




Family Expressiveness and Adolescent Empathy: The Mediating Role of Emotional Awareness

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ABSTRACT

Objective: This study aimed to examine the mediating role of emotional awareness in the relationship between family expressiveness and adolescent empathy.

Methods and Materials: A descriptive correlational research design was used, involving 400 Mexican adolescents selected based on the Morgan and Krejcie sampling table. Data were collected using three standardized self-report instruments: the Family Expressiveness Questionnaire (FEQ), the Emotional Awareness Questionnaire (EAQ), and the Interpersonal Reactivity Index (IRI) for empathy. Pearson correlation analysis was conducted using SPSS-27 to explore bivariate associations, and structural equation modeling (SEM) was performed using AMOS-21 to assess direct, indirect, and total effects among the variables and test the hypothesized mediation model.

Findings: The results showed significant positive correlations between family expressiveness and emotional awareness ($r = .46, p < .001$), family expressiveness and adolescent empathy ($r = .38, p < .001$), and emotional awareness and adolescent empathy ($r = .53, p < .001$). The structural model demonstrated a good fit to the data ($\chi^2/df = 1.66$, RMSEA = 0.041, CFI = 0.99). Direct effects from family expressiveness to emotional awareness ($B = 0.51, \beta = 0.46, p < .001$), from family expressiveness to empathy ($B = 0.24, \beta = 0.28, p < .001$), and from emotional awareness to empathy ($B = 0.44, \beta = 0.39, p < .001$) were statistically significant. The indirect effect of family expressiveness on empathy via emotional awareness was also significant ($B = 0.22, \beta = 0.18, p < .001$), supporting partial mediation.

Conclusion: These findings suggest that emotionally expressive family environments foster adolescents' empathy partly by enhancing their emotional awareness. Emotional awareness serves as a key developmental mechanism through which family dynamics shape prosocial emotional outcomes in adolescence.

Keywords: Family Expressiveness; Emotional Awareness; Adolescent Empathy

1 Introduction

Empathy has been increasingly recognized not merely as a trait but as a developmental outcome rooted in early emotional learning and interpersonal modeling. The capacity for empathy—both cognitive and affective—supports adolescents' capacity to build supportive peer relationships, avoid aggressive behavior, and maintain mental well-being. However, as research shows, empathy does not emerge in isolation but rather within emotionally rich social environments such as the family system (Peláez-Fernández et al., 2024). Adolescents exposed to expressive and emotionally communicative families are more likely to engage in empathetic reasoning and exhibit concern for others' emotions (Sabah & Alduais, 2024). In contrast, emotionally suppressive or inconsistent family climates may limit opportunities for emotional socialization, thereby impeding the development of empathic capabilities (Chernikova & Oblasova, 2024; Natavia et al., 2025).

Family expressiveness fosters a broader construct—emotional awareness—which encompasses the ability to perceive, understand, and verbally articulate emotional states. Adolescents who are encouraged to talk about feelings, observe emotional expression from family members, and receive validation of emotional experiences are more likely to develop awareness of their own emotions as well as the emotions of others (Cheng et al., 2024; Nurhidayati et al., 2024). This internalized emotional competence facilitates empathy by enabling adolescents to cognitively and affectively respond to another person's emotional state. Emotional awareness, therefore, may act as a mediating mechanism through which family expressiveness influences adolescent empathy. Evidence suggests that adolescents with higher emotional awareness display more prosocial behavior and are better equipped to manage interpersonal stressors, which are critical for emotional attunement and empathic engagement (Hadley et al., 2024; Jeon & Lee, 2024).

Previous studies have supported the conceptual and statistical linkage between family expressiveness and various emotional outcomes in adolescence. For instance, Sabah and Alduais (2024) found that warm and open emotional expression within the family predicted lower internalizing symptoms and higher emotional responsiveness among adolescents (Sabah & Alduais, 2024). Similarly, research by Huang (2023) emphasized that the family emotional environment was a key predictor of adolescent psychological adjustment across both healthy and

chronically ill populations (Huang, 2023). These findings indicate that family expressiveness exerts a widespread influence on adolescent emotion processing, including empathy.

Furthermore, research has also highlighted the central role of emotional awareness in the trajectory from emotional climate to psychosocial competence. Cheng et al. (2024) demonstrated that adolescents' ability to regulate and label their emotions mediated the relationship between family conflict and adolescents' social responsibility (Cheng et al., 2024). Similarly, the study by Jeon and Lee (2024) found that emotional awareness competencies in adolescents, parents, and siblings were interrelated and strongly influenced by familial emotional norms (Jeon & Lee, 2024). This body of evidence suggests that emotional awareness functions not only as a product of family interactions but also as a channel through which those interactions shape broader emotional outcomes such as empathy.

Moreover, emotional awareness has been associated with better emotion regulation, lower psychological distress, and increased interpersonal competence in adolescents (Li, 2025; Lin et al., 2023). These factors all converge in the formation of empathic abilities, suggesting that adolescents with high emotional awareness are more capable of distinguishing between self- and other-oriented emotions, a fundamental component of empathy (Antikaningsih & Sarajar, 2025; Nikolić et al., 2025). In this regard, emotional awareness serves as a bridge between the family's emotional expression patterns and the adolescent's empathic development.

Family structure and socio-cultural conditions can also moderate the relationship between family expressiveness and adolescent empathy. Munthe et al. (2024) emphasized that in certain rural family systems, parental expressiveness was linked to adolescents' emotional well-being and prosocial behaviors, underscoring the need to contextualize emotional development within cultural norms (Munthe et al., 2024). Similarly, Natavia et al. (2025) found that exposure to online and familial conflict environments among adolescents in urban settings influenced both emotional dysregulation and behavioral responses (Natavia et al., 2025). These findings emphasize the need for studies that include diverse contexts—geographically and socio-culturally—to unpack the dynamics between emotional climate and adolescent adjustment.

Given the increasing mental health concerns among adolescents globally, it is crucial to investigate the emotional underpinnings that contribute to psychological resilience

and relational functioning. Recent studies underscore the role of emotional regulation and family interaction quality in moderating adolescent stress, anxiety, and suicidality (Koay & Abdullah, 2024; Nikolić et al., 2025). Notably, Rodríguez-Rubio et al. (2025) revealed that emotional dynamics within families of adolescents with chronic conditions predicted not only psychological outcomes for the adolescents but also the emotional state of caregivers, indicating a bi-directional pattern of emotional contagion and expressiveness (Rodríguez-Rubio et al., 2025). These studies support the notion that healthy emotional environments can serve as protective factors in adolescent development.

Another critical layer is the quality of family communication and cohesion. Nasir and Johari (2024) reported that open communication and mutual respect within families significantly impacted adolescents' emotional development, particularly in their ability to navigate social challenges and build emotional connections (Nasir & Johari, 2024). Similarly, Nguyen et al. (2024) emphasized that family and peer support networks jointly influenced the formation of adolescent behavioral traits and emotional expressions (Nguyen et al., 2024). Thus, family expressiveness is not merely about emotion display but also involves fostering emotionally responsive interactions that cultivate empathy and emotional literacy.

Additionally, emerging evidence suggests that the absence of emotional training and emotional discussion in the home leads to affective suppression and maladaptive coping strategies among adolescents (Khofifah, 2024; Muktar, 2024). Adolescents who lack such experiences are often ill-equipped to interpret emotional cues or respond empathically to others. As such, the current research aligns with findings by Raposo and Francisco (2022), who asserted that adolescents with emotionally disengaged families reported lower levels of well-being and emotional regulation, reinforcing the importance of familial affective engagement (Raposo & Francisco, 2022).

Despite growing interest in the emotional competencies of adolescents, there remains a need for integrative models that simultaneously examine the influence of family expressiveness, emotional awareness, and adolescent empathy. While much research has been conducted independently on these variables, limited studies have examined their interrelated mechanisms within a single structural framework. For example, Zhang and Bi (2024) explored how family engagement in physical education indirectly promoted adolescents' socio-emotional

competence through positive youth development, highlighting the indirect pathways of family involvement (Zhang & Bi, 2024). Similarly, Maulina et al. (2024) investigated openness to parents as a predictor of emotional self-disclosure and empathetic responsiveness, underscoring the relational nature of emotional awareness (Maulina et al., 2024).

In light of these findings, this study seeks to bridge a critical gap by proposing and empirically testing a structural model in which family expressiveness predicts adolescent empathy through the mediating role of emotional awareness.

2 Methods and Materials

2.1 Study Design and Participants

This study employed a descriptive correlational design to investigate the relationships between family expressiveness, emotional awareness, and adolescent empathy. The participants included 400 adolescents from various secondary schools in Mexico, selected through a multi-stage cluster sampling method. The sample size was determined using the Morgan and Krejcie (1970) table, which recommends a minimum of 384 participants for a population size of approximately 100,000 or more, ensuring adequate statistical power. Inclusion criteria required participants to be aged between 13 and 18 years, enrolled in school at the time of the study, and willing to provide informed consent along with parental permission. Data collection was conducted using paper-based self-report questionnaires administered in school settings under the supervision of trained research assistants.

2.2 Measures

2.2.1 Parental Overprotection

To assess adolescent empathy, the Interpersonal Reactivity Index (IRI) developed by Davis (1980) was employed. The IRI is a widely used multidimensional self-report measure designed to assess dispositional empathy in adolescents and adults. It consists of 28 items divided into four subscales: Perspective Taking (the tendency to adopt the viewpoints of others), Empathic Concern (feelings of warmth, compassion, and concern for others), Personal Distress (self-oriented feelings of anxiety in response to others' suffering), and Fantasy (the tendency to imaginatively transpose oneself into fictional situations). Each item is rated on a 5-point Likert scale ranging from 0 (does not describe me well) to 4 (describes me very well).

Higher scores reflect greater empathy. Numerous studies have confirmed the tool's validity and reliability across adolescent populations, with Cronbach's alpha coefficients typically ranging from 0.70 to 0.85 for the subscales.

2.2.2 Emotional Awareness

Emotional awareness was measured using the Emotional Awareness Questionnaire (EAQ) developed by Rieffe et al. (2008). This 30-item self-report instrument is designed specifically for children and adolescents to assess various aspects of emotional understanding and regulation. It includes six subscales: Differentiating Emotions, Bodily Awareness, Verbal Sharing of Emotions, Not Hiding Emotions, Attending to Others' Emotions, and Analysis of Emotions. Each item is rated on a 3-point Likert scale (1 = not true, 2 = sometimes true, 3 = often true). The total and subscale scores can be calculated, with higher scores indicating greater emotional awareness. The EAQ has demonstrated good construct validity and internal consistency, with Cronbach's alpha coefficients ranging from 0.68 to 0.82 in adolescent samples across multiple cultural contexts.

2.2.3 Family Expressiveness

Family expressiveness was assessed using the Family Expressiveness Questionnaire (FEQ) developed by Halberstadt (1986). This 40-item instrument evaluates the frequency and nature of emotional expressions within the family environment as perceived by the respondent. It consists of two primary subscales: Positive Expressiveness (e.g., expressions of affection, joy, and encouragement) and Negative Expressiveness (e.g., expressions of anger, criticism, and disapproval). Participants rate the items on a 9-point Likert scale ranging from 1 (not at all frequently expressed) to 9 (very frequently expressed). Higher scores indicate greater perceived family expressiveness. The FEQ

has been shown to possess sound psychometric properties, including good internal consistency ($\alpha > 0.80$) and construct validity in studies involving adolescents and family dynamics.

2.3 Data Analysis

Data were analyzed using SPSS version 27 and AMOS version 21. Descriptive statistics (mean, standard deviation, frequency, and percentage) were calculated for demographic variables and main constructs. Pearson correlation coefficients were computed to assess the bivariate relationships between the dependent variable (adolescent empathy) and the independent variables (family expressiveness and emotional awareness). To examine the hypothesized mediation model, Structural Equation Modeling (SEM) was conducted using the maximum likelihood estimation method in AMOS. Model fit was evaluated using a combination of indices, including the Chi-square to degrees of freedom ratio (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR).

3 Findings and Results

The final sample consisted of 400 adolescents, including 218 females (54.50%) and 182 males (45.50%). The participants' age ranged from 13 to 18 years, with the majority aged between 15 and 16 years ($n = 162$, 40.50%), followed by 13–14 years ($n = 138$, 34.50%), and 17–18 years ($n = 100$, 25.00%). Regarding parental education, 29.25% ($n = 117$) of fathers and 33.75% ($n = 135$) of mothers held a university degree, while 26.25% ($n = 105$) of fathers and 24.00% ($n = 96$) of mothers had completed high school. Participants were drawn from both urban ($n = 260$, 65.00%) and rural ($n = 140$, 35.00%) school districts.

Table 1

Descriptive Statistics for Study Variables (N = 400)

Variable	Mean (M)	Standard Deviation (SD)
Family Expressiveness	5.82	0.91
Emotional Awareness	4.67	0.78
Adolescent Empathy	4.95	0.84

Adolescents reported moderately high levels of family expressiveness ($M = 5.82$, $SD = 0.91$), emotional awareness ($M = 4.67$, $SD = 0.78$), and empathy ($M = 4.95$, $SD = 0.84$),

suggesting a generally emotionally supportive environment and well-developed socioemotional competencies within the sample (Table 1).

Prior to conducting Pearson correlation and SEM analyses, all statistical assumptions were examined and met. The assumption of normality was assessed using skewness and kurtosis values, which for all major variables ranged between -0.97 and $+0.84$, indicating acceptable normal distribution. Multicollinearity was ruled out, as Variance Inflation Factor (VIF) values ranged from 1.03 to 1.28, all

below the recommended threshold of 5. Homoscedasticity was visually confirmed using scatterplots of standardized residuals. For SEM, the Mahalanobis distance was used to check for multivariate outliers, with none exceeding the critical chi-square value at $p < 0.001$. Finally, linearity between the constructs was confirmed via bivariate scatterplots and correlation matrix inspection.

Table 2

Pearson Correlation Coefficients and p-values Between Main Variables

Variable	1	2	3
1. Family Expressiveness	–		
2. Emotional Awareness	.46** ($p < .001$)	–	
3. Adolescent Empathy	.38** ($p < .001$)	.53** ($p < .001$)	–

All variables showed statistically significant positive correlations. Family expressiveness was moderately correlated with emotional awareness ($r = .46$, $p < .001$) and adolescent empathy ($r = .38$, $p < .001$). Emotional awareness

showed a strong correlation with adolescent empathy ($r = .53$, $p < .001$), supporting the hypothesized mediating relationship (Table 2).

Table 3

Fit Indices of the Structural Equation Model

Fit Index	Value	Recommended Threshold
χ^2	4.97	–
df	3	–
χ^2/df	1.66	< 3
GFI	0.98	≥ 0.90
AGFI	0.95	≥ 0.90
CFI	0.99	≥ 0.95
RMSEA	0.041	< 0.06
TLI	0.98	≥ 0.95

The structural equation model demonstrated a good fit to the data, with all indices falling within recommended thresholds. Specifically, the χ^2/df ratio was 1.66, and

RMSEA was 0.041. Both GFI (0.98) and CFI (0.99) exceeded 0.95, indicating excellent model fit (Table 3).

Table 4

Total, Direct, and Indirect Effects Among Variables in the Structural Model

Path	B	S.E	Beta	p
Family Expressiveness \rightarrow Emotional Awareness	0.51	0.06	0.46	$< .001$
Family Expressiveness \rightarrow Adolescent Empathy	0.24	0.07	0.28	$< .001$
Emotional Awareness \rightarrow Adolescent Empathy	0.44	0.05	0.39	$< .001$
Family Expressiveness \rightarrow Empathy (Indirect)	0.22	0.04	0.18	$< .001$
Family Expressiveness \rightarrow Empathy (Total)	0.46	–	0.46	$< .001$

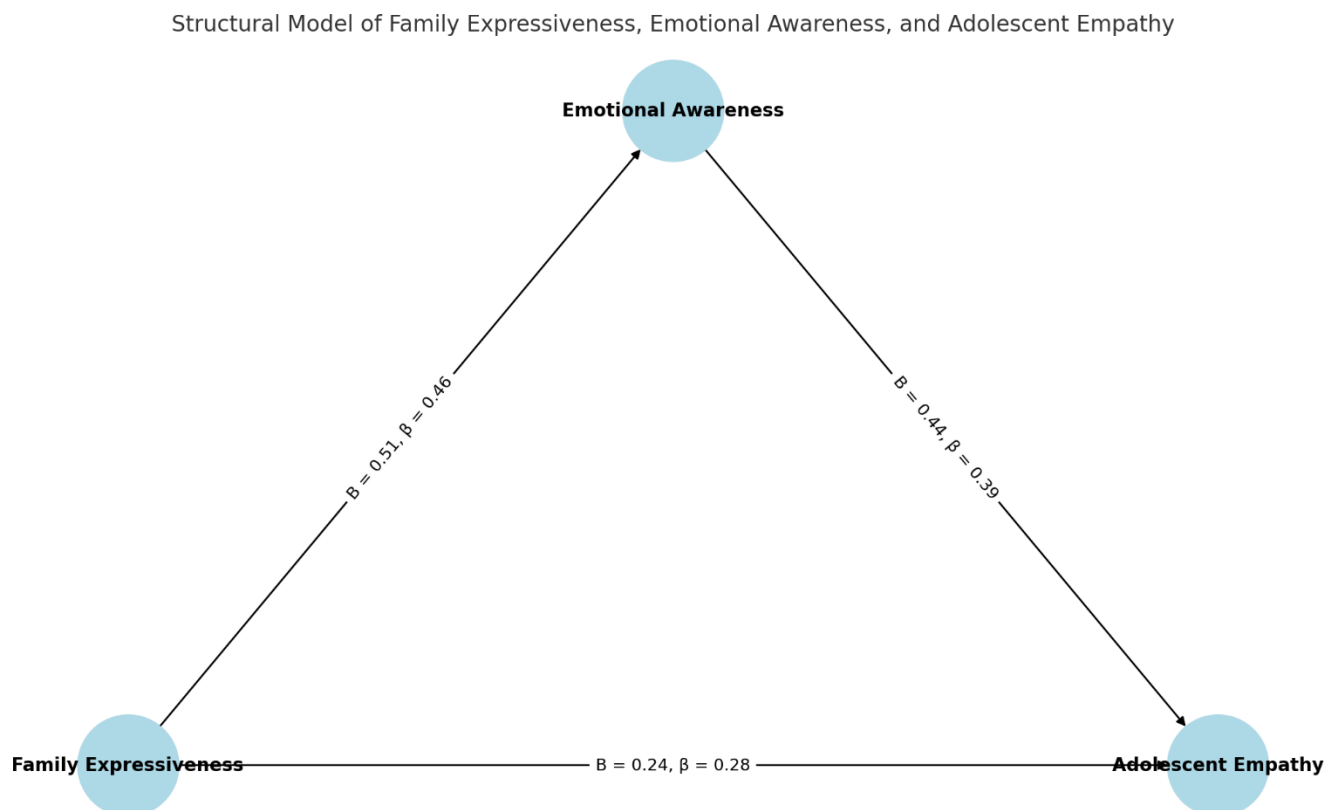
The model indicated that family expressiveness had a significant direct effect on emotional awareness ($B = 0.51$, $\beta = 0.46$, $p < .001$) and a significant direct effect on adolescent empathy ($B = 0.24$, $\beta = 0.28$, $p < .001$). Emotional awareness

significantly predicted empathy ($B = 0.44$, $\beta = 0.39$, $p < .001$). The indirect effect of family expressiveness on empathy through emotional awareness was also significant ($B = 0.22$, $\beta = 0.18$, $p < .001$), supporting a partial mediation

model. The total effect of family expressiveness on empathy (direct + indirect) was $B = 0.46$ (Table 4).

Figure 1

Model with Beta Coefficients



4 Discussion and Conclusion

The present study aimed to examine the mediating role of emotional awareness in the relationship between family expressiveness and adolescent empathy among a sample of Mexican adolescents. Results from Pearson correlations revealed that both family expressiveness and emotional awareness were positively and significantly correlated with adolescent empathy. Furthermore, structural equation modeling confirmed that emotional awareness partially mediated the relationship between family expressiveness and empathy, indicating that adolescents from emotionally expressive families are more likely to develop emotional awareness, which in turn enhances their empathic capacities.

These findings support the growing body of literature emphasizing the pivotal role of family emotional climate in adolescent socioemotional development. Specifically, the positive direct effect of family expressiveness on empathy is consistent with previous studies that highlight how exposure

to emotionally rich environments fosters adolescents' sensitivity to others' emotions. Adolescents who observe open emotional communication within the family are more likely to internalize such interactions and apply them in their own social contexts (Peláez-Fernández et al., 2024; Sabah & Alduais, 2024). In line with this, the current findings reinforce the idea that the family is a key context for emotional socialization and empathy modeling.

Additionally, the indirect pathway through emotional awareness suggests that emotional literacy serves as a developmental mechanism by which family expressiveness translates into empathic functioning. This finding echoes research demonstrating that emotional awareness enhances adolescents' ability to identify, verbalize, and cognitively process emotional experiences, which are foundational to empathic response (Cheng et al., 2024; Jeon & Lee, 2024). Moreover, the presence of a significant partial mediation indicates that while emotional awareness plays an essential role, family expressiveness also contributes to empathy

through other potential pathways, such as emotional validation, secure attachment, or affective mirroring, which deserve further exploration.

The relationship between family expressiveness and adolescent empathy, mediated by emotional awareness, may also be interpreted in light of neurodevelopmental and psychosocial models. Adolescents are at a stage where higher-order emotional processing and abstract reasoning skills are maturing. In emotionally expressive families, adolescents not only observe emotions but are also encouraged to explore and verbalize them, enhancing their metacognitive capacity to understand emotional states in both self and others (Li, 2025; Lin et al., 2023). This aligns with the finding that emotional awareness directly predicts empathy, as those who can understand their emotions are more adept at understanding others'. Such emotional clarity is essential for affective perspective-taking, a crucial element of empathy.

The present study's findings are also compatible with previous research indicating that family expressiveness acts as a protective factor for adolescent emotional and social adjustment. In emotionally supportive environments, adolescents are more likely to develop resilience, regulate negative affect, and maintain interpersonal harmony (Demirçel, 2024; Huang, 2023). These factors inherently promote empathic behavior and reduce the likelihood of emotional withdrawal or interpersonal detachment. Furthermore, research shows that adolescents who grow up in emotionally communicative households experience fewer behavioral problems and demonstrate more compassionate responses in peer conflict situations (Nguyen et al., 2024; Raposo & Francisco, 2022).

Beyond the primary mediation model, the data suggest that the quality of emotional communication in families has implications for broader psychosocial outcomes. Previous findings have shown that adolescents exposed to inconsistent or emotionally repressive environments are at increased risk for emotional dysregulation, psychological distress, and impaired empathic functioning (Koay & Abdullah, 2024; Nikolić et al., 2025). In contrast, families that encourage emotional expression serve as incubators of emotional competence, fostering the development of emotional intelligence and social connectedness (Nasir & Johari, 2024; Nurhidayati et al., 2024).

In a broader context, this study contributes to the understanding of the family's role in cultivating positive emotional outcomes during adolescence, especially in non-Western and underrepresented populations such as Mexican

adolescents. Much of the existing literature is drawn from Western samples, often neglecting how cultural norms surrounding emotional expression and parenting styles influence developmental trajectories. In Latin American cultures, where familismo and emotional closeness are culturally emphasized, the findings resonate with societal values that prioritize emotional bonding and familial responsibility (Munthe et al., 2024; Natavia et al., 2025). These cultural dimensions may enhance the salience of emotional awareness as a developmental asset and suggest that interventions grounded in emotional education within families are culturally appropriate and effective.

Moreover, the current study aligns with literature that suggests that interventions aimed at enhancing emotional regulation and awareness can serve as protective factors against adolescent emotional and behavioral problems. For example, Hadley et al. (2024) highlighted that emotional regulation skills buffer adolescents from the effects of socioeconomic adversity and negative parenting practices, thereby sustaining empathic behavior even in adverse contexts (Hadley et al., 2024). Similarly, Antikaningsih and Sarajar (2025) found that emotional regulation programs in adolescents from broken homes reduced aggressive tendencies and fostered emotional responsibility (Antikaningsih & Sarajar, 2025).

It is worth noting that while emotional awareness served as a significant mediator, it did not fully account for the relationship between family expressiveness and adolescent empathy. This suggests the presence of other unexplored mediators or moderators such as parental warmth, adolescent temperament, or peer relationships. Additionally, family expressiveness might interact with contextual variables such as socioeconomic status, academic environment, and exposure to digital media, influencing emotional development in complex ways (Leung et al., 2023; Zhang & Bi, 2024). These factors should be considered in future multivariate frameworks aiming to understand adolescent emotional and social functioning more comprehensively.

Despite its valuable contributions, this study is not without limitations. First, the cross-sectional design limits causal inference. While the mediation model provides insight into possible pathways, longitudinal data would be necessary to confirm the directional influence of family expressiveness on empathy through emotional awareness. Second, all measures were self-reported by adolescents, which could introduce common method bias or subjective distortions. Incorporating parent reports or observational data would provide a more holistic view of family emotional

expressiveness and its effects. Third, although the sample size was statistically adequate, it was limited to adolescents in Mexico, potentially restricting the generalizability of the findings to other cultural or regional populations. Variations in cultural norms surrounding emotional expression may influence the strength or nature of these associations. Lastly, while the study focused on emotional awareness as a mediator, other emotional competencies such as emotion regulation, affect labeling, or metacognitive beliefs about emotion were not assessed and could provide further explanatory power.

Future research should prioritize longitudinal and experimental designs to test the causal direction and developmental trajectories among family expressiveness, emotional awareness, and empathy over time. Additionally, incorporating multi-informant approaches, including parental reports and behavioral assessments, would enrich the data quality and offer a more objective understanding of family dynamics and adolescent emotional development. Comparative cross-cultural studies could also shed light on how different family emotional climates influence empathy in varying socio-cultural contexts. Moreover, future models could explore the moderating effects of gender, parental education, and socioeconomic status on these relationships. Investigating other potential mediators, such as emotional regulation, interpersonal trust, or attachment style, could deepen the theoretical framework and refine targeted interventions. Finally, integrating qualitative components could offer nuanced insights into adolescents' lived emotional experiences within family contexts.

Given the critical role of family expressiveness in adolescent empathy, educational and clinical interventions should aim to foster emotionally communicative home environments. Parenting programs can incorporate modules on emotion coaching, validating children's emotions, and modeling open emotional expression. Schools may also implement curricula that promote emotional awareness and empathy as part of socioemotional learning (SEL) initiatives. Mental health practitioners working with adolescents should assess family emotional climates as part of routine evaluations and engage families in therapy where necessary. Community-based efforts, especially in culturally cohesive societies like Mexico, should leverage family-centered strategies that align with traditional values of closeness and respect. Strengthening family emotional literacy not only benefits adolescent empathy but also contributes to broader social cohesion and psychological well-being.

Authors' Contributions

Authors contributed equally to this article.

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.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

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

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