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Childhood family attachment and physical abuse: the moderating role of gender

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Childhood physical abuse has lasting implications for individual well-being, yet empirical evidence on protective family factors and their gendered effects during emerging adulthood remains limited. This study offers novel insight by examining gender as a moderating factor in the relationship between childhood family attachment and childhood physical abuse among emerging adults. The objective of this study is to assess whether stronger childhood family attachment reduces experiences of childhood physical abuse and to determine whether this protective effect differs by gender. Data were collected using a structured self-administered questionnaire distributed to university students through academic networks, with lecturers assisting in disseminating the survey to their students. A total of 416 responses were analysed using descriptive statistics and regression-based moderation analysis. The findings indicate that childhood family attachment is significantly and negatively associated with childhood physical abuse, confirming its protective role. Gender is found to be a significant predictor and moderator, with results showing that the buffering effect of childhood family attachment against physical abuse is stronger for males than for females. From a policy perspective, the results emphasise the need for attachment-based and gender-sensitive family interventions. Policies should prioritise strengthening parent–child relationships, promoting non-violent disciplinary practices, and incorporating gender-responsive approaches in child protection and parenting programmes to prevent childhood physical abuse effectively.

Keywords Attachment, Childhood physical abuse, Gender, Emerging adults

Childhood family relationships play a foundational role in shaping individuals' emotional, psychological, and social development. The family environment is often the first context in which children learn to regulate emotions, develop a sense of security, and form expectations about relationships¹. In Malaysia, the family institution is highly valued and often viewed as a key source of protection, support, and moral development². However, not all family environments provide such security. Adverse experiences within the household, especially those involving harsh or abusive parenting practices, can disrupt the development of secure attachment and negatively affect children's well-being³. While positive and supportive caregiving experiences foster healthy development, whereas adverse family conditions may have enduring negative consequences that extend into adolescence and adulthood^{4–7}. In this context, understanding the dynamics between family attachment and childhood physical abuse is essential, particularly within the Malaysian socio-cultural setting, where family hierarchy and disciplinary practices may differ from Western contexts.

Child abuse remains a growing concern in Malaysia. Reports from the Ministry of Women, Family and Community Development⁸ indicate a consistent increase in reported child abuse cases over the past decade, with physical abuse being one of the most frequently recorded forms. Many of the cases involve parents or caregivers as perpetrators, raising serious concerns about the safety of children within their own homes. Cultural norms that tolerate strict or physical forms of discipline may further blur the boundary between acceptable parenting and abusive behaviour⁹. As a result, children may experience harm within environments that are socially perceived as normal, making it crucial to examine underlying relational factors such as family attachment.

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When cases of child abuse become prevalent or widely reported, they can undermine public trust in a country's social institutions, child protection systems, and governance structures^{10–12}. High rates of child abuse may draw negative attention from global organisations, human rights bodies, and foreign media, which leads to raised concerns about a nation's commitment to safeguarding the rights and well-being of children. From a theoretical perspective, attachment theory suggests that secure emotional bonds between children and caregivers serve as a protective factor against adverse developmental outcomes^{13,14}. Empirical studies, such as Widom et al.¹⁵ as well as Unger and De Luca¹⁶, have consistently shown that weak or insecure attachment is associated with a higher risk of childhood physical abuse. However, most of this evidence is derived from Western populations, with limited research specifically focusing on Malaysia or similar sociocultural contexts. Furthermore, while the relationship between attachment and abuse is well established, less attention has been given to factors that may influence this relationship, particularly gender differences.

Malaysia makes considerable efforts to safeguard its international reputation¹⁷. Therefore, the issue of child abuse needs to be given serious attention through more in-depth research, particularly as statistics from the Department of Social Welfare have shown an increase in child abuse cases from 1989 to 2021, as depicted in Fig. 1.

Although existing literature has established a robust association between childhood physical abuse and insecure attachment outcomes^{18–23}, an important gap remains in understanding how this relationship may differ across gender. Despite increasing scholarly interest in gender differences in developmental and psychological outcomes, relatively few studies have explicitly examined gender as a moderating variable in the relationship between childhood physical abuse and family attachment. The moderating role of gender suggests that the strength or direction of the association between physical abuse and attachment may vary for males and females, potentially due to differences in socialisation processes, emotional expression, coping mechanisms, and caregiver expectations. This lack of clarity limits the explanatory power of attachment theory and impedes the development of gender-sensitive prevention and intervention approaches. In response to this gap, the present study aims to examine the relationship between childhood family attachment and experiences of physical abuse, with a specific focus on the moderating role of gender.

Theoretical background

Attachment theory, initially developed by Bowlby^{13,14}, explains how emotional bonds formed between infants and their primary caregivers serve a fundamental biological and evolutionary function. These bonds motivate children to seek closeness to caregivers in times of distress, thereby promoting safety, protection, and survival. Attachment is therefore not merely a learned or social behaviour, but an innate regulatory system that supports emotional security and healthy development from early life. When children experience consistent, responsive, and sensitive caregiving, they are more likely to develop secure attachment relationships that foster emotional regulation, stress management, and confidence in exploring their environment.

Within this theoretical framework, caregivers play a pivotal role as sources of comfort, protection, and emotional support. Conversely, disruptions in caregiving, such as emotional unavailability, harsh discipline, or chronic stress, can undermine the formation of secure attachment bonds. Empirical evidence supports this perspective. For example, Madigan et al.²⁴ reported that children with insecure attachment patterns are more likely to exhibit both internalising and externalising problems compared to securely attached children. These findings suggest that insecure attachment reflects broader difficulties in emotional regulation and behavioural adjustment, which may emerge in environments characterised by inconsistent or harmful caregiving practices. Importantly, caregivers' awareness of their role in nurturing attachment has been shown to promote more positive outcomes. Muntean and Ungureanu²⁵ demonstrated that when parents actively support and prioritise secure attachment, children are more likely to develop stable and secure emotional bonds. This highlights the protective role of strong family attachment in reducing maladaptive parenting behaviours, including harsh or physically punitive discipline. More recent longitudinal evidence further strengthens the relevance of attachment theory to

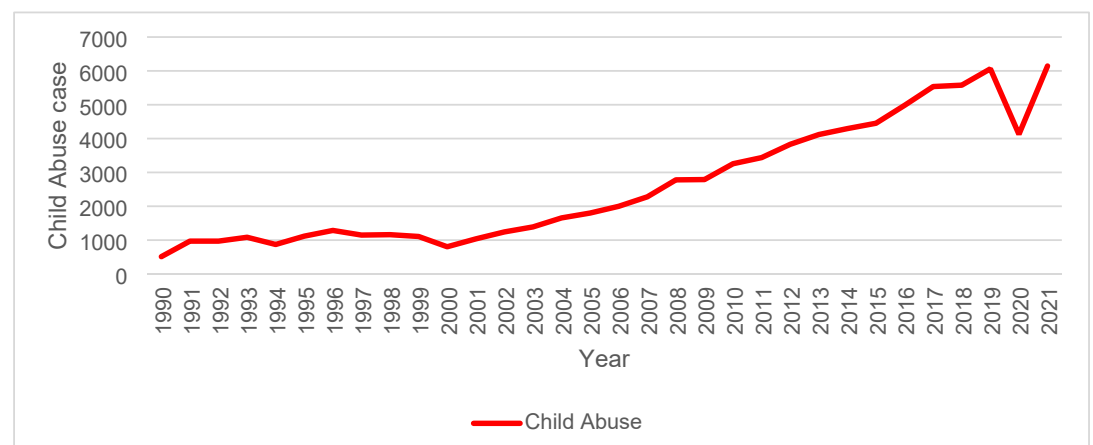


Fig. 1. Child abuse cases in Malaysia (1989–2021). Department of Social Welfare.

childhood maltreatment. Zhai et al.²⁶ found that childhood maltreatment is associated not only with lower initial levels of parent–child attachment but also with negative changes in attachment trajectories over time. Similarly, Haim-Nachum et al.²⁷ showed that experiences of maltreatment can lead to persistent disruptions in emotional bonding, resulting in unstable or progressively deteriorating attachment relationships across development.

Taken together, attachment theory provides a strong conceptual foundation for the present study by explaining how weaknesses in childhood family attachment may increase children's vulnerability to physical abuse. In families where attachment bonds are insecure, caregivers may struggle to regulate their emotions, respond sensitively to children's needs, or adopt non-violent disciplinary strategies. As a result, physical punishment may become more likely, reflecting breakdowns in the caregiver–child relationship rather than isolated disciplinary decisions. This study, therefore, draws on attachment theory to examine how variations in childhood family attachment are systematically related to the risk of childhood physical abuse.

Literature review

Previous research, such as Wang et al.²⁸ and Turgeon et al.²⁹, consistently demonstrates that childhood maltreatment and attachment are central to understanding emotional, behavioural, and psychological outcomes. Rather than operating independently, these factors interact to shape developmental trajectories over time^{26,30}. Across diverse contexts, studies converge on two broad patterns: adverse childhood experiences significantly increase the risk of maladaptive outcomes, while secure attachment often serves as a protective mechanism that can mitigate—though not always fully eliminate—these negative effects^{26,28–32}.

A substantial body of empirical evidence identifies attachment as a key explanatory pathway linking childhood maltreatment to later outcomes. For instance, Lowell et al.³¹ show that childhood maltreatment, particularly emotional abuse, is strongly associated with poorer emotional and behavioural functioning, while attachment to mothers and peers explains additional variation beyond maltreatment alone. This suggests that attachment is not merely a parallel influence but a mechanism through which early adversity affects development. Similarly, Wang et al.²⁸ find that emotional maltreatment is closely linked to vulnerable narcissism, with attachment security playing a mediating role in this relationship. Extending this perspective, Papalia and Widom³⁰ demonstrate that attachment insecurity—especially attachment anxiety—partly explains the link between childhood abuse and violent behaviour in adulthood. Collectively, these findings reinforce the argument that attachment processes are central in translating early adverse experiences into later psychological and behavioural outcomes.

However, the protective role of attachment is not uniform and appears to vary across contexts and developmental stages. Turgeon et al.²⁹ highlight that positive mother–child emotional communication can reduce the risk of disorganised attachment despite experiences of maltreatment, indicating that early relational quality can buffer adverse effects. Similarly, Zhai et al.²⁶ report that attachment to parents partially explains the relationship between maltreatment and depression, although its protective influence is not consistently stable over time. These findings suggest that while attachment is important, its buffering capacity may depend on factors such as developmental timing, environmental conditions, and methodological differences across studies.

Beyond internal psychological outcomes, attachment also shapes external behaviours. Silva et al.³² demonstrate that childhood maltreatment increases the likelihood of aggression in adulthood through its combined effects on attachment insecurity and maladaptive coping behaviours such as alcohol use. This highlights the compounding nature of these mechanisms, where attachment insecurity not only mediates but also interacts with other risk factors to intensify long-term consequences. From a broader perspective, Sirparanta et al.³³ provide a more nuanced view by showing that parents' own histories of maltreatment have only weak effects on their children's attachment outcomes, suggesting that current parenting practices and environmental contexts may be more influential than intergenerational transmission alone. From a prevention and intervention standpoint, Cyr and Alink³⁴ emphasise the importance of attachment-based approaches in addressing childhood maltreatment. They argue that strengthening the child–parent relationship and enhancing parental sensitivity are critical for improving developmental outcomes and supporting effective child protection practices. Taken together, the literature underscores the central role of attachment in both explaining and potentially mitigating the effects of childhood maltreatment. While strong evidence supports its function as a mediating and protective factor, inconsistencies across studies highlight the need for further research to better understand the conditions under which attachment can effectively buffer adverse experiences.

Besides, prior research has increasingly acknowledged gender as a potential moderating variable, although its role has often been examined within different research contexts. Existing evidence indicates that gender can influence both the strength and direction of relationships involving family and social dynamics. For example, gender-based differences have been identified in the link between social support and child physical abuse, as well as in the influence of attachment-related factors on later outcomes and the association between childhood abuse and mental health^{35–37}. However, these studies tend to focus on parental support, fertility intentions, or the consequences of abuse, rather than on early family relational factors that may serve as protective mechanisms against abuse. Furthermore, although gender has been found to moderate various psychosocial relationships, there remains limited empirical attention on its role in shaping the protective effect of childhood family attachment on childhood physical abuse. Therefore, the present study seeks to address this gap by examining gender as a moderating factor in the relationship between childhood family attachment and childhood physical abuse.

Methodology

Participants and sampling procedure

This study utilised a quantitative cross-sectional design focusing on 416 Malaysian young adults aged 20–24. Using a non-probability convenience sampling technique, participants were recruited via online academic

Variable	Cronbach's Alpha	Number of Items
Childhood Physical Abuse	0.820	5
Childhood Family Attachment	0.709	4

Table 1. Reliability analysis for study variables.

Variable	Category	n	%
Gender	Male	289	69.47
	Female	127	30.53
Marital Status (Parent/Caregiver)	Married	334	80.29
	Single Parent	30	7.21
	Divorced/Separated	27	6.49
	Widowed	25	6.01
Education Level (Parent/Caregiver)	Secondary	220	52.88
	Bachelor's Degree	87	20.91
	Diploma/Certificate	67	16.11
	Primary	23	5.53
	Postgraduate (Master's/PhD)	14	3.37
Household Monthly Income	No formal education	5	1.20
	Below RM2,500	178	42.79
	RM2,501–RM4,850	127	30.53
	RM4,851–RM10,959	78	18.75
Residential Area	RM10,960 and above	33	7.93
	Urban	206	49.52
	Suburban	116	27.88
	Rural	94	22.60

Table 2. Demographic profile of participants and caregivers.

networks. Data were collected via a self-administered questionnaire adapted from established instruments (Table 1).

These results indicate that the measurement scales used in this study are reliable and suitable for further statistical analysis.

The target population comprised Malaysian young adults aged 20 to 24. A total of 416 respondents were recruited using a non-probability convenience sampling technique. As shown in Table 2, the sample was predominantly male (69.47%). Most participants reported that their parents or caregivers were married (80.29%) and had completed secondary education (52.88%). Economically, 42.79% of households earned below RM2,500 per month, and nearly half of participants (49.52%) resided in urban areas.

Data collection instruments

Data were collected using a self-administered structured questionnaire comprising three main sections: demographic information, childhood physical abuse, and childhood family attachment. The measurement items were adapted from established instruments to suit the Malaysian context. Childhood Family Attachment was measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), while Childhood Physical Abuse was measured on a frequency scale (1 = never to 5 = always). These constructs are grounded in the attachment framework established by^{13,14}.

For each construct, item responses were averaged to compute composite scores, with higher scores indicating higher levels of perceived childhood physical abuse and stronger childhood family attachment. The internal consistency of the scales was assessed using Cronbach's alpha. The Childhood Physical Abuse (CPA) scale (5 items) demonstrated good reliability ($\alpha = 0.820$), while the Childhood Family Attachment (CFA) scale (4 items) showed acceptable reliability ($\alpha = 0.709$). These values exceed the recommended threshold of 0.70, indicating that the measurement scales are reliable and suitable for further statistical analysis. A summary of the questionnaire items and their respective constructs is presented in Table 3.

Higher scores indicate higher levels of perceived childhood physical abuse and stronger childhood family attachment, respectively.

Procedure and ethical considerations

Prior to data collection, ethical approval was obtained from Universiti Malaysia Sarawak (UNIMAS) Ethics Committee (Approval No.: UNIMAS/NC-22.02/09-17(05)). Participants were informed about the purpose of the study, their voluntary participation, and their right to withdraw at any stage without penalty. Confidentiality and anonymity were strictly maintained. No personally identifiable information was collected, and all responses

Variable		Items
Childhood Physical Abuse (CPA)	CPA1	When I was a child, my parents hit, slapped, or spanked me as a form of punishment
	CPA2	I was sometimes pushed, kicked, or beaten by my parents
	CPA3	My parents used objects such as belts, sticks, or hangers to discipline me
	CPA4	I experienced injuries, bruises, or pain after being punished by my parent
	CPA5	As a child, I often feared being physically hurt by my parents when I made mistakes
Childhood Family Attachment (CFA)	CFA1	I was happy being part of my family when I was a child
	CFA2	I would do anything necessary to help my parents
	CFA3	I felt emotionally close to one or both of my parent during my childhood
	CFA4	I enjoyed spending time with my parents when I was growing up

Table 3. Questionnaire items.

were used solely for academic research purposes. Given the sensitive nature of childhood abuse, participants were encouraged to respond honestly and were assured that their responses would be treated with the utmost confidentiality.

Survey links were disseminated through university academic networks, with assistance from lecturers who shared them with their students. To ensure data quality, only Malaysian citizens aged 20–24 who provided informed consent were included. Of the total responses received, 416 met all inclusion criteria and were retained for analysis. Casewise diagnostics were performed, identifying only four outliers (standardised residuals > ± 3.0), representing less than 1% of the sample and not significantly distorting the regression model.

Data analysis

Data were analysed using IBM SPSS Statistics (Version 23.0). The analysis proceeded in several stages to ensure the robustness and validity of the findings. First, descriptive statistics (means, standard deviations, frequencies, and percentages) were computed to summarise the demographic characteristics of the respondents and the central tendencies of the study variables. Next, Pearson correlation analysis was conducted to examine the bivariate relationships between childhood family attachment and childhood physical abuse. A correlation heatmap was generated to visually represent the strength and direction of associations among the variables. To test the study hypotheses, multiple linear regression analysis was employed. The moderating role of gender was examined by including an interaction term between childhood family attachment and gender in the regression model. Model summary and ANOVA tests were conducted to evaluate the explanatory power of the regression models and their overall statistical significance. Linear regression analysis was then used to examine the magnitude, direction, and statistical significance of each predictor.

Prior to interpretation, several diagnostic tests were performed to ensure that the assumptions of regression analysis were met. Variance Inflation Factor (VIF) and collinearity diagnostics were examined to assess potential multicollinearity among the independent variables; VIF values below the recommended threshold indicated no serious multicollinearity concerns. Case-wise diagnostics were also inspected to identify potential outliers or influential cases that could unduly affect the regression estimates. To examine the moderating role of gender, an interaction analysis was conducted by including the interaction term between childhood family attachment and gender in the regression model. All continuous variables were mean-centred prior to creating the interaction term to reduce multicollinearity. Where a significant interaction effect was observed, simple slope analysis was performed to further interpret the nature of the moderation effect by examining the relationship between childhood family attachment and childhood physical abuse at different levels of gender.

Demographic variables, including parental marital status, parental education level, household income, and residential area, are analysed descriptively to characterise the sample but are not included as covariates in the regression models. The primary objective of this study is to examine the relationship between childhood family attachment and childhood physical abuse, as well as the moderating role of gender based on attachment theory. Therefore, the analysis focuses on the hypothesised relationships among the key study variables.

Findings

Descriptive statistics

Table 4 presents the descriptive statistics for childhood family attachment (CFA), gender, and childhood physical abuse (CPA) based on 416 respondents. The mean score for CFA is 4.34 (SD = 0.77), indicating generally high levels of family attachment. In contrast, CPA records a lower mean of 2.07 (SD = 0.84), suggesting relatively low levels of childhood physical abuse. Gender has a mean of 1.31 (SD = 0.46), reflecting the distribution of the sample based on the coding scheme.

Correlation analysis

Table 5 presents the Pearson correlation matrix for childhood physical abuse (CPA), parental attachment (PA), gender, and the interaction term. PA is negatively correlated with CPA ($r = -0.268$, $p < 0.001$), while gender shows a weak positive correlation with CPA ($r = 0.159$, $p < 0.001$). Other correlations are weak in magnitude. One-tailed significance tests were used because the study hypotheses specify directional relationships (e.g., childhood family attachment is expected to be negatively associated with childhood physical abuse), making a one-tailed approach appropriate.

	N	Range	Minimum	Maximum	Mean	Std. Deviation
CFA	416	4	1	5	4.34	0.77
Gender	416	1	1	2	1.31	0.46
CPA	416	4	1	5	2.07	0.84

Table 4. Descriptive statistics.

		CPA	PA	Gender	PA x Gender
Pearson Correlation	CPA	1	−0.268	0.159	0.065
	PA	−0.268	1	−0.087	0.149
	Gender	0.159	−0.087	1	−0.069
	PA x Gender	0.065	0.149	−0.069	1
Sig. (1-tailed)	CPA	.	<.001	<.001	0.093
	PA	0	.	0.039	0.001
	Gender	0.001	0.039	.	0.08
	PA x Gender	0.093	0.001	0.08	.

Table 5. Pearson correlation matrix.

Variable	VIF
CFA	1.029
Gender	1.011
CFA*G	1.026

Table 6. Variance inflation factor.

Variable	B	Std. Error	p-value
Constant	3.03	0.262	<0.001
CFA	−0.298	0.052	<0.001
Gender	0.262	0.086	0.002
CFA × Gender	0.092	0.038	0.015
R	0.321		
R ²	0.103		
Adjusted R ²	0.097		
Std. Error of Estimate	0.800		
F-statistic	15.825		<0.001

Table 7. Coefficients.

Multicollinearity test (VIF)

Prior to the regression analysis, variance inflation factor (VIF) values were examined to assess multicollinearity. As shown in Table 6, all VIF values are close to 1 (CFA = 1.029; Gender = 1.011; Interaction = 1.026), indicating no multicollinearity concerns.

Regression analysis

Table 7 presents the regression coefficients for the model predicting childhood physical abuse from childhood family attachment, gender, and the interaction between childhood family attachment and gender. The constant term is positive and statistically significant ($B = 3.03$, $p < 0.001$). Childhood family attachment has a negative and statistically significant coefficient ($B = -0.298$, $p < 0.001$), indicating that higher levels of childhood family attachment are associated with lower levels of childhood physical abuse. Gender shows a positive and statistically significant coefficient ($B = 0.262$, $p = 0.002$), indicating differences in reported levels of childhood physical abuse across gender groups. The interaction term between childhood family attachment and gender is positive and statistically significant ($B = 0.092$, $p = 0.015$), indicating that the relationship between childhood family attachment and childhood physical abuse varies across gender. The overall regression model is statistically significant ($F = 15.825$, $p < 0.001$), indicating that the predictors jointly explain variation in childhood physical

Variable	Gender	Mean	SD	<i>p</i> -value	Cohen's <i>d</i>
CPA	Male	1.983	0.802	0.001	0.349
	Female	2.274	0.898		
CFA	Male	4.383	0.728	0.077	0.189
	Female	4.238	0.854		

Table 8. Independent samples t-test for gender differences.

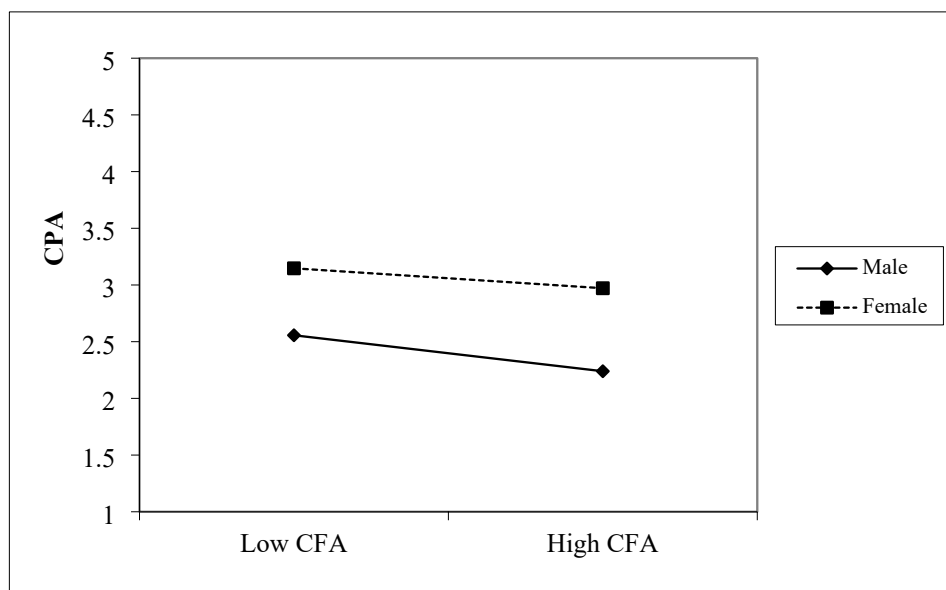


Fig. 2. Interaction analysis.

abuse. The model accounts for 10.3% of the variance ($R^2=0.103$), with an adjusted R^2 of 0.097. The standard error of the estimate is 0.800.

The estimated regression model is given by:

$$\widehat{CPA} = 3.030 - 0.298 (PA) + 0.262 (Gender) + 0.092 (PA \times Gender)$$

The interaction term indicates that the effect of parental attachment on childhood physical abuse differs across gender groups. Specifically, the negative effect of parental attachment is stronger for males ($B = -0.206$) compared to females ($B = -0.114$), suggesting that parental attachment plays a more protective role against childhood physical abuse among males than females.

Independent samples t-test

Table 8 shows the independent samples t-test results that indicate a significant gender difference in childhood physical abuse (CPA), with females reporting higher levels ($M = 2.274$, $SD = 0.898$) compared to males ($M = 1.983$, $SD = 0.802$), $p = 0.001$, with a small to moderate effect size (Cohen's $d = 0.349$). In contrast, no significant gender difference was found in parental attachment (PA), as males ($M = 4.383$, $SD = 0.728$) and females ($M = 4.238$, $SD = 0.854$) reported similar levels, $t = 1.771$, $p = 0.077$, with a small effect size (Cohen's $d = 0.189$). The findings suggest that gender is associated with differences in childhood physical abuse but not in parental attachment.

Moderation analysis

The interaction between childhood family attachment (CFA) and gender was statistically significant ($B = 0.092$, $p = 0.015$), indicating that gender moderates the relationship between childhood family attachment and childhood physical abuse (CPA). Figure 2 illustrates this interaction effect. For both males and females, CPA decreases as CFA increases; however, the decline is steeper among males than females. Across both low and high levels of CFA, females reported higher levels of CPA than males, suggesting that the protective influence of family attachment differs across gender groups.

To further interpret the interaction effect, a simple slope analysis was conducted, and the results are presented in Table 9. For males, CFA had a negative and statistically significant effect on CPA ($\beta = -0.206$, $p = 0.001$), indicating that stronger family attachment is associated with substantially lower levels of childhood physical abuse. In contrast, although the relationship was also negative among females ($\beta = -0.114$), the effect was not

Gender	Slope Coefficient (β)	<i>p</i> -value
Male	− 0.206	0.001
Female	− 0.114	0.174

Table 9. Slope analysis.

statistically significant ($p=0.174$). These findings suggest that childhood family attachment serves as a stronger protective factor against childhood physical abuse among males than females.

Discussion

The findings of this study provide deeper insight into the protective role of childhood family attachment in shaping experiences of childhood physical abuse, while also highlighting important gender-based differences in this relationship. Consistent with attachment theory, higher levels of childhood family attachment are associated with lower levels of physical abuse, underscoring the importance of secure emotional bonds, parental responsiveness, and a supportive family environment. Families characterised by warmth, trust, and open communication are more likely to adopt constructive discipline strategies and effective conflict resolution, thereby reducing children’s exposure to harsh or abusive practices. These findings are supported by previous research. Zhai et al.²⁶ showed that the relationship between childhood maltreatment and child depression is partly explained by the quality of attachment with both fathers and mothers, reinforcing the role of parental attachment as a key protective mechanism. Similarly, Thompson et al.³⁸ found that stronger attachment between children and their birth parents reduces dissociative symptoms, with this effect operating through caregiver–child attachment and placement stability. Together, these studies align with the present findings by demonstrating that secure attachment relationships play a critical role in buffering children against adverse psychological and behavioural outcomes.

Thus, in contexts where hierarchical parent–child relationships are emphasised, the presence of secure attachment may play a particularly important protective role by moderating the expression of parental authority and reducing the likelihood of harsh disciplinary practices. This is consistent with Wilke and Baker³⁹, who found that parental warmth and children’s moral self-influence each other over time. Specifically, warm parenting promotes stronger moral values in children, while children with a stronger moral self tend to elicit greater parental warmth. In contrast, parental harshness does not show significant long-term effects on children’s moral development. This further suggests that positive parent–child emotional bonds not only reduce the risk of harsh discipline but also contribute to reciprocal developmental processes that strengthen prosocial functioning over time³⁹.

According to Bisman and Ahmad⁴⁰, in the Malaysian sociocultural context, family relationships are strongly shaped by collectivist values that emphasise filial piety, respect for parental authority, and the maintenance of family harmony. Within such contexts, disciplinary practices, including physical punishment, may be more socially accepted as part of normative parenting. However, strong emotional attachment within the family may mitigate these practices by fostering empathy, communication, and mutual understanding between parents and children. This perspective is supported by Bisman and Ahmad⁴⁰, who highlight that parenting styles play a crucial role in shaping personality development, with supportive and responsive parenting contributing to more positive developmental outcomes. This study extends existing literature by demonstrating that the protective role of family attachment operates within the Malaysian cultural context, where parenting practices are influenced by both traditional cultural norms and evolving contemporary social expectations.

The significant effect of gender in the present study indicates that childhood physical abuse is not experienced uniformly by boys and girls. Meng and D’Arcy⁴¹ likewise reported that childhood abuse is strongly associated with gender and that men and women differ in their mental health outcomes later in life. These differences may reflect gendered socialisation practices, cultural norms, and parental expectations that influence disciplinary approaches. In Malaysia, gender roles are often influenced by traditional norms that encourage boys to exhibit toughness and independence, while girls are expected to be more compliant and emotionally restrained⁴². These expectations may shape parental disciplinary strategies, with boys more likely to experience physical punishment as a means of behavioural control. In many contexts, boys are more likely to be subjected to stricter or more physical discipline due to beliefs that they require firmer control or are more prone to behavioural problems. In contrast, girls may be more exposed to non-physical forms of maltreatment, such as emotional or psychological abuse, which are not fully captured by measures of physical abuse. This perspective is consistent with Liu et al.⁴³, who found that girls are more emotionally affected by physical neglect and abuse, particularly in how they understand and express their emotions. These patterns help explain why gender emerges as an independent predictor of childhood physical abuse in the model.

Most importantly, the significant interaction between childhood family attachment and gender indicates that the protective effect of family attachment operates differently for males and females. The stronger buffering effect observed among males suggests that high levels of family attachment substantially reduce the likelihood of physical abuse for boys. Within this context, the stronger protective effect of family attachment observed among boys may reflect the capacity of secure emotional bonds to counterbalance culturally endorsed harsh discipline practices directed at males. One possible explanation is that secure attachment helps reduce externalising behaviours among boys, which are often cited as triggers for physical punishment. In addition, strong emotional bonds may encourage parents to respond to boys with greater empathy and support, counteracting traditional norms that legitimise harsher discipline. However, this gendered pattern appears to be context-dependent.

Wang⁴⁴ showed that fathers' harsh parenting is explicitly linked to boys' aggressive behaviour, whereas mothers' harsh parenting is associated with verbal aggression in both boys and girls. This suggests that parental roles and gender-specific parenting practices may shape how attachment translates into protection against abuse. These findings suggest that attachment theory may operate differently across cultural and gendered contexts, highlighting the need to consider sociocultural norms when examining the mechanisms through which attachment influences child maltreatment.

Conclusion

This study provides empirical evidence on the protective role of childhood family attachment in reducing experiences of childhood physical abuse among emerging adults. Consistent with attachment theory, the results demonstrate that stronger childhood family attachment is associated with lower levels of childhood physical abuse, highlighting the importance of secure emotional bonds, parental responsiveness, and a supportive family environment in shaping children's early life experiences. Beyond this direct relationship, the findings reveal that gender plays a significant role in childhood physical abuse, both as an independent predictor and as a moderator. The interaction effect shows that the protective influence of childhood family attachment is stronger for males than for females, suggesting that secure attachment relationships are particularly effective in buffering boys against physical abuse. This gendered pattern underscores that childhood physical abuse is not experienced uniformly and that the mechanisms through which family attachment operates differ across genders. Thus, this study contributes to the literature by demonstrating that childhood family attachment remains a crucial protective factor well into emerging adulthood, while also emphasising the need to consider gender-specific pathways in understanding and preventing childhood physical abuse.

The findings offer several important policy implications for child welfare, family development, and violence prevention. First, policies and intervention programmes should prioritise strengthening family attachment and parenting practices from early childhood. Parenting education programmes that promote emotional warmth, positive communication, and non-violent discipline strategies can play a critical role in reducing the risk of physical abuse. Such programmes should be integrated into existing family and community services, particularly for families identified as at risk. Second, the significant role of gender suggests that gender-sensitive prevention strategies are essential. Policies should recognise that boys and girls may experience and respond to physical abuse differently. For example, interventions targeting boys may focus on managing externalising behaviours through positive reinforcement and emotional regulation, while ensuring that parents are supported in adopting empathetic, non-violent disciplinary approaches. At the same time, policies should not overlook girls, who may experience other forms of maltreatment that are less visible but equally harmful. Third, child protection agencies and schools should incorporate attachment-informed frameworks in their assessment and prevention efforts. Early identification of weak family attachment can serve as a warning signal for potential abuse, allowing timely intervention before maltreatment escalates. Strengthening collaboration between schools, healthcare providers, and social services can further enhance the effectiveness of such preventive measures.

Limitations and suggestions for future research

Despite its contributions, this study has several limitations that should be considered when interpreting the findings. First, the study relies on self-reported and retrospective data. Respondents were asked to recall their childhood experiences during emerging adulthood, which may not always be accurate. Memories can fade or change over time, and some respondents may be unwilling to report sensitive experiences such as physical abuse. As a result, the levels of childhood physical abuse and family attachment may be underreported or overreported. Second, the study's cross-sectional design limits the ability to identify cause-and-effect relationships. Although the findings show a clear association between childhood family attachment and childhood physical abuse, the study cannot confirm whether weak family attachment leads to higher abuse or whether abusive experiences weaken attachment. Longitudinal data would allow researchers to observe changes over time and better establish causal pathways. Third, the sample's gender distribution is unbalanced. This imbalance may affect the accuracy of gender comparisons and limit the generalisability of the findings. Some gender differences observed in the study may be due to unequal sample sizes rather than actual differences in experience. Fourth, the study focuses only on childhood physical abuse. Other forms of maltreatment, such as emotional abuse, psychological abuse, and neglect, were not examined. These forms of abuse may be more common, especially among females, and may also be closely linked to family attachment. Excluding them may underestimate the full impact of childhood adversity. Fifth, cultural and social factors were not directly included in the analysis. Parenting styles, discipline practices, and views on physical punishment differ across cultures and social contexts. Without considering these factors, the findings may not fully apply to other populations or cultural settings. Finally, demographic variables such as household income, parental education, and residential area were not included as potential variables in the regression models, which may have influenced childhood physical abuse.

Future research should address these limitations. Longitudinal studies are recommended to track children and families over time and better understand how family attachment affects the risk of abuse across different stages of development. Future studies should also include multiple forms of childhood maltreatment to provide a more complete understanding of adverse childhood experiences. In addition, examining attachment to different caregivers, such as mothers and fathers, may help explain how specific parental roles influence abuse risk. Researchers should also consider cultural, socioeconomic, and family context factors, as these may shape parenting behaviour and attachment patterns. Besides, using larger, more representative samples would improve the generalisability of the findings and support the development of more effective and inclusive prevention policies. Future research may also consider incorporating additional demographic factors to further examine their potential influence on childhood physical abuse.

Data availability

The data that support the findings of this study were generated from a questionnaire survey and contain sensitive personal information. Due to ethical and confidentiality considerations, the data are not publicly available. However, anonymised data may be made available from the corresponding author upon reasonable request.

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References

- Wang, M. et al. Chinese parents' education anxiety, parenting, and problem behaviors in preschool children: Child competence as moderator. *Fam. Relat.* **74**(2), 969–984. <https://doi.org/10.1111/fare.13135> (2025).
- Malek, N. A. The family institution and its governing laws in Malaysia as a vanguard in protecting the society from social ailments: A Shari'ah perspective. *IJUM Law J.* **24**(2), 397–413. <https://doi.org/10.31436/ijumlj.v24i2.235> (2016).
- Li, M. et al. The predictive effect of parental adult attachment on parent–adolescent attachment: The mediating role of harsh parenting. *Front. Psychol.* **12**, 710167. <https://doi.org/10.3389/fpsyg.2021.710167> (2021).
- Boat, A. A., Hirano, K. A. & Roehlkepartain, E. Parent and adolescent perceptions of parent–child developmental relationships: The role of family routines. *Fam. Relat.* **74**(1), 395–411. <https://doi.org/10.1111/fare.13107> (2024).
- Don, B. P., Simpson, J. A., Fredrickson, B. L. & Algoe, S. B. Interparental positivity spillover theory: How parents' positive relational interactions influence children. *Perspect. Psychol. Sci.* **20**(4), 639–668. <https://doi.org/10.1177/17456916231220626> (2025).
- Pertiwi, Y. W., Triantoro, M., Indriyani, D. & Al-Amin., Character education from an early age: Family strategies in developing positive values. *Int. J. Teach. Learn.* **3**(4), 343–354 (2025).
- Pollak, S. D. & Gunnar, M. R. What developmental science has to say about caregiving. *Daedalus* **154**(1), 36–51. https://doi.org/10.1162/daed_a_02122 (2025).
- Ministry of Women, Family and Community Development. Laporan Pemantauan Media KPWK 2025. (2025). Retrieved from https://kpwm.gov.my/uploads/content-downloads/file_20250528112534.pdf
- Rousseau, D. *Discipline across cultures: How our norms shape trauma—and why cultural competency matters*. Boston University. (2025) <https://sites.bu.edu/daniellerousseau/2025/12/11/discipline-across-cultures-how-our-norms-shape-trauma-and-why-cultural-competency-matters/>
- Ekici, Ö. The role of media in creating an environment of trust in society. *J. Educ. Soc. Sci. Res.* **6**(2), 121–136. <https://doi.org/10.5281/zenodo.18099053> (2025).
- Mahmoodi, M. et al. Sexual abuse in street children: A systematic review and meta-analysis. *Sex. Cult.* <https://doi.org/10.1007/s12119-025-10497-z> (2026).
- Park, K., Eastman, A. L., Gómez, A. & Courtney, M. E. Risks of incarceration: Impact of social support networks during the transition to adulthood. *Soc. Work Res.* <https://doi.org/10.1093/swr/svaf026> (2026).
- Bowlby, J. *Attachment* (Basic Books, 1969).
- Bowlby, J. *A Secure Base: Parent–Child Attachment and Healthy Human Development* (Basic Books, 1988).
- Widom, C. S., Czaja, S. J., Kozakowski, S. S. & Chauhan, P. Does adult attachment style mediate the relationship between childhood maltreatment and mental and physical health outcomes?. *Child Abuse Negl.* **76**, 533–545. <https://doi.org/10.1016/j.chiabu.2017.05.002> (2018).
- Unger, J. A. M. & De Luca, R. V. The relationship between childhood physical abuse and adult attachment styles. *J. Fam. Violence* **29**(3), 223–234. <https://doi.org/10.1007/s10896-014-9588-3> (2014).
- Shukri, S., Batool, F. & Yilmaz, I. Civilisational chauvinism: Islamic heritage in the foreign policies of Mahathir, Sharif, and Erdoğan. *Instrum. Relig. Elect. Polit.* https://doi.org/10.1007/978-981-95-2848-6_6 (2025).
- Desbiens, F. et al. Therapeutic alliance with perpetrators of intimate partner violence: The roles of childhood interpersonal trauma and attachment insecurity. *J. Aggress. Maltreat. Trauma* **34**(4), 467–487. <https://doi.org/10.1080/10926771.2025.2474606> (2025).
- Kascakova, N., Furstova, J., Hasto, J. & Tavel, P. Associations of multiple adverse childhood experiences, attachment insecurity, and loneliness with physical and mental health difficulties in a representative Slovak sample. *Prev. Med. Rep.* <https://doi.org/10.1016/j.pmedr.2025.102982> (2025).
- Maçkali, Z., Gökdağ, C. & Toksoy, ŞE. The structural associations among childhood traumas, attachment dimensions, and relational needs. *Curr. Psychol.* **44**, 13367–13377. <https://doi.org/10.1007/s12144-025-08070-w> (2025).
- Nejad, M. H., Damirchi, E. S., Sadeghi, M. & Homayoon, M. N. Developing a model of experiential avoidance based on childhood trauma and victimization, mediated by insecure attachment styles. *Eur. J. Trauma Dissociation* <https://doi.org/10.1016/j.ejtd.2025.100513> (2025).
- Ritz, L. et al. Indirect association between childhood maltreatment and food and alcohol disturbance through insecure attachment in university students. *J. Eat. Disord.* <https://doi.org/10.1186/s40337-025-01321-y> (2025).
- Talmon, A. & Tsur, N. Intergenerational transmission of posttraumatic orientation to bodily signals following child maltreatment. *J. Interpers. Violence* <https://doi.org/10.1177/08862605241285874> (2024).
- Madigan, S., Brumariu, L. E., Villani, V., Atkinson, L. & LyonsRuth, K. Representational and questionnaire measures of attachment: A meta-analysis of relations to child internalizing and externalizing problems. *Psychol. Bull.* **142**(4), 367–399. <https://doi.org/10.1037/bul0000029> (2016).
- Muntean, A. & Ungureanu, R. Adoptions of children in Romania: Applying attachment theory. *Proc. Soc. Behav. Sci.* **33**, 6–10. <https://doi.org/10.1016/j.sbspro.2012.01.072> (2012).
- Zhai, R., Yang, S. & Zhang, L. Does parent–child attachment play a role in the relationship between childhood maltreatment and depression? Evidence from a longitudinal study. *Child Abuse Negl.* **135**, 107643. <https://doi.org/10.1016/j.chiabu.2025.107643> (2025).
- Haim-Nachum, S. et al. Self-stigma mediates the relationships between childhood maltreatment and symptom levels of PTSD, depression, and anxiety. *Eur. J. Psychotraumatol.* **15**(1), 2370174. <https://doi.org/10.1080/2008066.2024.2370174> (2024).
- Wang, X., Yu, L. & Li, J. Relationships between childhood maltreatment, attachment security, and features of narcissism: A network analysis. *Pers. Individ. Dif.* **200**, 111890. <https://doi.org/10.1016/j.paid.2022.111890> (2023).
- Turgeon, J., Milot, T., St-Laurent, D. & Dubois-Comtois, K. Association between childhood maltreatment and attachment disorganization in young adulthood: The protective role of early mother–child interactions. *Child Abuse Negl.* **143**, 106281. <https://doi.org/10.1016/j.chiabu.2023.106281> (2023).
- Papalia, N. & Widom, C. S. Do insecure adult attachment styles mediate the relationship between childhood maltreatment and violent behavior?. *Dev. Psychopathol.* **36**, 636–647. <https://doi.org/10.1017/S0954579422001468> (2023).
- Lowell, A., Renk, K. & Havill Adgate, A. The role of attachment in the relationship between child maltreatment and later emotional and behavioral functioning. *Child Abuse Negl.* **38**(9), 1436–1449. <https://doi.org/10.1016/j.chiabu.2014.02.006> (2014).
- Silva, D. et al. *From Victimization to Aggression: The Effect of Adverse Childhood Experiences, Attachment, and Alcohol Consumption on Aggressors* (Advance online publication, 2026). <https://doi.org/10.1027/1016-9040/a000577>.

33. Sirparanta, A. E., Danner Touati, C., Cyr, C. & Miljkovitch, R. Parental history of childhood maltreatment and offspring attachment insecurity and disorganization: Two meta-analyses. *Trauma Violence Abuse* **26**(3), 420–435. <https://doi.org/10.1177/15248380241282995> (2024).
34. Cyr, C. & Alink, L. R. A. Child maltreatment: The central roles of parenting capacities and attachment. *Curr. Opin. Psychol.* **15**, 81–86. <https://doi.org/10.1016/j.copsyc.2017.02.002> (2017).
35. Li, G.-Y., You, Z.-Q. & Yang, G.-H. The relationship between parent-child attachment and fertility intention: The mediating role of family resilience and the moderating role of gender. *Front. Psychol.* **16**, 1669639. <https://doi.org/10.3389/fpsyg.2025.1669639> (2025).
36. Price-Wolf, J. Social support, collective efficacy, and child physical abuse: Does parent gender matter?. *Child Maltreat.* **20**(2), 125–135. <https://doi.org/10.1177/1077559514562606> (2015).
37. Türkkan, T., Odacı, H. & Bülbül, K. Gender moderates the relationships between childhood abuse experiences and mental disorders later in life: A cross-sectional study among university students in Turkey. *Br. J. Guid. Couns.* **52**(4), 745–760. <https://doi.org/10.1080/03069885.2023.2264472> (2024).
38. Thompson, J. N., Salazar, A. M. & Taussig, H. N. Parent-child attachment and trauma-related dissociation among youth in out-of-home care: The age-dependent roles of caregiver-child attachment and placement duration. *Child Abuse Negl.* **138**, 107883. <https://doi.org/10.1016/j.chiabu.2026.107883> (2026).
39. Wilke, J. & Baker, E. R. Stability and cross-lagged associations between parenting and children's moral self. *J. Appl. Dev. Psychol.* **97**, 101766. <https://doi.org/10.1016/j.appdev.2025.101766> (2025).
40. Bisman, H. A. B. M. & Ahmad, A. B. Gaya asuhan keibubapaan dalam perkembangan personaliti awal dewasa. *J. Pendidik. Bitara UPSI* **17**, 102–115. <https://doi.org/10.37134/bitara.vol17.sp3.10.2024> (2024).
41. Meng, X. & D'Arcy, C. Gender moderates the relationship between childhood abuse and internalizing and substance use disorders later in life: A cross-sectional analysis. *BMC Psychiatry* **16**(1), 401. <https://doi.org/10.1186/s12888-016-1071-7> (2016).
42. Nor, N. M. & Ayub, S. H. Stigma and silence: Understanding men's mental health communication and help-seeking in Klang Valley. *Quantum J. Soc. Sci. Humanit.* <https://doi.org/10.55197/qjssh.v7si1.1184> (2026).
43. Liu, Y. et al. Childhood maltreatment and alexithymia: A network analysis. *J. Affect. Disord.* **343**, 120876. <https://doi.org/10.1016/j.jad.2025.120876> (2026).
44. Wang, M. Harsh parenting and peer acceptance in Chinese early adolescents: Three child aggression subtypes as mediators and child gender as moderator. *Child Abuse Negl.* **63**, 30–40. <https://doi.org/10.1016/j.chiabu.2016.11.017> (2017).

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Author contributions

M.S.S. conceptualised the study, developed the research framework, supervised the overall research process, and wrote the original draft of the manuscript. F.M. and M.J.A.R. contributed to data collection, questionnaire design, and preliminary data analysis. A.S. assisted with the literature review and methodological refinement. N.S.A. contributed to statistical analysis, interpretation of results, and manuscript editing. R.M.H. contributed to the discussion section and provided critical revisions to improve the intellectual content of the manuscript. All authors reviewed, revised, and approved the final version of the manuscript.

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Declarations

Competing interests

The authors declare no competing interests.

Ethical approval

This study was conducted in accordance with the ethical principles outlined in the American Psychological Association (APA) and relevant institutional research guidelines. Prior to data collection, ethical approval was obtained from the Universiti Malaysia Sarawak (UNIMAS) Ethics Committee (Approval No.: UNIMAS/NC-22.02/09-17(05)). All participants were fully informed about the purpose and procedures of the study. They were assured that their participation was entirely voluntary and that they had the right to withdraw at any stage without penalty. Data collection procedures ensured anonymity and confidentiality, and no identifying or sensitive personal information was recorded. The research involved minimal risk to participants and was conducted in full compliance with established ethical standards.

Consent to participate

All participants in this study provided written informed consent, either in online format, prior to their participation in the research.

Additional information

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