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Investigating the Impact of Multicultural Literacy Components on the Development of Social and Emotional Skills among Upper Secondary School Students in District 2 of Ahvaz

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ABSTRACT

Purpose: The present study aimed to determine the impact of multicultural literacy components on the development of social and emotional skills among upper secondary school students.

Methods and Materials: This applied study employed a quantitative, descriptive-survey design. The statistical population consisted of all upper secondary school students in District 2 of Ahvaz during the 2024–2025 academic year ($N = 12,584$). Based on the Krejcie and Morgan sampling table, 295 students (150 males and 145 females) were selected through simple random sampling. Data were collected using the Multicultural Literacy Questionnaire (Ajam & Kadkhodaei, 2023), the Matson Social Skills Scale (1983), and the Emotion Regulation Questionnaire (Gross & John, 2003). The reliability of the instruments was confirmed using Cronbach's alpha coefficients ranging from 0.82 to 0.88 in the present study. Data were analyzed using descriptive statistics (mean and standard deviation) and inferential statistics, including Pearson correlation and multiple linear regression analysis, through SPSS version 24.

Findings: Regression analysis indicated that multicultural literacy had a positive and statistically significant effect on the development of social skills ($R = .586$, $R^2 = .344$, $F(1,144) = 86.350$, $p < .05$), explaining 34.4% of the variance in social skills. Furthermore, multicultural literacy demonstrated a positive and statistically significant effect on emotional skills ($R = .570$, $R^2 = .325$, $F(1,144) = 80.380$, $p < .05$), accounting for 32.5% of the variance in emotional skills. The standardized regression coefficients confirmed that higher levels of multicultural literacy were associated with higher levels of both social and emotional skill development.

Conclusion: Enhancing students' cognitive, affective, and behavioral dimensions of multicultural literacy may contribute to improved interpersonal functioning and adaptive emotion regulation within culturally diverse educational settings.

Keywords: Multicultural literacy, social skills, emotional skills.



1. Introduction

In recent decades, rapid globalization, transnational mobility, and digital interconnectedness have transformed the sociocultural fabric of contemporary societies, placing multicultural education at the center of educational discourse. Multicultural literacy is no longer limited to awareness of cultural differences but has evolved into a comprehensive framework encompassing cognitive understanding, affective sensitivity, and behavioral competence in diverse contexts. From a sociopolitical perspective, multicultural education functions as a transformative project aimed at affirming diversity, challenging inequities, and fostering inclusive participation within pluralistic societies (Nieto, 2025). As adolescents navigate increasingly heterogeneous environments, educational systems are compelled to equip students not only with academic knowledge but also with the intercultural and socio-emotional competencies necessary for constructive engagement in culturally diverse communities.

Adolescence and emerging adulthood represent critical developmental stages characterized by identity exploration, emotional reactivity, and heightened sensitivity to social belonging. Developmental theorists emphasize that the period spanning late adolescence through the early twenties is marked by significant psychosocial transitions that influence self-concept, interpersonal relationships, and emotional regulation capacities (Arnett, 2024). Within this context, schools function as primary arenas for socialization, where students encounter peers from varied cultural, linguistic, and socioeconomic backgrounds. The capacity to interpret cultural cues accurately, manage emotional responses adaptively, and engage in prosocial behaviors becomes indispensable for successful adjustment and well-being. Consequently, investigating the role of multicultural literacy in shaping students' social and emotional skills is both theoretically and practically significant.

Multicultural literacy is closely linked to intercultural competence, defined as the ability to communicate effectively and appropriately in intercultural situations based on knowledge, skills, and attitudes (Ilie, 2019). Empirical evidence indicates that structured educational interventions can enhance intercultural competence among both domestic and international students, thereby improving mutual understanding and collaborative functioning (Wu et al., 2024). Similarly, cross-cultural comparisons have demonstrated that students in helping professions exhibit varying levels of multicultural competence depending on

educational exposure and sociocultural context (Hladik & Jadama, 2016). These findings suggest that multicultural literacy is not an innate trait but a developable competence that can be systematically cultivated through targeted educational strategies.

Beyond intercultural communication, multicultural literacy intersects with constructs such as cultural intelligence and social adjustment. Studies have shown that higher levels of cultural intelligence are positively associated with students' social adaptation and relational effectiveness in diverse environments (Jahed, 2024). In instructional settings, the relationship between cultural intelligence and emotionality has been documented, indicating that culturally attuned individuals demonstrate greater emotional awareness and responsiveness in pedagogical interactions (Ghasemi Kandeskolapi & Alae, 2017). Moreover, research examining cultural literacy has underscored its preventive function in reducing cultural anomalies and promoting social cohesion (Hassani Rostamabadi et al., 2023). Collectively, these findings highlight that multicultural literacy contributes not only to intercultural understanding but also to broader social and emotional functioning.

Social skills constitute a core dimension of adolescents' psychosocial development. Theoretical analyses of children's social skills emphasize competencies such as communication, cooperation, empathy, and conflict resolution as foundational for adaptive functioning in educational environments (Hosseini Panah & Zendehtelan, 2016). Empirical research has further demonstrated that social and ethical intelligence significantly predict students' social skills, suggesting that cognitive and moral dimensions interact with behavioral competencies in shaping interpersonal effectiveness (Gholizadeh et al., 2023). Additionally, social skills have been identified as mediators between trait emotional intelligence and school adjustment, reinforcing their central role in academic and psychosocial outcomes (Nikooyeh et al., 2017). In multicultural contexts, these skills are especially critical, as students must navigate differences in norms, values, and communication styles.

Emotional skills, particularly emotion regulation, represent another essential component of adolescent development. Emotion regulation has been conceptualized as a multifaceted construct involving processes that influence the experience, expression, and modulation of emotions (Shams Alam & Besharat, 2024). Unified theoretical models propose that maladaptive emotion regulation strategies underlie a range of emotional disorders,



including anxiety and depression (Barlow et al., 2016). Specific strategies such as catastrophizing have been associated with heightened stress and depressive symptoms, underscoring the importance of adaptive regulation mechanisms (Angell, 2017). In adolescence, emotional competence and coping strategies have been shown to play protective roles against depressive symptomatology (Vucenovic et al., 2023). Furthermore, qualitative investigations have identified contextual, cognitive, and relational factors as influential in shaping individuals' emotion regulation patterns (Jalvani et al., 2017). These findings collectively suggest that emotional skills are dynamic capacities shaped by environmental, cultural, and interpersonal influences.

The relationship between cultural factors and emotion regulation has gained increasing scholarly attention. Cross-cultural competence has been linked to emotion regulation ability and optimism, indicating that individuals capable of navigating cultural differences tend to manage emotional responses more effectively (Trejo et al., 2015). Within family systems, parental relationships and emotional expression patterns significantly influence children's socio-emotional competence through mediating processes such as attachment security (Tang et al., 2023). Moreover, parenting styles have been found to contribute to the development of socio-emotional regulation skills during early childhood, laying foundations for later adaptive functioning (Ojibara, 2024). These findings underscore the intertwined nature of cultural socialization and emotional development, suggesting that multicultural literacy may indirectly foster emotional skills by promoting adaptive interpretive frameworks and empathic engagement.

In educational settings, multicultural personality traits have been shown to interact with emotional processes. For example, emotional creativity has been identified as a mediating factor between multicultural personality traits and language anxiety among bilingual students, highlighting the role of culturally informed emotional capacities in academic performance (Homayouni & Babanezhad, 2024). From an organizational perspective, social competence in intercultural teams has been recognized as a critical determinant of collaborative effectiveness, reinforcing the relevance of socio-emotional skills in culturally diverse environments (Knap-Stefaniuk & Sowa-Behtane, 2025). At the secondary school level, socio-emotional competence has been positively associated with academic grit, indicating that emotional and social capacities contribute to perseverance and achievement (Barrientos, 2025). Together, these studies

illustrate that multicultural literacy and socio-emotional skills are interconnected constructs with implications extending from classroom dynamics to broader professional contexts.

The digital era has further complicated the landscape of multicultural interaction. Critical literacy approaches emphasize the necessity of equipping learners with the skills to navigate diverse media environments and critically engage with culturally embedded narratives (Habegger-Conti, 2015). Emotions play integral roles in cognitive processes such as information retrieval and interpretation, suggesting that affective awareness is embedded in knowledge construction itself (Norouzi & Yari, 2020). Consequently, multicultural literacy in contemporary contexts entails not only interpersonal competence but also critical engagement with culturally diverse information ecosystems.

Despite the growing body of international research on multicultural competence and socio-emotional development, contextualized studies within specific sociocultural settings remain essential. Educational environments characterized by ethnic, linguistic, and cultural diversity present unique opportunities and challenges for fostering inclusive climates. Investigating how multicultural literacy influences students' social and emotional skills within such contexts can provide empirically grounded insights for curriculum development, teacher training, and policy formulation. By integrating theoretical perspectives on multicultural education, intercultural competence, social skills, and emotion regulation, the present study seeks to contribute to a more comprehensive understanding of how cultural literacy dimensions relate to adolescents' socio-emotional development.

Therefore, the aim of this study is to determine the impact of multicultural literacy components on the development of social and emotional skills among upper secondary school students.

2. Methods and Materials

2.1. Study Design and Participants

The present study was applied in terms of purpose, quantitative with respect to data type, and descriptive using a survey design in terms of methodology. The statistical population consisted of all upper secondary school students in District 2 of Ahvaz. According to information obtained from the Ahvaz Department of Education, the population included 12,584 students studying in 54 upper secondary



schools in District 2 of Ahvaz. Among the students, 6,870 were male and 5,714 were female. The sample size was determined based on the Krejcie and Morgan sample size table, resulting in a total sample of 295 participants. Considering the population distribution, 150 male students and 145 female students were included in the sample. Simple random sampling was employed. Data collection in this study was conducted using the following questionnaires.

2.2. Measures

Multicultural Literacy Questionnaire: This questionnaire was developed by Ajam and Kadkhodaei (2023). In designing the scale and identifying its indicators and dimensions, existing theoretical foundations in the field of cultural literacy were utilized. The principal theoretical bases used by Ajam and Kadkhodaei consisted of four studies. Mousavi et al. (2013) identified indicators related to multicultural literacy within national educational policy documents reflected in school textbooks. Ahmadi et al. (2018) examined the position of multicultural education components within the intended curriculum of lower secondary education. Sadeghi et al. (2015) investigated multicultural competencies of teachers and assessed them in primary schools. Finally, Ashouri and Sadeghi (2020) introduced and categorized the major indicators of multicultural literacy. Based on these four studies, the student multicultural literacy questionnaire was developed. The Ajam and Kadkhodaei (2023) questionnaire consists of 40 items designed to measure three dimensions of multicultural literacy: the cognitive component (items 1–11), the affective component (items 12–32), and the skill-based component (items 33–40). Responses are measured using a five-point Likert scale scored as follows: not at all = 0, very little = 1, little = 2, much = 3, and very much = 4. Face and content validity were established through expert judgment from the academic supervisor and experienced teachers within the education system. Reliability was assessed through pilot administration of 30 questionnaires and calculation of Cronbach's alpha coefficients. The obtained alpha values for the cognitive, affective, and skill dimensions were 0.79, 0.81, and 0.77, respectively. The overall Cronbach's alpha coefficient for the scale was 0.80, indicating acceptable reliability. In the present study, reliability was confirmed with a Cronbach's alpha coefficient of 0.84.

Social Skills Questionnaire: The Social Skills Scale was developed by Matson (1983) and includes 56 items assessing

five dimensions: appropriate social skills (items 1–18), antisocial behaviors (items 19–29), aggression and impulsive behaviors (items 30–41), dominance and excessive self-confidence (items 42–47), and peer relationships (items 48–56). Responses are rated on a five-point Likert scale scored as never = 1, rarely = 2, sometimes = 3, often = 4, and always = 5. However, scoring is reversed for items 19–47, 49, 50, 52, 54, and 55. The total score represents overall social skills. Construct validity was confirmed in Matson's original study through factor analysis, and reliability coefficients for subscales ranged from 0.81 to 0.89. In Iran, Yousefi et al. (2002) confirmed the model's validity using construct validity methods, reporting Cronbach's alpha coefficients ranging from 0.73 to 0.87 for subscales and 0.86 for the overall scale. In the present study, the reliability coefficient calculated using Cronbach's alpha was 0.82.

Emotion Regulation Questionnaire: The Emotion Regulation Questionnaire was developed by Gross and John (2003) and consists of 10 items assessing two subscales: cognitive reappraisal and expressive suppression. Responses are rated on a seven-point Likert scale ranging from strongly disagree to strongly agree, scored from 1 to 7, respectively. In the original validation study, Cronbach's alpha coefficients for cognitive reappraisal and suppression were both 0.79. Test-retest reliability for suppression was reported as 0.73, and overall scale stability after a three-month interval was 0.69 (Gross & John, 2003). Internal consistency was further examined using samples of state employees and Catholic university students at the University of Milan, showing correlation coefficients ranging from 0.48 to 0.68 for reappraisal and 0.42 to 0.63 for suppression. Correlations between reappraisal and positive affect (0.24) and negative affect (-0.14), as well as suppression and positive affect (-0.15) and negative affect (0.04), were reported (Balzarotti, John, & Gross, 2010). The questionnaire was first translated and validated in the Iranian population by Ghasempour, Ilbeigi, and Hasanzadeh (2012). Reliability coefficients ranged from 0.60 to 0.81, and validity was assessed through factor loadings and principal component analysis, with Varimax rotation revealing a correlation of 0.13 between the two main factors and acceptable criterion validity. In the present study, the reliability coefficient calculated using Cronbach's alpha was 0.88.



2.3. Data Analysis

Data analysis in the present study was conducted in three stages. In the first stage, demographic findings were analyzed using frequency and percentage indices presented in tables and charts. In the second stage, descriptive statistics including mean, standard deviation, minimum, and maximum values were calculated for the study variables. In the third stage, research hypotheses were examined using Pearson correlation coefficients and multiple linear

regression analysis. All analyses were performed using SPSS version 24.

3. Findings and Results

According to the research procedure, the mean and standard deviation of multicultural literacy, development of social skills, and emotional skills were first calculated. The results are presented in Table 1.

Table 1

Mean and Standard Deviation of the Main Variables

Variable	Overall Mean	Standard Deviation
Multicultural Literacy	110.2	17.1
Development of Social Skills	164.1	21.08
Emotional Skills	59.5	9.04

The results presented in Table 1 indicate that the overall mean scores were 110.2 for multicultural literacy, 164.1 for development of social skills, and 59.5 for emotional skills.

Before testing the hypotheses, the primary assumptions of regression analysis were reviewed and reported. First, regarding the measurement level of variables, all predictor variables were quantitative, and the criterion (outcome) variables were quantitative, continuous, and unrestricted. Quantitative measurement refers to interval-level scaling, and unrestricted indicates that there were no imposed

constraints on variability; this assumption was satisfied. Second, multicollinearity was examined, and the results indicated no high intercorrelations among predictor variables; therefore, this assumption was met. Third, homoscedasticity was confirmed, indicating that the variance of residuals was constant across all levels of the predictor variables. Fourth, the linearity assumption was satisfied. Fifth, the normality of error distribution was assessed using the Kolmogorov–Smirnov test, and the results are presented in Table 2.

Table 2

Normality of Data Distribution Based on the Kolmogorov–Smirnov (K–S) Test

Variable	K–S Z Value	p Value	Result
Multicultural Literacy	0.85	0.12	Normal
Development of Social Skills	1.01	0.19	Normal
Emotional Skills	0.77	0.14	Normal

As shown in Table 2, the significance levels for all variables were greater than 0.05 ($p > .05$), indicating that the data were normally distributed. Therefore, based on the

Kolmogorov–Smirnov test results, the assumption of normality was confirmed, and parametric statistical tests were deemed appropriate for subsequent analyses.

Table 3

Regression Analysis Indices and Statistics (Social Skills)

R	R ²	Adjusted R ²	Std. Error of Estimate	F	Sig.
.586a	.344	.340	.96598	86.350	.001

The results indicate that the correlation coefficient between multicultural literacy and the development of social skills was 0.586, and multicultural literacy explained 34.4%

of the variance in students' social skills development ($R^2 = .344$). The observed analysis of variance was statistically significant, $F(1, 144) = 86.350$, $p < .05$, indicating that



multicultural literacy significantly predicts the development of students' social skills. Thus, the table demonstrates a

statistically significant relationship between multicultural literacy and the development of students' social skills.

Table 4

Regression Coefficients for Variables Entered into the Model (Social Skills)

Predictor Variable	B	Std. Error	Beta	t	Sig.
Constant	1.650	.195	—	8.467	.001
Social Skills	.548	.059	.586	9.292	.001

The coefficients reported in Table 4 indicate that social skills had a positive and statistically significant relationship with multicultural literacy ($p < .05$). In other words, as the

level of multicultural literacy increased, the development of students' social skills also increased. Therefore, the first subsidiary hypothesis of the study was confirmed.

Table 5

Regression Analysis Indices and Statistics (Emotional Skills)

R	R ²	Adjusted R ²	Std. Error of Estimate	F	Sig.
.570a	.325	.321	.97413	80.380	.001

The results show that the correlation coefficient between multicultural literacy and the development of emotional skills was 0.570, and multicultural literacy explained 32.5% of the variance in emotional skills development ($R^2 = .325$). The observed analysis of variance was statistically significant, $F(1, 144) = 80.380$, $p < .05$, indicating that

multicultural literacy significantly predicts the development of students' emotional skills. Therefore, the table demonstrates a statistically significant relationship between multicultural literacy and the development of students' emotional skills.

Table 6

Regression Coefficients for Variables Entered into the Model (Emotional Skills)

Predictor Variable	B	Std. Error	Beta	t	Sig.
Constant	1.466	.220	—	6.663	.001
Emotional Skills	.580	.065	.570	8.966	.001

The coefficients reported in Table 6 indicate that the development of emotional skills had a positive and statistically significant relationship with multicultural literacy ($p < .05$). In other words, as multicultural literacy increased, students' emotional skills development also increased. Accordingly, the second subsidiary hypothesis of the study was confirmed.

multicultural literacy demonstrated a positive and statistically significant association with emotional skills, accounting for 32.5% of the variance. These findings underscore the substantial predictive role of multicultural literacy in shaping adolescents' socio-emotional functioning within educational contexts characterized by cultural diversity.

4. Discussion and Conclusion

The present study examined the impact of multicultural literacy components on the development of social and emotional skills among upper secondary school students. The findings indicated that multicultural literacy had a positive and statistically significant relationship with the development of social skills, explaining 34.4% of the variance in students' social skills. Additionally,

The significant relationship between multicultural literacy and social skills development aligns with theoretical perspectives that conceptualize multicultural education as a transformative framework aimed at promoting inclusion, empathy, and democratic participation (Nieto, 2025). When students acquire cognitive awareness of cultural differences, develop affective sensitivity toward diversity, and cultivate behavioral competencies for intercultural interaction, they are better equipped to engage in constructive peer



relationships. The present findings are consistent with research demonstrating that intercultural competence enhances effective communication and relational functioning (Ilie, 2019). Similarly, empirical evidence from internationalization programs indicates that structured exposure to multicultural learning environments facilitates the acquisition of intercultural competence, which in turn supports collaborative engagement (Wu et al., 2024). These parallels suggest that multicultural literacy operates as a foundational resource enabling students to navigate socially heterogeneous environments with confidence and adaptability.

The observed association also resonates with studies linking cultural intelligence and social adjustment. Jahed (2024) reported a positive relationship between cultural intelligence and students' social adjustment, indicating that culturally informed individuals display greater flexibility and responsiveness in diverse peer contexts (Jahed, 2024). In instructional settings, cultural intelligence has been associated with emotional awareness and sensitivity, which are essential for effective social interaction (Ghasemi Kandeskolapi & Alaei, 2017). Furthermore, multicultural competence among students in helping professions has been shown to vary according to educational experiences, reinforcing the notion that social competencies can be cultivated through intentional training (Hladik & Jadama, 2016). The present findings extend this body of knowledge to upper secondary school students, demonstrating that multicultural literacy contributes meaningfully to the development of age-appropriate social skills.

The relationship between multicultural literacy and social skills can also be interpreted in light of research emphasizing the mediating role of social skills in broader psychosocial outcomes. Nikooyeh et al. (2017) identified social skills as mediators between trait emotional intelligence and school adjustment, underscoring their integrative function in academic and social domains (Nikooyeh et al., 2017). Moreover, Gholizadeh et al. (2023) highlighted the contribution of social and ethical intelligence to students' social skills, suggesting that moral and cultural awareness enhance interpersonal effectiveness (Gholizadeh et al., 2023). In multicultural settings, literacy regarding diverse norms and values likely fosters empathy, perspective-taking, and conflict resolution, which are central components of social competence as described in theoretical analyses of children's social skills (Hosseini Panah & Zendehdelan, 2016). Thus, the present results are theoretically coherent and empirically supported.

Regarding emotional skills, the findings revealed that multicultural literacy significantly predicted students' emotional competence. This result is congruent with conceptualizations of emotion regulation as a multifaceted construct influenced by cognitive appraisals and contextual interpretations (Shams Alam & Besharat, 2024). Exposure to diverse cultural perspectives may broaden students' interpretive frameworks, enabling more adaptive emotional responses to social stimuli. Unified treatment models for emotional disorders emphasize the importance of flexible emotion regulation strategies in mitigating anxiety and depression (Barlow et al., 2016). Given that maladaptive strategies such as catastrophizing are linked to emotional distress (Angell, 2017), it is plausible that multicultural literacy—by fostering tolerance, openness, and cognitive complexity—reduces rigid or exaggerated emotional appraisals.

The positive association between multicultural literacy and emotional skills also aligns with research demonstrating that emotional competence and coping strategies serve protective roles in adolescence (Vucenovic et al., 2023). Jalvani et al. (2017) identified contextual and relational factors as influential in shaping emotion regulation patterns (Jalvani et al., 2017). Multicultural literacy may function as such a contextual factor, equipping students with interpretive flexibility and empathic understanding that facilitate adaptive emotional modulation. Additionally, Trejo et al. (2015) reported that cross-cultural competence is positively associated with emotion regulation ability and optimism (Trejo et al., 2015), reinforcing the interdependence of cultural and emotional capacities.

Family and relational contexts further illuminate the interplay between cultural awareness and emotional development. Tang et al. (2023) demonstrated that parental emotional expression and attachment mediate the relationship between interparental dynamics and children's socio-emotional competence (Tang et al., 2023). Likewise, parenting styles have been shown to shape socio-emotional regulation skills in early development (Ojibara, 2024). These findings suggest that cultural socialization processes embedded in family and educational contexts contribute to emotional competencies. Multicultural literacy in schools may complement familial influences by promoting inclusive norms and modeling respectful engagement with diversity.

The mediating role of emotional creativity in the relationship between multicultural personality traits and language anxiety among bilingual students further supports the present findings (Homayouni & Babanezhad, 2024).



Emotional creativity reflects the capacity to experience and express emotions in novel and contextually appropriate ways, a skill that likely benefits from exposure to diverse cultural narratives. In organizational settings, social competence within intercultural teams has been identified as critical for effective collaboration (Knap-Stefaniuk & Sowa-Behtane, 2025), illustrating that socio-emotional skills grounded in cultural awareness are relevant beyond school contexts. At the secondary education level, socio-emotional competence has been positively associated with academic grit, suggesting that emotional regulation supports perseverance and achievement (Barrientos, 2025). Therefore, the predictive power of multicultural literacy observed in this study may have implications not only for interpersonal adjustment but also for academic resilience.

Critical literacy perspectives further contextualize these findings. Habegger-Conti (2015) argued that engaging with diverse media narratives enhances learners' capacity for critical reflection and cultural understanding (Habegger-Conti, 2015). Since emotions influence cognitive processes such as information interpretation (Norouzi & Yari, 2020), multicultural literacy may indirectly shape emotional responses by fostering critical awareness and reflective thinking. Additionally, research on cultural literacy has highlighted its preventive role in reducing cultural anomalies and promoting social cohesion (Hassani Rostamabadi et al., 2023). This preventive dimension may extend to emotional maladjustment, as inclusive environments reduce experiences of marginalization and conflict.

Finally, considering the developmental stage of the participants, it is noteworthy that emerging adulthood is characterized by identity exploration and increased intercultural exposure (Arnett, 2024). Multicultural literacy may provide adolescents with cognitive and affective tools necessary for navigating identity negotiations within pluralistic societies. As Shams Alam and Besharat (2024) emphasize, emotion regulation is deeply embedded in cognitive appraisals and sociocultural contexts (Shams Alam & Besharat, 2024). Thus, fostering multicultural literacy in upper secondary education may contribute to healthier socio-emotional trajectories during this critical developmental period.

Despite the valuable insights generated by this study, several limitations should be acknowledged. First, the use of a cross-sectional design limits causal inference, as the observed relationships cannot definitively establish temporal precedence. Second, reliance on self-report questionnaires may introduce response biases, including social desirability

and common method variance. Third, the study was conducted within a specific educational district, which may constrain the generalizability of the findings to other sociocultural contexts. Additionally, while regression analysis identified significant predictive relationships, other unmeasured variables—such as family dynamics, peer climate, or school culture—may also influence students' social and emotional development.

Future research could employ longitudinal designs to examine how multicultural literacy influences social and emotional skills over time, thereby clarifying developmental trajectories. Experimental or quasi-experimental interventions aimed at enhancing multicultural literacy would provide stronger evidence regarding causality. Moreover, incorporating multi-informant data, such as teacher or parent reports, could reduce reliance on self-report measures. Comparative studies across different regions or cultural contexts would also enrich understanding of contextual moderators. Finally, exploring potential mediating mechanisms—such as empathy, perspective-taking, or cognitive flexibility—could deepen theoretical insight into how multicultural literacy translates into socio-emotional competencies.

Educational policymakers and school administrators should consider integrating structured multicultural literacy programs into secondary school curricula. Teacher training initiatives can emphasize culturally responsive pedagogy and socio-emotional learning strategies. Schools may create inclusive environments through collaborative projects, intercultural dialogues, and reflective activities that encourage empathy and respect for diversity. Additionally, embedding multicultural perspectives within extracurricular activities and digital literacy programs may further reinforce students' social and emotional growth. By systematically cultivating multicultural literacy, educational systems can promote adaptive social interactions, emotional resilience, and cohesive school communities.

Authors' Contributions

All authors significantly contributed to this study.

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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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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