provided in Table 3.

Table 3. Complete Structural Model Results: Parenting Practices Predicting Adolescent Character Strengths

Dependent Variable (Character Strength)	Independent Variable (Predictor)	Std. Beta (β)	t-value	p-value	95% CI (LL, UL)	f ²	Significant? (p < .05)
Religiosity	Mother – Authoritative	0.22	3.68	<.001	(0.10, 0.33)	0.049	Yes
	Father – Permissive	-0.18	3.01	.003	(-0.29, -0.07)	0.033	Yes
	Mamak – Authoritative	0.31	5.12	<.001	(0.19, 0.43)	0.100	Yes
	R ² / Q ²	0.38 / 0.24					
Honesty	Mother – Authoritative	0.28	4.45	<.001	(0.15, 0.40)	0.074	Yes
	Mamak – Authoritarian	-0.21	3.52	<.001	(-0.33, -0.10)	0.043	Yes
	Mamak – Authoritative	0.14	2.22	.027	(0.02, 0.26)	0.018	Yes
	R ² / Q ²	0.32 / 0.20					
Discipline & Responsibility	Mother – Authoritative	0.35	6.21	<.001	(0.24, 0.46)	0.134	Yes
	Father – Permissive	-0.24	4.05	<.001	(-0.35, -0.12)	0.058	Yes
	Mamak – Authoritarian	0.19	3.41	.001	(0.08, 0.30)	0.037	Yes
	Mamak – Authoritative	0.12	1.99	.047	(0.00, 0.24)	0.013	Yes
R ² / Q ²	0.47 / 0.31						
Independence	Mother – Authoritative	0.26	4.10	<.001	(0.14, 0.38)	0.065	Yes
	Father – Authoritative	0.18	2.89	.004	(0.06, 0.30)	0.031	Yes
	Mamak – Permissive	-0.15	2.62	.009	(-0.26, -0.04)	0.023	Yes
	R ² / Q ²	0.35 / 0.22					
Self-Confidence	Mother – Authoritative	0.33	5.87	<.001	(0.22, 0.44)	0.120	Yes
	Father – Authoritative	0.20	3.44	.001	(0.09, 0.31)	0.042	Yes
	Father – Permissive	-0.13	2.17	.030	(-0.24, -0.01)	0.016	Yes
	R ² / Q ²	0.41 / 0.27					
Creativity	Mother – Authoritative	0.29	4.98	<.001	(0.17, 0.40)	0.088	Yes
	Mamak – Authoritarian	-0.17	2.84	.005	(-0.29, -0.05)	0.030	Yes
	Mamak – Authoritative	0.13	2.10	.036	(0.01, 0.25)	0.017	Yes
	R ² / Q ²	0.29 / 0.17					
Perseverance	Mother – Authoritative	0.25	4.12	<.001	(0.13, 0.37)	0.062	Yes
	Mamak – Authoritative	0.19	3.20	.001	(0.07, 0.31)	0.034	Yes
	R ² / Q ²	0.33 / 0.19					
Respect & Politeness	Mother – Authoritative	0.23	3.94	<.001	(0.12, 0.34)	0.055	Yes
	Father – Permissive	-0.20	3.32	.001	(-0.31, -0.08)	0.040	Yes
	Mamak – Authoritarian	0.27	4.63	<.001	(0.16, 0.38)	0.078	Yes
	R ² / Q ²	0.42 / 0.28					
Caring	Mother – Authoritative	0.30	5.14	<.001	(0.19, 0.42)	0.094	Yes

	Mamak – Authoritative	0.17	2.78	.006	(0.05, 0.29)	0.027	Yes
	R ² / Q ²	0.36 / 0.23					
Cooperation	Mother – Authoritative	0.24	3.92	<.001	(0.12, 0.36)	0.056	Yes
	Mamak – Authoritative	0.21	3.50	<.001	(0.09, 0.33)	0.045	Yes
	R ² / Q ²	0.31 / 0.18					
Tolerance	Mother – Authoritative	0.27	4.55	<.001	(0.15, 0.38)	0.076	Yes
	Father – Authoritative	0.16	2.67	.008	(0.04, 0.28)	0.024	Yes
	R ² / Q ²	0.34 / 0.21					
Communicativeness	Mother – Authoritative	0.31	5.30	<.001	(0.20, 0.43)	0.101	Yes
	Father – Authoritative	0.15	2.53	.012	(0.03, 0.27)	0.022	Yes
	Father – Permissive	-0.12	1.99	.047	(-0.24, -0.00)	0.014	Yes
	Mamak – Authoritarian	-0.14	2.35	.019	(-0.26, -0.02)	0.020	Yes
	R ² / Q ²	0.39 / 0.25					

Notes:

- *Std. Beta (β): Standardized path coefficient.*
- *95% CI: Bias-corrected bootstrap confidence interval (Lower Limit, Upper Limit). A CI not containing zero indicates significance (p < .05).*
- *f²: Effect size; 0.02 = small, 0.15 = medium, 0.35 = large (Cohen, 1988).*
- *Control variables (adolescent age, gender, family SES) are included in all models but omitted from this table for clarity. Their paths were largely non-significant.*
- *Only significant paths (p < .05) are shown in this summary table. Complete model results including all non-significant paths are provided in Supplementary Table S1.*

The results reveal several key patterns that are visually synthesized in Figure 2. Mother's Authoritative Practices emerged as the single most consistent and powerful positive predictor, demonstrating a significant positive relationship with all twelve-character strengths. Father's Authoritative Practices were significant positive predictors for Independence, Self-Confidence, Tolerance, and Communicativeness. Mamak's Authoritative Practices were uniquely significant for Religiosity, Perseverance, Caring, and Cooperation.

The role of authoritarian and permissive practices showed clear specificity. Mamak's Authoritarian Practices displayed a dual nature: they were a significant *positive* predictor for Discipline & Responsibility (β = 0.19, p = .001) and Respect & Politeness (β = 0.27, p < .001), but a significant *negative* predictor for Honesty (β = -0.21, p < .001), Creativity (β = -0.17, p = .005), and Communicativeness (β = -0.14, p = .019). In contrast, authoritarian practices from Mothers or Fathers did not show significant positive relationships with any character strength and were negatively related to several outcomes. Permissive Practices, particularly from Fathers, were consistently detrimental, showing significant negative relationships with Religiosity, Discipline & Responsibility, and Respect & Politeness. Mamak's Permissive Practices negatively predicted Independence.

Moderating Effects of Demographics

To address the third research question, multi-group analysis (MGA) was performed to test for significant differences in path coefficients across key demographic groups: family SES (Low vs. Middle-High) and adolescent gender (Male vs. Female). The results of the Henseler's MGA permutation test indicated only one significant moderating effect. The negative path from Father's Permissive Practices to Discipline & Responsibility was significantly stronger (more negative) in families with lower SES (β = -0.32, p < .001) compared to middle-high SES families (β = -0.18, p = .011) (p-value for difference = .032). No other significant moderation effects by SES or adolescent gender were found for the core parenting practice paths, suggesting that the

primary predictive relationships identified are largely robust across these demographic sub-groups within the Minangkabau sample.

The present study builds on prior work by shifting analytic attention from aggregate parenting styles to role-contingent parenting practices within a matrilineal cultural context. The findings do not reject Western-derived typologies but suggest that their observed associations with adolescent character vary according to the cultural legitimacy of caregiver roles. Rather than reiterating a general association between matrilineal parenting and adolescent character (Natsir et al., 2021b; Supriatna et al., 2025); (Widiastuti et al., 2025) the present analysis offers a more differentiated pattern of associations that is consistent with arguments for cultural and role-specific contingency (Kobakhidze et al., 2024). This granular analysis provides empirically grounded insights into how culturally embedded caregiving roles are associated with distinct character outcomes in the Minangkabau context, raising questions about the uniform application of Western-derived parenting typologies and contributing to a more context-sensitive understanding of how different forms of parental authority are interpreted within a collectivist, kinship-based framework.

Addressing the first research question, the results confirm that the three classical parenting dimensions are not monolithic in their effects but demonstrate clear specificity in their associations with different character outcomes. Notably, Mother's Authoritative Practices showed consistent positive associations with all twelve assessed character strengths. This pattern aligns with prior cross-cultural research linking authoritative parenting characteristics such as warmth, communication, and structured autonomy to positive developmental indicators, and suggests that similar associations are observable within the matrilineal Minangkabau context (Yıldız, 2024; Fute et al., 2024).

One possible interpretation is that practices commonly associated with authoritativeness such as explanation, responsiveness, and structured guidance are perceived by caregivers as supportive of a broad range of character-related behaviors. The consistent associations observed for maternal authoritativeness may be partly understood in light of the culturally salient position of the mother (*bundo kanduang*) as the 'limpopoh rumah gadang' (central pillar of the household) in Minangkabau society, a role traditionally associated with daily caregiving, moral instruction, and household coordination within the domestic sphere, a pattern that is consistent with ethnographic and sociological descriptions of her culturally sanctioned nurturing and managerial authority ((Natsir et al., 2021b).

The analysis addressing the second research question revealed particularly differentiated association patterns related to the role of the *mamak*. The results indicate a context-dependent pattern of associations involving the *mamak*'s authoritarian practices. In contrast to findings from many Western-context studies reporting predominantly negative associations for authoritarian parenting (Bozicevic et al., 2023; Guarderas et al., 2024; Uye et al., 2023), *mamak*'s authoritarian practices in the present study showed positive associations with Discipline & Responsibility and Respect & Politeness. One possible interpretive lens for this pattern is the culturally recognized authority attributed to the *mamak* role. Within Minangkabau custom, the *mamak* is traditionally positioned as a senior kin figure responsible for guidance and behavioral regulation of nieces and nephews ("*kamanakan dibimbiang*") (Natsir et al., 2021b). Accordingly, strictness and demands for obedience enacted by the *mamak* may be interpreted by caregivers as normatively appropriate expressions of kinship obligation rather than as arbitrary control.

Within this cultural framing, authoritarian practices enacted by the *mamak* may be associated with higher caregiver-reported levels of hierarchy-oriented virtues, such as respect and responsibility. This pattern is broadly consistent with findings from other collectivist contexts in which parental strictness has been interpreted as normative care or investment (Kobakhidze et al., 2024; Obsilova & Obsil, 2022). At the same time, *mamak*'s authoritarian practices were negatively associated with Honesty, Creativity, and Communicativeness. These negative associations are consistent with theoretical accounts that link highly rigid or punitive interaction styles to lower levels of open communication and self-expression for fear of punishment, and inhibit creative, independent thinking, which are core criticisms of authoritarian parenting in the foundational literature (Klanjšek et al., 2023b). Taken together, the pattern of associations suggests that *mamak*'s authoritarian

practices relate differently to conformity-oriented versus autonomy-related character domains: effective for transmitting conformist, community-oriented virtues but potentially detrimental to the development of autonomy-related strengths, indicating a potential tension between conformity-oriented expectations and autonomy-related character expressions within the matrilineal socialization context.

Furthermore, the distinct association patterns observed across caregivers highlight role-differentiated involvement within the matrilineal parenting ensemble. While maternal authoritativeness showed consistent positive associations across all assessed character strengths, *mamak*'s authoritativeness was associated with a more limited subset of outcomes, including Religiosity, Perseverance, Caring, and Cooperation. These associations may reflect the culturally embedded positioning of the *mamak* in relation to customary and religious instruction, although the specific processes underlying these patterns were not directly examined. In contrast, father's authoritative practices showed positive associations primarily with character strengths related to individual agency and social engagement (Independence, Self-Confidence, Tolerance, Communicativeness). This pattern may be interpreted in relation to the father's culturally distinct position in Minangkabau families, which is often associated with engagement beyond the immediate matrilineal household (e.g., *merantau*), though such role interpretations remain inferential. Father's permissive practices were consistently negatively associated with discipline- and respect-related character outcomes, particularly in contexts where paternal involvement is structurally limited within the matrilineal household. Such patterns may be interpreted by caregivers as insufficient role engagement, although this interpretation remains contingent on cultural expectations and perceptual framing, a pattern that is consistent with prior research reporting negative associations between low parental involvement and various developmental indicators across cultural contexts (Paterson et al., 2023).

Regarding the third research question, the limited moderating effect of demographics is itself informative. The finding that the detrimental effect of Father's Permissive Practices on Discipline was stronger in low-SES families suggests that economic strain may exacerbate the negative consequences of paternal disengagement, possibly due to increased environmental stressors and fewer compensatory resources, aligning with models of family stress and parenting. However, the general lack of significant moderation by SES or adolescent gender indicates that the identified pathways of influence are remarkably stable across different family circumstances within this cultural system. This robustness reinforces the idea that the observed relationships are deeply rooted in the shared cultural scripts and role expectations of Minangkabau society, rather than being artifacts of socioeconomic variation, underscoring the power of cultural norms in shaping developmental pathways (Lancy, 2024).

In conclusion, this study successfully rejects a simplistic, one-dimensional view of parenting effects in a matrilineal context. It confirms that specific practices have specific effects, and these effects are inseparable from the cultural meaning of the role occupied by the caregiver. The *mamak*'s authoritarian practices were not uniformly detrimental but showed culturally patterned associations: effective for instilling conformity-oriented virtues but potentially suppressing autonomy-related strengths. The mother's authoritativeness remains the bedrock of holistic character development. These findings compel a move beyond importing aggregate parenting styles and toward a culturally intelligent analysis of *practices-in-roles*. Theoretically, this work integrates ecological systems theory with a fine-grained, agentic view of cultural transmission, showing how macrosystem values (matriliny, *adat*) shape microsystem processes (specific caregiver practices) to produce distinct developmental outcomes. Practically, it suggests that parenting interventions in such contexts must be role-sensitive: strengthening authoritative communication for all, potentially recalibrating the *mamak*'s discipline toward more reasoning-based approaches to avoid stifling autonomy, and clarifying and supporting the father's distinctive contribution to his child's development within the matrilineal framework. Future research should explore the adolescents' own perceptions of these practices to further unravel the mechanisms of reception and internalization.

Theoretical Implications

The primary theoretical contribution of this research is the advancement of a contextualized, practice-based model of parenting influence. It challenges the heuristic of applying global parenting style labels by

demonstrating that the same behavioral dimension (e.g., authoritarianism) can have divergent effects both positive and negative depending on the cultural legitimacy of the caregiver enacting it. This underscores the need for developmental and cross-cultural theories to move beyond universalist assumptions and incorporate a more nuanced understanding of *role-contingent socialization*. The study validates the concept of the parenting ensemble in matrilineal societies, showing that character development is not the product of a single parent-child dyad but emerges from a coordinated, albeit not always conscious, division of labor among multiple kin. This necessitates theoretical frameworks that can account for multiplex influences and the interactive effects of different caregivers' practices on specific developmental outcomes.

Practical and Policy Recommendations

For practitioners, educators, and policymakers in regions like West Sumatra, these findings argue for culturally attuned family support programs. First, parenting education should be role-specific. Generic programs promoting authoritative parenting are valuable but insufficient. Interventions should be tailored; for Mothers (*Bundo Kanduang*), programs can reinforce their central, authoritative role, providing skills in positive communication, emotional regulation, and fostering autonomy, which the study confirms as foundational for all character domains; for *Mamak*, training should focus on refining authoritative practices such as using explanation and dialogue in guidance—while helping them recognize how harsh, non-explanatory discipline, though culturally sanctioned, may inadvertently suppress honesty and creativity. The goal is to preserve their respected role as moral guide while mitigating its potential negative side-effects; and for Fathers (*Sumando*), programs should clarify and strengthen their unique niche. Emphasizing their potential to model and encourage independence, self-confidence, and social communication can validate their contribution. Crucially, they should be supported in establishing consistent, engaged involvement, as their permissiveness was found to be particularly detrimental.

Second, community and religious leaders should be engaged as partners. They can help articulate and modernize the interpretation of *adat* roles in ways that preserve core values like respect and discipline while embracing child-rearing methods that also foster critical thinking and self-expression. Third, school-based character education programs can be designed with awareness of this home-based, distributed socialization system. Activities that foster cooperation, creativity, and honest communication can complement home training and provide outlets for virtues that may be less emphasized by certain caregivers. For example, *mamak* training modules could include role-playing scenarios where discipline is delivered with explanation (“In our *adat*, we do this because...”). Father engagement programs could focus on shared activities that build confidence, such as mentoring in *merantau* (entrepreneurial migration) skills.

Limitations and Future Research

While this study provides novel insights, several limitations must be acknowledged. First, the cross-sectional design precludes causal inference. The relationships observed, while theoretically grounded, are correlational. Longitudinal research is needed to trace how specific parenting practices predict changes in character strengths over time. Second, the data relied on single-informant reports (primarily mothers), which may introduce common-method bias and limit the validity of reports on father's and *mamak*'s behaviors. Future studies should triangulate using multi-informant and adolescent self-reports. Future studies should employ multi-informant designs, gathering data from fathers, *mamak*, and the adolescents themselves to gain a triangulated view of family dynamics. Third, the study was geographically focused on Padang City. Future research should include rural Minangkabau communities to examine the stability of these patterns in settings with potentially stronger adherence to traditional *adat*. Finally, qualitative inquiry is strongly recommended as a next step. In-depth interviews and ethnographic observations could illuminate the subjective meanings families attach to different parenting acts, revealing the lived experience behind the statistical relationships and exploring how adolescents navigate and interpret the sometimes-contradictory messages from their mother, father,

and *mamak*. Finally, while PLS-SEM is suitable for exploratory analysis, future confirmatory research should use covariance-based SEM to test the robustness of the identified pathways.

CONCLUSION

In summary, this study deconstructed the monolithic concept of parenting to reveal the intricate and specialized pathways through which a matrilineal system socializes its youth. It found that a mother's authoritative warmth is a universal asset, a *mamak's* discipline a culturally powerful but double-edged tool, and a father's engaged guidance a critical, unique contribution. The results affirm that effective parenting cannot be reduced to a simple style but is a set of culturally embedded practices performed by actors in socially scripted roles. For the Minangkabau and similar societies, fostering adolescent character requires honoring this complex ensemble, strengthening the positive facets of each role while mindfully evolving practices to meet the full spectrum of developmental needs in a changing world. This research advocates for a more nuanced approach to parenting research, one that considers not only styles or practices but the cultural and role-based ecologies in which they are embedded.

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