KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 04 December 2024
Revised 11 February 2025
Accepted 21 February 2025
Published online 01 October 2025

Applied Family Therapy Journal

Volume 6, Issue 4, pp 1-10

E-ISSN: 3041-8798

Family Economic Hardship and Adolescent Risk-Taking: The Mediating Role of Family Cohesion

Intan. Sari[1], Arjun. Deshmukh[2*], Haruka. Nishimura[3]

[1] Department of Child and Family Studies, Universitas Padjadjaran, Bandung, Indonesia
[2] Department of Psychology and Counseling, Savitribai Phule Pune University, Pune, India
[3] Graduate School of Human Sciences, Osaka University, Osaka, Japan

*** Corresponding author email address**: arjun.deshmukh@unipune.ac.in

A r t i c l e I n f o

Article type:
Original Article

How to cite this article:
Sari, I., Deshmukh, A., & Nishimura, H. (2025). Family Economic Hardship and Adolescent Risk-Taking: The Mediating Role of Family Cohesion. *Applied Family Therapy Journal, 6*(4), 1-10.
http://dx.doi.org/10.61838/kman.aftj.4444

A B S T R A C T

Objective: This study aimed to examine the mediating role of family cohesion in the relationship between family economic hardship and adolescent risk-taking.

Methods and Materials: A descriptive correlational research design was employed with a sample of 520 adolescents recruited from secondary schools in India, determined through Morgan and Krejcie's sample size table. Data were collected using standardized self-report instruments: the Adolescent Risk-Taking Questionnaire (ARQ), the Economic Hardship Questionnaire (EHQ), and the Family Adaptability and Cohesion Evaluation Scales (FACES IV). Statistical analyses were conducted using SPSS-27 and AMOS-21. Pearson correlation coefficients were calculated to determine associations among variables, and Structural Equation Modeling (SEM) was performed to test the hypothesized mediation model. Model fit was evaluated using Chi-square, χ^2/df, GFI, AGFI, CFI, TLI, and RMSEA indices.

Findings: Results indicated that family economic hardship was positively correlated with adolescent risk-taking ($r = .42$, $p = .001$) and negatively correlated with family cohesion ($r = -.40$, $p = .001$). Family cohesion was inversely related to adolescent risk-taking ($r = -.36$, $p = .002$). The SEM analysis demonstrated adequate model fit (χ^2/df = 2.17, GFI = .93, AGFI = .90, CFI = .95, TLI = .94, RMSEA = .048). Direct paths showed that family economic hardship significantly predicted adolescent risk-taking ($\beta = .38$, $p = .001$) and negatively predicted family cohesion ($\beta = -.41$, $p = .001$). Family cohesion negatively predicted adolescent risk-taking ($\beta = -.29$, $p = .002$). The indirect effect of economic hardship on risk-taking via cohesion was significant ($\beta = .12$, $p = .006$), supporting the mediation hypothesis.

Conclusion: Findings highlight that family cohesion partially mediates the link between economic hardship and adolescent risk-taking. Strengthening family cohesion may buffer adolescents from the adverse effects of financial strain and serve as a practical target for interventions aimed at reducing risk behaviors.

Keywords: *Family economic hardship; family cohesion; adolescent risk-taking; mediation; structural equation modeling*

1. Introduction

Adolescence is a developmental period characterized by profound physical, psychological, and social changes, during which young people often engage in exploration and experimentation with behaviors that can include risk-taking. While risk-taking may in some cases serve adaptive developmental purposes, such as fostering autonomy and identity formation, excessive or maladaptive risk-taking is frequently associated with delinquency, health-compromising activities, and broader social challenges (Defoe et al., 2018). A wide body of research has underscored the role of family dynamics, economic conditions, and social environments in shaping adolescents' propensities toward risk-taking and delinquency. In particular, family economic hardship and the cohesion of the family unit emerge as central influences, potentially interacting to either exacerbate or buffer against maladaptive outcomes (Kwon & Wickrama, 2013; Low et al., 2012).

Economic stress theories suggest that financial strain in families disrupts parenting, communication, and cohesion, which in turn heightens adolescents' vulnerability to engaging in delinquent or risk-oriented behaviors (Bao et al., 2016; Low et al., 2012). Family economic hardship has been consistently linked to negative adolescent outcomes, including poor sleep quality (Bao et al., 2016), compromised health behaviors (Kwon & Wickrama, 2013), and delinquency (Low et al., 2012). At the same time, a cohesive family environment is identified as a protective factor that fosters emotional bonding, regulates behavior, and provides adolescents with social support critical for resisting peer pressure and navigating developmental challenges (Kapetanovic et al., 2019; Kapetanovic & Skoog, 2020). Thus, exploring the mediating role of family cohesion in the pathway between family economic hardship and adolescent risk-taking has both theoretical significance and practical implications for prevention and intervention.

Family economic hardship is a multidimensional construct that encompasses financial strain, unmet material needs, and adjustments families make to cope with limited resources (Bao et al., 2016). Research consistently indicates that economic stressors exert a destabilizing effect on family processes. For instance, Low and colleagues (Low et al., 2012) demonstrated that economic strain predicted adolescent delinquency through disruptions in parenting and microsocial processes within the family. Similarly, Bao et al. (Bao et al., 2016) found that economic hardship negatively influenced adolescent sleep quality, mediated by perceived discrimination and coping strategies, underscoring the pervasive psychological consequences of financial stress.

Kwon and Wickrama (Kwon & Wickrama, 2013) also showed that economic pressure undermined supportive parenting, leading to pathways toward risky health behaviors in adolescents. These findings align with the Family Stress Model, which posits that economic hardship generates stress in parents, which cascades into interparental conflict, disrupted parenting practices, and ultimately adverse developmental outcomes. The cumulative evidence therefore highlights economic hardship as a risk context that fuels adolescent vulnerability.

In contrast to the risks posed by economic hardship, family cohesion is often identified as a key protective factor that mitigates delinquency and other maladaptive outcomes. Cohesion reflects the emotional bonds and supportive interactions within the family system, facilitating communication, regulation, and attachment. For example, Kapetanovic and Skoog (Kapetanovic & Skoog, 2020) emphasized that the emotional climate of the family mediates the relationship between parent-adolescent communication and psychosocial functioning, while Kapetanovic et al. (Kapetanovic et al., 2019) demonstrated that open communication patterns reduce adolescent delinquency.

Similarly, Buist and colleagues (Buist et al., 2020) reported that family negativity predicted delinquent behaviors in adolescents, highlighting the role of family dynamics over time. Cohesive family environments provide adolescents with a buffer against peer influence, economic strain, and other contextual risks. Gao et al. (Gao et al., 2013) further showed that family functioning moderated the association between deviant peer affiliation and delinquency, suggesting that strong family cohesion can neutralize the negative influence of risky peer contexts. Together, these findings reinforce the theoretical proposition that cohesion serves as a mediator through which structural and economic factors influence adolescent risk-taking.

Beyond cohesion, family structure and broader familial adversities also shape adolescents' engagement in delinquent and risk behaviors. Kroese et al. (Kroese et al., 2024) documented the anticipatory, short-term, and long-term effects of parental separation and parental death on adolescent delinquency, confirming that disruptions in family stability increase vulnerability. Similarly, Svensson and Johnson (Svensson & Johnson, 2022) reconsidered the influence of family constellations, finding that adolescents in non-traditional or disrupted family structures displayed

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

higher delinquency rates compared to those in intact families.

Henneberger et al. (Henneberger et al., 2014) found that delinquency in adolescent girls was uniquely shaped by relational dynamics and contextual stressors, suggesting gendered pathways in risk-taking. Khodabakhshi-Koolaee and colleagues (Khodabakhshi-Koolaee et al., 2014) compared delinquent and non-delinquent adolescents, highlighting differences in family power structures and parent-child interaction quality. Lee (Lee, 2014) also identified structural variations in family relationships and their direct link to adolescent delinquency among single-parent families, pointing to systemic differences in support and cohesion across family forms.

Parental monitoring, involvement, and communication remain central mechanisms through which family-level factors influence adolescent risk-taking. Dargahi et al. (Dargahi et al., 2018) reported that single-parent adolescents exhibited lower levels of parental monitoring and higher risk behaviors compared to those in two-parent households. Similarly, Defoe et al. (Defoe et al., 2018) highlighted that both parent and peer influences play critical roles in shaping minor delinquency, with gender and adolescent developmental stage influencing these dynamics.

Imran and colleagues (Imran et al., 2022) further underscored that parental involvement and family functioning moderated the likelihood of delinquent behavior, suggesting that engaged parenting acts as a protective shield against risk behaviors. Al-Matalka and Hussainat (Al-Matalka & Hussainat, 2012) also found that family environment, including warmth, supervision, and discipline, strongly predicted juvenile delinquency rates in Jordan, demonstrating the cross-cultural robustness of these findings. Rina (Rina, 2018) emphasized the role of communication patterns within nuclear families, concluding that constructive parental communication strategies can effectively reduce adolescent misbehavior.

Brauer (Brauer, 2016) added that parental control and autonomy support differentially shaped adolescent delinquency, illustrating the importance of balancing regulation with respect for adolescent independence. These studies collectively suggest that cohesion is not only an emotional bond but also reflected in parenting practices, monitoring, and effective communication.

Cultural and contextual factors also significantly shape the dynamics of economic hardship, family cohesion, and adolescent delinquency. Chamratrithirong et al. (Chamratrithirong et al., 2012) demonstrated that intergenerational transmission of religious beliefs and practices reduced adolescent delinquency in urban Thailand, suggesting that cultural norms can strengthen cohesion and regulate behavior. Yakhnich and colleagues (Yakhnich et al., 2019) explored immigration contexts, finding that immigrant youth and their parents identified structural disadvantages and cultural adaptation challenges as contributing to delinquency, yet strong family cohesion remained a key protective mechanism.

Zakaria et al. (Zakaria et al., 2022) presented qualitative evidence from Malaysia, highlighting the role of family life and peer pressure in delinquency, and underscoring that cultural settings modify how economic and relational factors play out in shaping adolescent outcomes. Similarly, Yusoff et al. (Yusoff et al., 2022) confirmed that family functionality and parental behavior significantly predicted adolescent delinquency, reiterating that cohesive family dynamics are universally protective. These findings point to the necessity of cross-cultural studies that examine the universal and context-specific mechanisms linking family hardship, cohesion, and risk behaviors.

Taken together, the literature establishes three clear patterns: (1) family economic hardship is a robust risk factor that disrupts parenting and adolescent well-being (Bao et al., 2016; Low et al., 2012); (2) family cohesion serves as a protective mechanism that mediates and moderates the influence of structural and contextual stressors (Gao et al., 2013; Kapetanovic & Skoog, 2020); and (3) cultural and familial contexts, including family structure, parental monitoring, and communication, shape the strength and direction of these associations (Imran et al., 2022; Yakhnich et al., 2019; Zakaria et al., 2022).

The present study builds upon this evidence base by proposing and empirically testing a model in which family cohesion mediates the relationship between family economic hardship and adolescent risk-taking in an Indian context. This focus addresses important gaps in the literature, particularly in underrepresented cultural settings, and aims to clarify the mechanisms through which economic strain influences adolescent developmental outcomes. Understanding these dynamics will not only advance theoretical knowledge but also inform family-based interventions aimed at reducing adolescent risk behaviors.

Thus, the objective of this research is to investigate the mediating role of family cohesion in the relationship between family economic hardship and adolescent risk-taking.

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

2. Methods

2.1. Study Design and Participants

The present study employed a descriptive correlational design to examine the mediating role of family cohesion in the relationship between family economic hardship and adolescent risk-taking. The target population consisted of adolescents residing in India, and the sample size was determined based on the Morgan and Krejcie sampling table, which suggested a minimum of 520 participants for adequate statistical power. A stratified random sampling technique was used to ensure representation across diverse socioeconomic and demographic backgrounds. Participants were recruited from secondary schools in both urban and semi-urban areas. Informed consent was obtained from all participants and their guardians, and ethical approval was secured prior to data collection.

2.2. Measures

Adolescent risk-taking can be assessed using the Adolescent Risk-Taking Questionnaire (ARQ) developed by Gullone, Moore, Moss, and Boyd in 2000. The ARQ consists of 20 items divided into four subscales: thrill-seeking, reckless, rebellious, and antisocial behaviors. Each item is rated on a 5-point Likert scale ranging from 1 ("never") to 5 ("very often"), with higher scores reflecting greater engagement in risk-taking behaviors. The measure has been widely applied across adolescent populations, and multiple studies have reported acceptable internal consistency (Cronbach's alpha coefficients above .70) and construct validity, confirming its suitability for research on adolescent developmental outcomes.

Family economic hardship can be measured using the Economic Hardship Questionnaire (EHQ) originally created by Conger and Elder in 1992 as part of the Iowa Youth and Families Project. The instrument includes 28 items assessing four subscales: unmet material needs, financial strain, financial adjustments, and inability to make ends meet. Items are rated on Likert-type scales (e.g., from 1 = "strongly disagree" to 5 = "strongly agree"), with higher scores indicating greater perceived economic hardship. The EHQ has been extensively used in family and developmental research, with numerous studies reporting strong reliability (α values typically between .80 and .90) and robust validity across diverse cultural contexts, making it a well-established measure for capturing financial stress within families.

Family cohesion can be evaluated using the Family Adaptability and Cohesion Evaluation Scales (FACES IV) developed by Olson, Gorall, and Tiesel in 2006, building upon earlier versions of the Circumplex Model of family functioning. The FACES IV includes 42 items with six subscales, two of which specifically assess family cohesion and family flexibility, while the remaining four capture problematic dimensions (disengaged, enmeshed, rigid, and chaotic). Items are scored on a 5-point Likert scale from 1 ("almost never") to 5 ("almost always"), with higher cohesion scores reflecting stronger emotional bonding and connectedness among family members. The scale has demonstrated high internal consistency ($\alpha > .80$ for cohesion) and has been validated in multiple international studies, confirming both convergent and discriminant validity.

2.3. Data Analysis

Data analysis was conducted using both SPSS version 27 and AMOS version 21. Initially, descriptive statistics were calculated for all study variables, followed by Pearson correlation analyses to assess the associations between the dependent variable (adolescent risk-taking) and each of the independent variables (family economic hardship and family cohesion). Subsequently, a Structural Equation Model (SEM) was tested to examine both the direct and indirect paths among the variables, with family cohesion specified as a mediator. Model fit was assessed using standard fit indices, including Chi-square, CFI, TLI, GFI, and RMSEA. Statistical significance was determined at $p < .05$.

3. Findings and Results

The final sample consisted of 520 adolescents, of whom 260 (49.92%) were male and 260 (50.08%) were female. The participants' ages ranged from 14 to 18 years, with the largest proportion aged 16 years (n = 152, 29.23%), followed by those aged 15 years (n = 138, 26.54%). A smaller portion of the sample were 14 years old (n = 110, 21.15%) and 17 years old (n = 80, 15.38%), while the least represented age group was 18 years (n = 40, 7.69%). In terms of socioeconomic background, 218 participants (41.92%) reported their families as belonging to lower-middle income groups, 185 (35.58%) to middle income, and 117 (22.50%) to higher income categories. These figures reflect a balanced distribution of participants across gender, age, and economic strata.

AFTJ
Applied Family Therapy Journal
E-ISSN: 3041-8798

Table 1

Descriptive Statistics of Study Variables

Variable	M	SD
Adolescent Risk-Taking	58.34	9.27
Family Economic Hardship	64.81	10.42
Family Cohesion	71.56	8.93

Table 1 shows the descriptive statistics for the main study variables. The mean score for adolescent risk-taking was 58.34 (SD = 9.27), indicating a moderate level of risk-taking behaviors among adolescents. Family economic hardship had a mean of 64.81 (SD = 10.42), reflecting notable perceived financial stress. Family cohesion showed a mean of 71.56 (SD = 8.93), suggesting that families generally reported higher levels of connectedness and emotional bonding.

Prior to conducting inferential analyses, statistical assumptions were evaluated. Normality was examined through skewness and kurtosis indices, which fell within the acceptable range of −1.12 to +1.07 for all variables. Multicollinearity was checked using Variance Inflation Factor (VIF) values, which ranged between 1.24 and 2.08, well below the critical threshold of 10, indicating no multicollinearity concerns. Homoscedasticity was verified through inspection of standardized residual plots, which revealed evenly distributed residuals. Additionally, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .89, and Bartlett's test of sphericity was significant (χ^2 = 1,356.42, $p < .001$), confirming suitability for further analyses. These results indicate that all assumptions required for Pearson correlations and SEM were satisfied.

Table 2

Pearson Correlations Between Variables

Variable	1	2	3
1. Adolescent Risk-Taking	—		
2. Family Economic Hardship	.42** (p = .001)	—	
3. Family Cohesion	−.36** (p = .002)	−.40** (p = .001)	—

Table 2 presents the Pearson correlation coefficients among the study variables. Adolescent risk-taking was positively correlated with family economic hardship (r = .42, p = .001), suggesting that greater financial stress is associated with higher engagement in risk behaviors. Conversely, adolescent risk-taking was negatively correlated with family cohesion (r = −.36, p = .002), indicating that greater family connectedness is linked with lower risk-taking. Additionally, family economic hardship was negatively correlated with family cohesion (r = −.40, p = .001).

Table 3

Fit Indices of the Structural Equation Model

Index	Value
χ^2	182.46
df	84
χ^2/df	2.17
GFI	0.93
AGFI	0.90
CFI	0.95
TLI	0.94
RMSEA	0.048

Table 3 shows the model fit indices for the structural equation model. The χ^2 statistic was 182.46 with 84 degrees of freedom, yielding a χ^2/df ratio of 2.17, which is within the acceptable range. Other indices also indicated good model

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

fit, with GFI = .93, AGFI = .90, CFI = .95, TLI = .94, and RMSEA = .048. These values confirm that the proposed model fits the data well.

Table 4

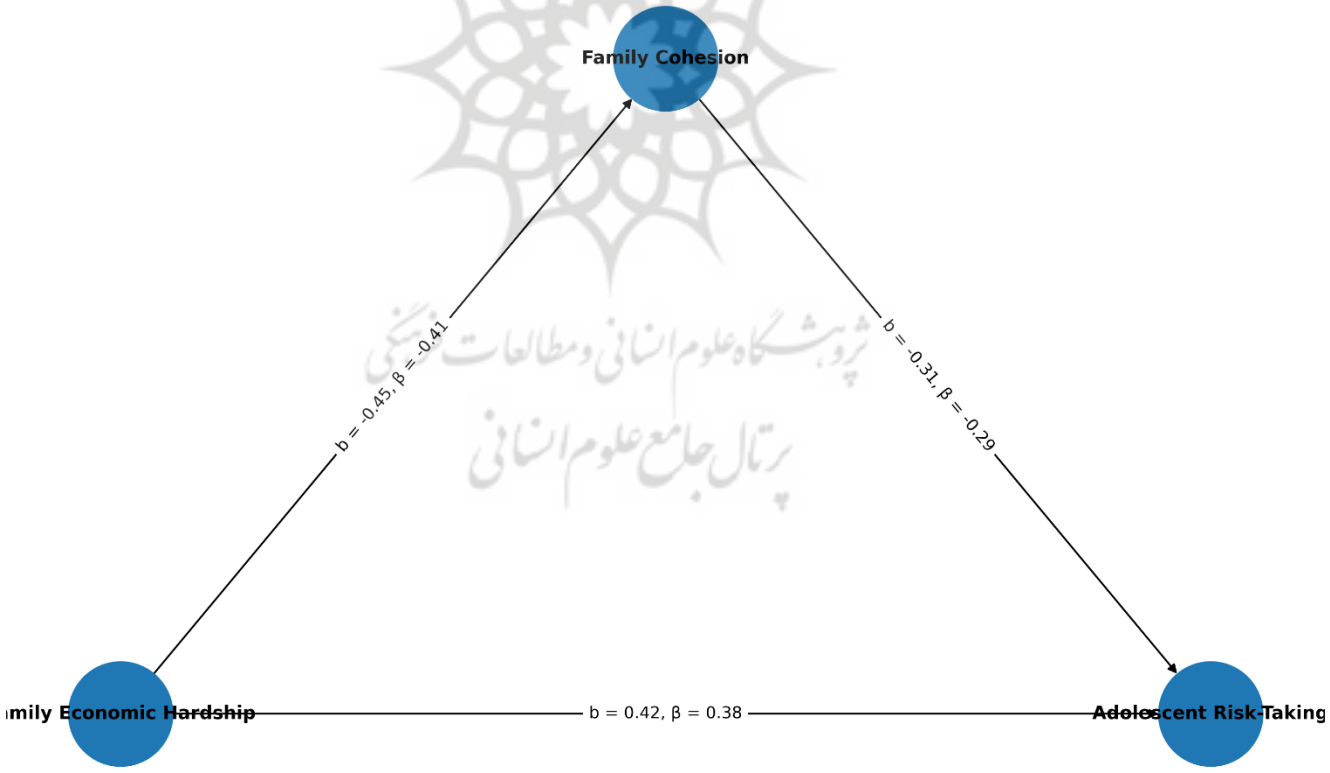
Direct, Indirect, and Total Effects in the Structural Model

Path	b	SE	β	p
Family Economic Hardship → Adolescent Risk-Taking (Direct)	0.42	0.08	0.38	.001
Family Economic Hardship → Family Cohesion	−0.45	0.07	−0.41	.001
Family Cohesion → Adolescent Risk-Taking	−0.31	0.09	−0.29	.002
Family Economic Hardship → Adolescent Risk-Taking (Indirect via Cohesion)	0.14	0.05	0.12	.006
Family Economic Hardship → Adolescent Risk-Taking (Total)	0.56	0.09	0.50	.001

Table 4 summarizes the direct, indirect, and total effects between the study variables. Family economic hardship had a significant direct positive effect on adolescent risk-taking (β = .38, p = .001). It also negatively predicted family cohesion (β = −.41, p = .001), and family cohesion in turn negatively predicted adolescent risk-taking (β = −.29, p = .002). The indirect effect of family economic hardship on adolescent risk-taking through family cohesion was significant (β = .12, p = .006). The total effect of family economic hardship on adolescent risk-taking was β = .50 (p = .001), indicating both direct and mediated pathways.

Figure 1

Model with Beta Coefficients



4. Discussion and Conclusion

The present study investigated the relationship between family economic hardship and adolescent risk-taking, with a particular focus on the mediating role of family cohesion. The results demonstrated that family economic hardship was positively associated with adolescent risk-taking, suggesting that adolescents from economically strained households are

AFTJ
Applied Family Therapy Journal
E-ISSN: 3041-8798

more likely to engage in risky or delinquent behaviors. In addition, family cohesion was found to negatively predict adolescent risk-taking, meaning that adolescents who perceive stronger family bonds and emotional connectedness are less likely to engage in maladaptive behaviors. Importantly, family cohesion was shown to partially mediate the relationship between economic hardship and risk-taking, highlighting its role as a protective factor that reduces the negative impact of financial stress on adolescent developmental outcomes. These findings underscore the significance of family relational processes in mitigating the detrimental effects of socioeconomic adversity.

The direct relationship between family economic hardship and adolescent risk-taking aligns with prior studies that have documented the adverse developmental consequences of financial strain. Bao et al. (Bao et al., 2016) showed that economic hardship in Chinese families was linked not only to poor sleep quality among adolescents but also to psychological stress through mechanisms such as perceived economic discrimination. Similarly, Low et al. (Low et al., 2012) found that economic strain influenced adolescent delinquency through microsocial processes that disrupted family functioning. Kwon and Wickrama (Kwon & Wickrama, 2013) also observed that family economic pressure reduced supportive parenting, which in turn was associated with adolescent engagement in risky health behaviors. Together, these studies reinforce the view that financial hardship creates an environment that fosters stress and conflict, which are then transmitted to adolescents in ways that promote delinquent or risky behavior.

Our findings further highlight the central role of family cohesion in shaping adolescent behavior. Consistent with previous literature, we found that higher family cohesion was associated with lower levels of adolescent risk-taking. Kapetanovic and Skoog (Kapetanovic & Skoog, 2020) emphasized that the emotional climate of the family is essential in linking parent-adolescent communication to psychosocial outcomes, while Kapetanovic et al. (Kapetanovic et al., 2019) demonstrated that effective family communication helps to reduce adolescent delinquency. Similarly, Buist and colleagues (Buist et al., 2020) found that family negativity contributed to delinquent behavior, underscoring how the absence of cohesion and positivity creates conditions conducive to maladaptive outcomes. The protective role of family cohesion is also supported by Gao et al. (Gao et al., 2013), who reported that strong family functioning could buffer the influence of deviant peer affiliation on delinquency. Our findings echo this literature, suggesting that cohesive family environments not only foster support and attachment but also serve as a shield against both external and internal risk factors.

The mediating role of family cohesion found in this study provides empirical support for theories such as the Family Stress Model, which posits that economic hardship disrupts family relationships, leading to weakened parental involvement, conflict, and reduced emotional support, all of which predict adolescent maladjustment. Our results confirm that economic hardship undermines family cohesion, which then contributes to higher adolescent risk-taking. This pattern is consistent with evidence presented by Imran et al. (Imran et al., 2022), who showed that family functioning moderated the relationship between parental involvement and delinquent behaviors, indicating that engaged and cohesive families are better equipped to buffer against external pressures. Al-Matalka and Hussainat (Al-Matalka & Hussainat, 2012) similarly reported that poor family environments, characterized by low cohesion and weak parental monitoring, were linked to higher delinquency rates among youth in Jordan. By emphasizing the mediating role of cohesion, the present study underscores that economic hardship does not influence adolescent outcomes in isolation but operates through relational processes within the family.

The literature on family structure and adolescent delinquency also provides further context for our findings. Kroese et al. (Kroese et al., 2024) documented that parental separation and death significantly increased delinquency, confirming that disruptions in family stability exert long-term consequences. Svensson and Johnson (Svensson & Johnson, 2022) also showed that non-traditional family constellations were associated with higher delinquency rates, while Lee (Lee, 2014) emphasized that single-parent households face unique challenges in maintaining cohesion and effective parent-child interactions. Henneberger et al. (Henneberger et al., 2014) highlighted the particular vulnerabilities of adolescent girls to delinquency in the context of disrupted family relationships. These studies suggest that cohesion is not only shaped by economic hardship but also by structural and relational factors that influence how adolescents perceive and experience their family environments.

Parenting practices and monitoring are important mechanisms through which cohesion is expressed, and our results indirectly reflect this broader process. Defoe et al. (Defoe et al., 2018) highlighted the interplay of parental and

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

peer influences in predicting delinquency, while Dargahi et al. (Dargahi et al., 2018) found that adolescents from single-parent households reported weaker parental monitoring and greater risk behaviors. Rina (Rina, 2018) also emphasized that constructive parental communication reduced misbehavior in nuclear families. These findings align with Brauer's (Brauer, 2016) conclusion that the balance between parental control and autonomy support influences delinquency outcomes. Taken together, the literature confirms that cohesive families are more likely to engage in effective communication, monitoring, and supportive parenting, which in turn reduce the likelihood of adolescent risk-taking.

Cultural and contextual factors provide an important backdrop to these findings. Chamratrithirong et al. (Chamratrithirong et al., 2012) demonstrated that intergenerational transmission of religious beliefs in Thailand reduced delinquency, suggesting that cultural norms strengthen cohesion and discipline. Yakhnich et al. (Yakhnich et al., 2019) highlighted the challenges faced by immigrant youth, where cultural adaptation and structural disadvantages heightened delinquency, yet cohesive family support remained a protective factor. Zakaria et al. (Zakaria et al., 2022) provided qualitative evidence from Malaysia showing how family life and peer pressure jointly influenced delinquency, while Yusoff et al. (Yusoff et al., 2022) confirmed that family functionality and parenting behaviors directly shaped delinquent outcomes. These findings indicate that while economic hardship is universally detrimental, the specific mechanisms through which it influences adolescent behavior are shaped by cultural, structural, and relational contexts.

Overall, this study contributes to the literature by empirically confirming that family cohesion mediates the relationship between economic hardship and adolescent risk-taking. By situating our findings within the broader body of evidence, it becomes clear that economic stressors compromise family processes, but cohesive family environments can counterbalance these effects. Our results highlight the importance of strengthening family cohesion as a potential intervention strategy to reduce adolescent delinquency and maladaptive risk-taking behaviors in contexts of financial adversity.

5. Suggestions and Limitations

Despite its contributions, this study has several limitations. First, the cross-sectional design limits the ability to make definitive causal inferences about the relationships among economic hardship, family cohesion, and adolescent risk-taking. Longitudinal research would be necessary to clarify the temporal sequencing of these effects. Second, the reliance on self-reported data introduces the possibility of response bias, as adolescents may underreport or overreport risk-taking behaviors. Third, the study was conducted in a single cultural context, namely India, which may limit the generalizability of findings to other cultural and socioeconomic environments. Finally, while the study focused on family cohesion as a mediator, other potential mediators and moderators—such as peer influence, school connectedness, or neighborhood characteristics—were not examined, potentially underestimating the complexity of the relationships.

Future research should employ longitudinal designs to track the dynamic interplay between family economic hardship, cohesion, and adolescent behavior over time. Such designs would enable more robust causal inferences. It would also be valuable to replicate this study in diverse cultural contexts to test the universality of the proposed model, particularly in societies with different family structures and economic systems. Future studies might also integrate multiple data sources, such as parent and teacher reports, to complement adolescent self-reports and reduce the risk of bias. Additionally, incorporating other protective factors, such as school climate, community resources, and peer support, could provide a more comprehensive understanding of how economic adversity translates into adolescent risk-taking. Finally, testing intervention programs that target family cohesion in economically disadvantaged settings could help to establish the practical efficacy of strengthening family relationships as a strategy for preventing delinquency.

The findings of this study have several practical implications. Programs aimed at reducing adolescent risk-taking should not only address individual-level factors but also incorporate family-based interventions that strengthen cohesion and communication. Schools and community organizations could play a central role by providing support groups and workshops that promote effective parenting and family bonding. Policy initiatives that reduce economic stress on families, such as financial assistance programs and job security measures, may indirectly contribute to reducing adolescent delinquency. Practitioners working with adolescents should prioritize family-centered approaches that acknowledge the central role of cohesion in promoting resilience against economic adversity.

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

References

Al-Matalka, F. I. M., & Hussainat, M. M. (2012). Juvenile Delinquency and Family Environment in Jordan. *Journal of Sociological Research*, *3*(2). https://doi.org/10.5296/jsr.v3i2.2750

Bao, Z., Chen, C., Zhang, W., Zhu, J., Jiang, Y., & Xue-fen, L. (2016). Family Economic Hardship and Chinese Adolescents' Sleep Quality: A Moderated Mediation Model Involving Perceived Economic Discrimination and Coping Strategy. *Journal of adolescence*, *50*(1), 81-90. https://doi.org/10.1016/j.adolescence.2016.04.005

Brauer, J. R. (2016). Cultivating Conformists or Raising Rebels? Connecting Parental Control and Autonomy Support to Adolescent Delinquency. *Journal of Research on Adolescence*, *27*(2), 452-470. https://doi.org/10.1111/jora.12283

Buist, K. L., Eichelsheim, V., Cook, W. L., Lier, P. A. C. v., Koot, H. M., & Meeus, W. (2020). Family Negativity and Delinquent Behavior in Adolescence: A Predictive Multivariate Latent Growth Analysis. *Psychology Crime and Law*, *26*(9), 849-867. https://doi.org/10.1080/1068316x.2020.1742337

Chamratrithirong, A., Miller, B. A., Byrnes, H. F., Rhucharoenpornpanich, O., Cupp, P. K., Rosati, M. J., Fongkaew, W., Atwood, K. A., & Todd, M. (2012). Intergenerational Transmission of Religious Beliefs and Practices and the Reduction of Adolescent Delinquency in Urban Thailand. *Journal of adolescence*, *36*(1), 79-89. https://doi.org/10.1016/j.adolescence.2012.09.011

Dargahi, S., Sharif, A. R., Sangdeh, J. K., Nazari, M. A., & Bakhtiari, Z. (2018). Comparing Parental Monitoring, Affiliation With Delinquent Peers, and High-Risk Behaviors in Single-Parent and Two-Parent Male Adolescents. *Journal of Research and Health*, *8*(5), 411-417. https://doi.org/10.29252/jrh.8.5.411

Defoe, I. N., Dubas, J. S., & Marcel, A. G. v. A. (2018). The Relative Roles of Peer and Parent Predictors in Minor Adolescent Delinquency: Exploring Gender and Adolescent Phase Differences. *Frontiers in Public Health*, *6*. https://doi.org/10.3389/fpubh.2018.00242

Gao, Y., Yu, Y., & Ng, T. K. (2013). A Study on the Moderating Effect of Family Functioning on the Relationship Between Deviant Peer Affiliation and Delinquency Among Chinese Adolescents. *Advances in Applied Sociology*, *03*(03), 178-185. https://doi.org/10.4236/aasoci.2013.33024

Henneberger, A. K., Tolan, P. H., Hipwell, A. E., & Keenan, K. (2014). Delinquency in Adolescent Girls. *Criminal Justice and Behavior*, *41*(11), 1327-1337. https://doi.org/10.1177/0093854814538624

Imran, S., Muddasir, A., & Sattar, A. (2022). Delinquent Behavior Among Adolescents: Moderating Role of Parental Involvement and Family Functioning. *Aitusrj*, *1*(1). https://doi.org/10.63094/aitusrj.22.1.1.5

Kapetanovic, S., Boele, S., & Skoog, T. (2019). Parent-Adolescent Communication and Adolescent Delinquency: Unraveling Within-Family Processes From Between-Family Differences. *Journal of youth and adolescence*, *48*(9), 1707-1723. https://doi.org/10.1007/s10964-019-01043-w

Kapetanovic, S., & Skoog, T. (2020). The Role of the Family's Emotional Climate in the Links Between Parent-Adolescent Communication and Adolescent Psychosocial Functioning. *Research on Child and Adolescent Psychopathology*, *49*(2), 141-154. https://doi.org/10.1007/s10802-020-00705-9

Khodabakhshi-Koolaee, A., Lor, H. S., Soleimani, A. A., & Rahmatizadeh, M. (2014). Comparison Between Family Power Structure and the Quality of Parent-Child Interaction Among the Delinquent and Non-Delinquent Adolescents. *International Journal High Risk Behaviors & Addiction*, *3*(2). https://doi.org/10.5812/ijhrba.13188

Kroese, J., Bernasco, W., Liefbroer, A. C., & Rouwendal, J. (2024). The Anticipatory, Short-Term, and Long-Term Effects of Parental Separation and Parental Death on Adolescent Delinquency. *Journal of Developmental and Life-Course Criminology*, *10*(2), 288-308. https://doi.org/10.1007/s40865-024-00252-7

Kwon, J. A., & Wickrama, K. A. S. (2013). Linking Family Economic Pressure and Supportive Parenting to Adolescent Health Behaviors: Two Developmental Pathways Leading to Health Promoting and Health Risk Behaviors. *Journal of youth and adolescence*, *43*(7), 1176-1190. https://doi.org/10.1007/s10964-013-0060-0

Lee, S. (2014). Structural Equation Modeling About Family Relationship, Self-Efficacy, Self-Esteem, and Delinquency of Adolescent in Single-Parent Families. *The Journal of the Korea Contents Association*, *14*(11), 759-771. https://doi.org/10.5392/jkca.2014.14.11.759

Low, S., Sinclair, R. T., & Shortt, J. W. (2012). The Role of Economic Strain on Adolescent Delinquency: A Microsocial Process Model. *Journal of Family Psychology*, *26*(4), 576-584. https://doi.org/10.1037/a0028785

Rina, N. (2018). Communication Pattern of Parents in Nuclear Families. https://doi.org/10.2991/icomacs-18.2018.13

Svensson, R., & Johnson, B. (2022). Does It Matter in What Family Constellations Adolescents Live? Reconsidering the Relationship Between Family Structure and Delinquent Behaviour. *PLoS One*, *17*(4), e0265964. https://doi.org/10.1371/journal.pone.0265964

Yakhnich, L., Pounko, I., & Walsh, S. D. (2019). The Hidden Matrix: Perspectives of Youth and Their Parents on Immigration and Youth Delinquent Behavior. *Journal of Cross-Cultural Psychology*, *50*(4), 615-636. https://doi.org/10.1177/0022022119832128

Yusoff, S., Shah, K. M., Sakari, N. S. M., & Ahmad, N. S. S. (2022). The Relationship of Family Functionality and Parent Behavior on Adolescent Delinquent Behavior. *International Journal of Public Health Science (Ijphs)*, *11*(3), 1119. https://doi.org/10.11591/ijphs.v11i3.21553

Zakaria, E., Kamarudin, N. N., Mohamad, Z. S., Suzuki, M., Rathakrishnan, B., Singh, S. S. B., Rahman, Z. A., Sabramani, V., Shaari, A. H., & Kamaluddin, M. R. (2022). The Role of Family Life and the Influence of Peer Pressure on Delinquency: Qualitative Evidence From Malaysia. *International journal of environmental research and public health*, *19*(13), 7846. https://doi.org/10.3390/ijerph19137846