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ADOLESCENT EMOTION REGULATION BASED ON EMOTIONAL INTELLIGENCE AND SELF-COMPASSION

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ABSTRACT
Adolescence is a developmental stage characterized by social pressure, emotional turbulence, and identity exploration. Emotion regulation is a crucial skill that enables adolescents to adapt to social and academic demands. This study aimed to examine the role of emotional intelligence (EI) and self-compassion (SC) as predictors of emotion regulation among adolescents in Manado City. An explanatory quantitative design was employed, involving 300 high school students aged 15–19 years selected through stratified random sampling. Data were collected using the Schutte Emotional Intelligence Scale, the Self-Compassion Scale, and the Difficulties in Emotion Regulation Scale (DERS). Prior to the main study, all instruments were subjected to validity and reliability testing on a pilot sample of 30 adolescents with characteristics comparable to the study population. Item validity was assessed using item–total correlation, while reliability was evaluated using Cronbach's alpha coefficient. Data were analyzed using descriptive statistics and multiple linear regression after meeting classical assumption tests. Indicated that the regression model was statistically significant ($F = 412.245$; $p < 0.001$), with a coefficient of determination (R^2) of 0.727, indicating that EI and SC jointly explained 72.7% of the variance in emotion regulation. Partial analyses revealed that EI had a positive and significant effect on emotion regulation ($B = 0.321$; $p < 0.001$), whereas SC showed no significant effect ($B = -0.009$; $p = 0.750$). These findings indicate that emotional intelligence is the dominant factor in enhancing adolescents' emotion regulation. Therefore, school-based mental health interventions should prioritize strengthening emotional intelligence, while fostering self-compassion may serve as a complementary long-term strategy.

Keywords: adolescents; emotional intelligence; emotion regulation; mental health; self-compassion

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INTRODUCTION

Adolescence represents a complex developmental period characterized by profound biological, psychological, and social transformations. Within this stage, the capacity to regulate emotions is a fundamental developmental competence that contributes significantly to psychological well-being, behavioral adjustment, and social functioning. Nevertheless, empirical evidence indicates that a substantial proportion of adolescents experience difficulties in managing their emotions adaptively, which may adversely affect their social behaviors, coping strategies, and mental health outcomes (Neff, 2023). Emotion regulation is conceptualized as the ability to identify, modulate, and express emotional responses in a manner that is contextually appropriate and psychologically adaptive. This ability becomes particularly salient during adolescence, a phase marked by rapid emotional fluctuations, heightened sensitivity to social evaluation, and increased exposure to complex interpersonal demands (Gross, 2015).

In rapidly urbanizing settings such as Manado, the challenges associated with emotion regulation are further intensified by shifting family structures, academic pressures, pervasive exposure to digital media, and accelerated sociocultural change. The rising prevalence of psychological disturbances among Indonesian adolescents—such as anxiety disorders (3.7%), major depressive disorder (1.0%), conduct disorder (0.9%), and both Post-Traumatic Stress Disorder (PTSD) and Attention Deficit Hyperactivity Disorder (ADHD) at 0.5%—raises urgent concerns regarding their

emotional well-being (Nurajizah et al., 2023). If unaddressed, these conditions may impede adolescents' academic engagement, social interaction, concentration, and self-confidence, thereby underscoring the crucial role of the school environment in fostering healthy emotional development and resilience (Husnianita & Jannah, 2021).

As one of the major urban centers in eastern Indonesia, Manado is experiencing rapid socio-technological transformation that influences adolescents' daily experiences and emotional demands. This dynamic context amplifies susceptibility to stressors related to academic expectations, social media involvement, and interpersonal conflict, thereby necessitating a more nuanced and predictive understanding of emotion regulation mechanisms. Two psychological constructs—emotional intelligence and self-compassion—have been identified as potentially influential determinants of emotion regulation. Emotional intelligence encompasses the ability to perceive, understand, and manage one's own emotions as well as the emotions of others (Megías et al., 2025), while self-compassion refers to adopting a stance of kindness, acceptance, and nonjudgment toward oneself during experiences of suffering or perceived inadequacy (Rehman et al., 2024). Although prior studies suggest that both constructs independently contribute to adaptive emotional functioning, their combined predictive capacity has not been sufficiently examined within the context of Indonesian adolescents. Moreover, research specifically addressing emotion regulation among adolescents in eastern Indonesian regions, including Manado, remains notably scarce. This study seeks to investigate the predictive role of emotional intelligence and self-compassion in emotion regulation among adolescents in Manado City.

METHOD

This study employed a quantitative correlational approach using an explanatory sequential design. The primary objective was to develop and evaluate a predictive model of adolescent emotion regulation based on two key psychological constructs: emotional intelligence and self-compassion. Multiple linear regression served as the main analytical method. The study population comprised adolescents aged 15–19 years enrolled in senior high schools and vocational schools (SMA/SMK) in Manado, Indonesia. A stratified random sampling strategy was applied according to regional zones (north, central, and south) to ensure adequate geographical and socio-demographic representation. A total of 300 adolescents were included in the final sample.

Data were collected using structured self-administered questionnaires distributed to participants who met the inclusion criteria. Emotional intelligence was assessed using the Trait Emotional Intelligence Questionnaire–Adolescent Short Form (TEIQue-ASF), self-compassion was measured using the Self-Compassion Scale–Short Form (SCS-SF), and emotion regulation was assessed using the Emotion Regulation Questionnaire (ERQ). Prior to the main study, all instruments underwent validity and reliability testing on a pilot sample of 30 adolescents with characteristics comparable to the study population. Item validity was evaluated using item–total correlation, while internal consistency reliability was assessed using Cronbach's alpha. The results demonstrated satisfactory reliability for all instruments, with Cronbach's alpha coefficients of 0.88 for TEIQue-ASF, 0.85 for SCS-SF, and 0.87 for ERQ, indicating good internal consistency. Multiple linear regression analyses were conducted to examine the predictive contributions of emotional intelligence and self-compassion to emotion regulation outcomes. Prior to data collection, ethical approval was granted by the Research Ethics Committee of Universitas 'Aisyiyah (UNISA) (Approval No. 4736/KEP-UNISA/VIII/2025), and written informed consent was obtained from all participants.

RESULT

In summary, the respondent characteristics indicate that the study sample was predominantly composed of mid-adolescents aged 15–19 years, a critical developmental period marked by identity formation and heightened social and academic engagement. The sample was largely male, although female participants remained adequately represented. Most respondents resided with their parents,

suggesting continued exposure to direct parental support that may shape emotional and social development. Additionally, the majority of respondents were actively involved in extracurricular activities, reflecting substantial engagement in social and non-academic contexts that potentially contribute to the development of social competencies and emotion regulation. Overall, these characteristics suggest that the sample appropriately represents adolescents in a developmental stage relevant to the study's focus on emotion regulation.

Table 1.
Distribution of sociodemographic characteristics of participants (n = 312)

Chararacteristic	Categories	*f*	%
Age	13 Years	2	0,6
	14 Years	48	15,4
	15 Years	84	26,9
	16 Years	95	30,4
	17 Years	77	24,7
	18 Years	4	1,3
	19 Years	2	0,6
Gender	Male	112	35,9
	Female	200	64,1
Living Status	Living with Parents	233	74,7
	Living with Other Family Members	37	11,9
	Living in a Boarding House	42	13,5
Extracurricular Participation	Yes	200	64,1
	No	112	35,9

Notes: *n=312

Table 2.
Results of the Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9343.332	2	4671.666	412.245	<.001[b]
	Residual	3501.665	309	11.332		
	Total	12844.997	311			

a. Dependent Variable: RE

b. Predictors: (Constant), SC, EI

The multiple regression analysis, assessed through the ANOVA test, demonstrated that the regression model was statistically significant in predicting the dependent variable, emotion regulation (ER). The ANOVA results indicated an F-value of 412.245 with a significance level of $p < 0.001$, confirming that the independent variables—self-compassion (SC) and emotional intelligence (EI)—collectively exert a meaningful influence on emotion regulation.

In addition, the Sum of Squares for Regression (SS = 9343.332) exceeded the Sum of Squares for Residual (SS = 3501.665), suggesting that the majority of the variance in emotion regulation is explained by the model. The coefficient of determination ($R^2 = 0.727$) indicates that 72.7% of the variability in emotion regulation is accounted for by self-compassion and emotional intelligence, while the remaining 27.3% is attributable to other unexamined factors. Overall, these findings support the conclusion that the regression model is robust and suitable for predicting emotion regulation based on self-compassion and emotional intelligence. Both predictors contribute significantly to enhancing emotion regulation among the respondents.

Table 3.
Variable Coefficients

Model		B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2.237	2.490		.898	.370
	EI	.321	.012	.849	26.531	<.001
	SC	-.009	.028	-.010	-.319	.750

a. Dependent Variable: RE

The results demonstrate that emotional intelligence (EI) exerts a significant and predominant effect on emotion regulation, whereas self-compassion (SC) does not show a statistically meaningful contribution. The regression analysis indicates that EI has a positive and highly significant coefficient ($B = 0.321$; $p < 0.001$) and a substantial standardized beta value ($\beta = 0.849$), confirming its role as the primary predictor of emotion regulation among the respondents. In contrast, SC yields a negligible negative coefficient ($B = –0.009$; $p = 0.750$), indicating the absence of a significant effect within the regression model.

DISCUSSION

Emotion regulation during adolescence refers to the capacity to modulate the type, intensity, duration, and expression of emotional responses, enabling individuals to function adaptively within social, academic, and identity-related contexts. Adolescence is a developmental stage particularly vulnerable to emotional dysregulation due to neurobiological changes, social pressures, and increasing academic and future-oriented demands. A useful conceptual framework views emotion regulation as a set of strategies (e.g., cognitive reappraisal, expressive suppression) that must be applied flexibly depending on context; this flexibility itself is a key determinant of adaptive functioning (7). Recent reviews and systematic studies (2020–2024) emphasize the importance of regulatory flexibility—rather than reliance on a single dominant strategy—as well as the emerging influence of digital environments and social media on adolescents' emotional processes. Furthermore, growing evidence suggests that mindfulness- and self-compassion–based interventions can reduce symptoms of anxiety and depression while improving regulatory capacity among adolescents (Haag et al., 2024).

Emotional intelligence (EI), within both trait and ability frameworks, encompasses the capacity to recognize, understand, and manage one's own emotions and those of others, as well as to use emotional information to guide effective thinking. EI provides cognitive–emotional skills that directly support emotion regulation, such as recognizing early emotional cues and selecting adaptive strategies (Megías-Robles et al., 2024). Recent quantitative studies report consistent positive associations between EI and the use of adaptive regulation strategies, as well as inverse associations with symptoms of psychopathology (e.g., anxiety, depression). In the Indonesian context, local studies highlight links between parenting patterns, school environment, and students' EI levels, indicating that socio-cultural factors shape EI development (Riolo et al., 2025).

Self-compassion involves adopting a stance of kindness toward oneself during experiences of failure or distress, recognizing such experiences as part of shared humanity, and maintaining mindful awareness of negative emotions without overidentifying with them. Mechanistically, self-compassion reduces emotional reactivity, decreases self-judgment, and facilitates soothing cognitive strategies (e.g., reinterpretation, attentional grounding) (Neuenschwander & Gunten, 2024). Meta-analyses and intervention studies (2020–2024) report that mindfulness and self-compassion programs can reduce stress and anxiety and enhance emotion regulation among adolescents when delivered with adequate duration and intensity, although study quality varies and age-appropriate school adaptations are needed (Dai & Li, 2022).

EI contributes skill-based competencies for detecting and evaluating emotions, whereas self-compassion shapes the emotional tone and affective response when facing difficulties. These constructs complement each other—EI facilitates detection and strategic selection, while self-compassion mitigates emotional intensity and supports engagement in adaptive strategies (Stutts, 2022). Emerging research also demonstrates that self-compassion frequently acts as a mediator or moderator in associations between stress, self-esteem, and emotional outcomes; for example, self-compassion buffers the impact of stress on negative affect via improved cognitive–emotional regulation. Additionally, evidence suggests that combining EI skills training with self-compassion practices yields optimal improvements in emotion regulation (Megías-Robles et al., 2024).

The present study indicates that self-compassion and emotional intelligence jointly exert a significant effect on emotion regulation, contributing 72.7% of the explained variance. This suggests that adolescents with higher levels of self-compassion and emotional intelligence demonstrate stronger adaptive emotional management. These findings align with recent research underscoring the role of self-compassion in enhancing emotional well-being and reducing psychological symptoms. For instance, Arimitsu & Hofmann (2020) found that self-compassion is strongly associated with reduced stress and improved emotion regulation among adolescents. Likewise, Yin et al. (2021) reported that emotional intelligence significantly contributes to individuals' capacity to cope with emotional pressure and utilize more adaptive regulation strategies. Comparable results were documented by Gutiérrez-Hernández et al. (2022), who found that individuals with higher levels of both self-compassion and EI demonstrate greater psychological resilience and more effective management of negative emotions. Collectively, these findings highlight the importance of both constructs as key determinants of healthy emotional development in adolescence.

Practically, these results imply that interventions targeting adolescents should incorporate programs aimed at strengthening self-compassion and emotional intelligence through formal education, counseling services, and extracurricular activities. Such efforts are expected to enhance adolescents' emotion-regulation abilities, thereby supporting mental health and social adaptation (Yani et al., 2025). Consistent with prior research, the present findings reinforce the centrality of emotional intelligence in emotional management. Yin et al. (2021) demonstrated that individuals with higher EI possess greater skill in recognizing and regulating emotions enabling more adaptive responses to emotional pressure. Similarly, Szczygiel & Mikolajczak (2021) reported that EI is strongly associated with positive regulation strategies and psychological resilience. In contrast, the nonsignificant effect of self-compassion observed in this study may reflect developmental characteristics of adolescence, a period in which cognitive and emotional capacities are still maturing. Bluth et al. (2020) noted that adolescents typically exhibit lower levels of self-compassion compared to adults, which may explain the weaker impact of this construct on regulation outcomes.

Overall, these findings suggest that emotional regulation among respondents is more strongly influenced by emotional intelligence than by self-compassion. This indicates that interventions aimed at improving emotion regulation in adolescents may benefit from prioritizing EI-focused strategies, such as emotional awareness training, empathy development, and emotion-management skills in social interactions. Family factors and parenting styles also play a crucial role. Research in Indonesia indicates that parenting practices significantly influence EI and emotion regulation; the cultural values characteristic of North Sulawesi—strong family bonds, religious norms, and community cohesion—may serve as sources of support or pressure depending on family dynamics. Therefore, intervention programs should include parental or family involvement (Manoppo & Kabangunang, 2024). School climate and social environment likewise shape adolescents' emotional capacities; recent Indonesian studies highlight the importance of supportive school environments, the presence of counselors, and academic pressure levels in shaping emotion regulation (Lancastle et al., 2024). Finally, the pervasive influence of social media and digitalization on adolescents in Manado, as in other regions, suggests that interventions should address digital emotional literacy and healthy online engagement.

CONCLUSION

The findings of this study indicate that emotional intelligence (EI) and self-compassion (SC) jointly exert a significant influence on adolescents' emotion regulation, accounting for 72.7% of the variance. However, when examined individually, only EI demonstrated a significant and dominant effect, whereas SC did not show a meaningful contribution. These results underscore that adolescents' emotion regulation is primarily shaped by their level of emotional intelligence.

Based on these findings, practical interventions should prioritize strengthening emotional intelligence through emotional education programs, school counseling services, and extracurricular activities that foster social skills and empathy. Although self-compassion was not a significant predictor in this study, cultivating self-compassion remains valuable as a complementary long-term strategy for enhancing adolescents' psychological well-being.

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