COUNSENESIA
Indonesian Journal of Guidance and Counseling
https://ejournal.utp.ac.id/index.php/CIJGC

Beyond self-control: self-compassion as a mediator in the dynamics of self-control, self-esteem, and emotional regulation among adolescents

Azura Fahrel Anjeli[1], Rezki Hariko[2]
1. Department of Guidance and Counseling, Faculty of Education, Universitas Negeri Padang, Indonesia
2. Department of Guidance and Counseling, Faculty of Education, Universitas Negeri Padang, Indonesia
Corresponding Email: azurafahrelanjeli@gmail.com

Article Information:
Received : May 12, 2026
Revised : May 17, 2026
Published : June 1, 2026

Keywords:
Adolescents, emotional regulation, self-control, Self-compassion, self-esteem

Abstract

This study reveals the psychological mechanisms underlying emotional regulation in adolescents, emphasizing the role of self-compassion as a mediator between self-control and self-esteem. Using a quantitative approach with PLS-SEM analysis on 800 adolescents in Padang, the results indicate that all hypotheses were supported. Self-control, self-esteem, and self-compassion significantly influence emotional regulation, both directly and indirectly. Specifically, self-compassion was found to be a key mechanism bridging the effects of self-control and self-esteem on emotional regulation. Descriptive findings indicate that emotional regulation falls into the moderate category, including among adolescents from intact families, suggesting a paradox between family structural integrity and optimal emotional regulation. These findings underscore the dominance of internal psychological factors over external structural factors. This study contributes to the development of an integrative mediation-based model of emotional regulation and offers practical implications that interventions for adolescents should focus on strengthening self-compassion as an adaptive mechanism for emotional regulation.

Introduction

Adolescence is a developmental period characterized by significant changes in physical, cognitive, and emotional aspects as part of the transition from childhood to adulthood. This transition is understood as a complex developmental process from childhood to adulthood that involves various multidimensional changes (Steinberg & Lerner, 2004; Riswanto, 2019). During this phase, individuals face increasing complex developmental demands, both academically and socially, which often lead to fluctuating and unstable emotional states (Unayah & Sabarisman, 2015). These conditions make adolescents a group vulnerable to difficulties in emotion management, making emotional regulation a crucial aspect in supporting the adaptation process and the success of individual development

Emotional regulation is the individual process of recognizing, monitoring, evaluating, and controlling emotional responses to align with the demands of a situation. This concept refers to an individual's ability to adaptively manage emotional experiences across various life contexts (Gross, 2024; Troy et al., 2022; Rahmi et al., 2025). This ability plays a crucial role in shaping adaptive behavior, enhancing sound decision-making, and supporting psychological well-being. Conversely, failure in emotional regulation can increase the risk of

How to cite : Anjeli, A., F., Hariko, R. (2026). Beyond self-control: self-compassion as a mediator in the dynamics of self-control, self-esteem, and emotional regulation among adolescents. *COUNSENESIA: Indonesia Journal of Guidance and Counseling,* 7(1). https://doi.org/10.36728/cijgc.v7i1.6581
E-ISSN : 2746-3532
Published by : Universitas Tunas Pembangunan Surakarta

various psychological issues such as stress, anxiety, and behavioral disorders (Roberton et al., 2012; Hasmarlin & Hirmaningsih, 2019). Globally, the rise in mental health issues among adolescents indicates that emotional regulation is an increasingly important psychological issue that warrants in-depth study (UNICEF, 2024). Thus, emotional regulation is not merely an individual psychological aspect but also a mental health issue with broad implications for adolescent development.

Theoretically, emotional regulation is a multidimensional construct influenced by various interacting psychological factors, including self-control, self-compassion, and self-esteem. Self-control plays a role in managing impulses and directing behavior to remain adaptive in emotional situations (Tangney et al., 2004). Self-esteem contributes to fostering a positive self-evaluation, enabling individuals to remain more stable when facing emotional stress (Orth et al., 2008). Additionally, self-compassion allows individuals to respond to negative experiences with acceptance, understanding, and without excessive self-criticism (Neff & McGehee, 2010). These three constructs indicate that emotional regulation is determined not only by behavioral control abilities but also by self-evaluation and affective attitudes toward emotional experiences.

One key factor in emotional regulation is self-control, which refers to an individual's capacity to regulate impulses, emotions, and behavior to achieve long-term goals. This concept emphasizes that individuals with high self-control are better able to inhibit impulsive responses and direct behavior adaptively in emotional situations (Tangney et al., 2004). Empirical research indicates that self-control is positively associated with emotional regulation and psychological well-being (de Ridder et al., 2020; Duckworth et al., 2020). Recent research indicates that self-control plays a crucial role in emotional regulation, where individuals with high self-control tend to be better able to manage negative emotions, understand and utilize emotions adaptively, and select effective emotional regulation strategies in daily life. Furthermore, in the context of Indonesian adolescents, self-control has also been shown to be a significant predictor of emotional regulation ability (Pan et al., 2023; Tornquist & Miles, 2023; Kozubal et al., 2023; Tammilehto et al., 2023; Werner & Ford, 2023; Hasanah & Latifah, 2021).

In addition to self-control, self-compassion is an internal factor that plays a crucial role in emotional regulation. This construct refers to an individual's ability to be kind to oneself, recognize that negative experiences are part of the human condition, and maintain full awareness without judgment (Neff, 2003). Theoretically, self-compassion functions as an emotional regulation system that reduces negative emotional reactions through mechanisms of acceptance and reduced self-criticism (Gilbert, 2010). Research indicates that self-compassion is positively correlated with emotional regulation and acts as a protective factor against psychological distress, with individuals possessing high levels of self-compassion tending to be better able to adaptively manage negative emotions and reduce difficulties in emotional regulation (Muris, 2023; Wooten et al., 2024; Vidal et al., 2024; Cai et al., 2023; Ericson et al., 2023; Himmerich & Orcutt, 2021)

Self-esteem is also a key factor in emotional regulation, relating to an individual's evaluation of their own worth and value. This construct reflects the extent to which an individual views themselves as a valuable, capable, and worthy person (Coopersmith, 1967; Rosenberg, 1965; Branden, 1994). Individuals with high self-esteem are believed to have better emotional stability because they are able to interpret negative experiences in a more adaptive manner. Empirically, research indicates that self-esteem is positively and significantly associated with emotional regulation and contributes to reduced psychological distress, where individuals with high self-esteem tend to be better able to manage emotions adaptively, exhibit lower levels of emotional regulation difficulties, and are supported as a key factor in adolescents' emotional regulation abilities (Li et al., 2023; Park & Gentzler,

2023; Aslan & Demir, 2023; Muntamah et al., 2024; Orth & Robins, 2022; Muarifah et al., 2019).

Although these three variables have been shown to be associated with emotional regulation, most previous studies have focused on direct relationships between variables. This approach still leaves limitations in explaining the underlying internal psychological mechanisms of emotional regulation. In fact, relationships among psychological variables are often indirect and involve mediating roles (Chen et al., 2024). Therefore, self-compassion is hypothesized to act as an internal mechanism bridging the effects of self-control and self-esteem on emotional regulation, through its ability to reduce self-criticism and rumination while enhancing self-acceptance.

Given these conditions, this study offers novelty by developing an integrative model of adolescent emotion regulation that examines the simultaneous roles of self-control and self-esteem in emotion regulation, with self-compassion serving as the mediating variable. Unlike previous studies that tend to examine direct relationships between variables, this study emphasizes that the effects of self-control and self-esteem on emotional regulation operate through an internal psychological mechanism known as self-compassion. Furthermore, this study expands the empirical context by examining the phenomenon of emotional regulation among Indonesian adolescents, particularly the paradoxical condition where individuals from intact families still exhibit emotional regulation at a moderate level. Thus, this study provides a theoretical contribution by strengthening mediation-based models of emotional regulation mechanisms, as well as a contextual contribution to understanding the psychological dynamics of adolescents in Indonesia. In line with this, there are two main research gaps: the limited number of studies integrating self-control, self-esteem, and self-compassion into a comprehensive structural model, and the scarcity of research examining moderate-level emotional regulation among adolescents from intact families in Indonesia.

Therefore, this study aims to analyze the relationship between self-control, self-esteem, self-compassion, and emotional regulation among adolescents in Padang City, with self-compassion hypothesized as a mediating variable. Additionally, this study aims to describe the level of adolescents' emotional regulation as part of the empirical contextual understanding of the research. The analysis was conducted using the Partial Least Square–Structural Equation Modeling (PLS-SEM) approach to test the complex relationships among the variables simultaneously.

Based on this theoretical framework, the following research hypotheses are proposed: (1) Self-compassion is positively associated with emotion regulation; (2) Self-control is positively associated with emotion regulation; (3) Self-control is positively associated with self-compassion; (4) Self-esteem is positively associated with emotion regulation; (5) Self-esteem is positively related to self-compassion; (6) Self-compassion is hypothesized to mediate the relationship between self-control and emotional regulation; (7) Self-compassion is hypothesized to mediate the relationship between self-esteem and emotional regulation; (8) Self-control, self-esteem, and self-compassion simultaneously influence emotional regulation

Methods

Design

This study employs a quantitative approach with a correlational design and path analysis based on Partial Least Squares Structural Equation Modeling (PLS-SEM). The correlational approach was used to analyze the relationships among the study variables, while path analysis was used to test the direct, indirect, and total effects among variables in the structural model (Creswell, 2014; Ghozali & Latan, 2015; Seeram, 2019). The dependent variable in this study is emotional regulation, while self-control and self-esteem serve as independent variables. Self-compassion is positioned as a mediating variable in the relationship between self-control and self-esteem on emotional regulation.

Participants

The respondent composition consisted of 428 males (53.5%) and 372 females (46.5%), with demographic characteristics including family status, parental conditions, parental education level, parental occupation, and family income level. The demographics of the respondents can be seen in Table 1

Table 1: Demographics of Research Respondents

Gender	Frequency	Percentage
Male	428	53.5%
Female	372	46.5%
Family Status		
Biological child	786	98.3%
Stepchild	13	1.6%
Adopted child	1	1%
Parental Status		
Complete	576	72%
One parent deceased	100	12.5
Both parents have passed away	9	1.1
Parents divorced	115	14.4%
Father's education		
Elementary school	82	10.3%
Junior High School	135	16.9%
High School	494	61.8%
Associate's Degree	27	3.4%
Bachelor's	61	76%
Master's	1	1%
Mother's Education		
Elementary	87	10.9%
Junior High School	133	16.6%
High School	451	56.4%
Associate's Degree	52	6.5%
Bachelor's	68	8.5%
Ph.D.	2	3%
Father's Occupation		
Civil Servant	28	3.5%
Private-sector employees	76	9.5%
Fishermen	33	4.1%
Farmers	47	5.9%
Daily laborers (construction, factories)	325	40.6
Drivers (public transportation, online ride-hailing, trucks, etc.)	55	6.9
Small-scale vendors (small shops, street vendors, etc.)	30	3.8
Entrepreneurs (merchants/business owners)	80	10
Military/Police	8	1
Migrant workers (TKI/TKW)	2	3%
Unemployed	20	2.5%
Other	96	12%
Working Mothers		
Civil Servants	42	5.3

Gender	Frequency	Percentage
Private-sector employees	25	3.1%
Farmers	26	3.3
Daily laborers (construction, factories)	26	3.3
Drivers (public transportation, online ride-hailing, trucks, etc.)	6	8
Small-scale vendors (small shops, street vendors, etc.)	72	9%
Entrepreneurs (Merchants/Business Owners)	74	9.3%
Military/Police	4	5
Migrant Workers (TKI/TKW)	3	4%
Unemployed	419	52.4%
Other	103	12.9%
Father's Income		
Less than Rp 1,500,000	428	53.5
Rp 1,500,001 – Rp 3,000,000	258	32.3
Rp 3,000,001 – Rp 5,000,000	85	10.6
Over Rp 5,000,001	29	3.6
Mother's Income		
Less than Rp 1,500,000	603	75.4
Rp 1,500,001 – Rp 3,000,000	137	17.1
Rp 3,000,001 – Rp 5,000,000	43	5.4
Over Rp 5,000,001	17	2.1%

Instruments

Data collection was conducted using a printed questionnaire distributed directly at the school during the study period. The research instruments included scales for emotion regulation, self-control, self-compassion, and self-esteem, all of which used a Likert scale response format.

Emotion regulation was measured using the Emotion Regulation Scale Indonesian Version (ERSIV), which consists of 32 items. Based on the validity test involving 30 respondents, valid item correlation coefficients ranged from 0.363 to 0.676 ($p < 0.05$), while invalid items were excluded from further analysis. The reliability test yielded a Cronbach's Alpha coefficient of 0.793, indicating good internal consistency of the instrument. (Mharchelya et al., 2025). Self-control was measured using the Indonesian adaptation of the Brief Self-control Scale, consisting of 10 items. The instrument demonstrated good construct validity, as indicated by the confirmatory factor analysis fit indices (CFI = 0.97, RMSEA = 0.04, and SRMR = 0.05). The scale also showed good internal reliability, with a Cronbach's alpha coefficient of 0.81, while the inhibition and initiation dimensions yielded reliability coefficients of 0.68 and 0.69, respectively. (Arifin et al., 2020).

Self-compassion was measured using the Indonesian version of the Self-compassion Scale, consisting of 26 items. Self-compassion was measured using the Indonesian Self-Compassion Scale (SWD) adapted, which demonstrated good construct validity based on CFA results ($\chi^2/df = 1.324$, RMSEA = 0.043, GFI = 0.910, CFI = 0.935, TFI = 0.923, and IFI = 0.936). The scale also showed good internal consistency with a Cronbach's alpha coefficient of 0.872 (Sugianto et al. 2020). Self-esteem was measured using the adapted Coopersmith Self-Esteem Inventory, consisting of 44 items. The validity test showed that 44 out of 46 items were valid, with item-total correlation coefficients ranging from 0.255 to 0.753 at the 5% significance level (r-table = 0.254), while two items were excluded due to insufficient validity. The reliability analysis yielded a Cronbach's alpha coefficient of 0.867, indicating high internal consistency. (Rokhmatika, 2024).

All instruments underwent a language adaptation process and have been used in previous studies with similar respondent characteristics. The research instruments used in this study were adapted from previously validated scales measuring emotion regulation, self-control, self-compassion, and self-esteem. Each instrument consists of several dimensions or indicators that reflect the theoretical constructs being measured. Examples of statement items representing each indicator are presented in Table 2.

Table 2. Description of Research Instruments

Instrument	Variable	Factor/Indicator	Example Statement
Emotion Regulation Scale	Emotion Regulation	1. Situation Selection 2. Situation Modification 3. Attentional Deployment 4. Cognitive Change 5. Response Modulation	1. I avoid friends who like to tease me so I don't retaliate. 2. I feel calm after getting support from friends 3. I think conflict with friends can affect friendship relationships 4. I understand teacher criticism as a valuable lesson for self-improvement. 5. I try to stay calm in front of others, even when I'm feeling anxious.
Self-control Scale	Self-Control	1. Inhibition (Impulse Control) 2. Initiation (Goal-directed Behavior)	1. I can control any temptation well 2. I can work effectively in achieving long-term goals.
Self-Compassion Scale	Self-Compassion	1. Self Kindness 2. Self Judgement 3. Common Humanity 4. Isolation 5. Mindfulness 6. Overidentification	1. When I'm going through a hard time, I'll give you the care and tenderness you need. 2. I do not accept and judge my weaknesses and shortcomings. 3. When bad things happen to me, I see life's difficulties as a part of life that everyone goes through. 4. When I think about my shortcomings, it makes me feel isolated from the rest of the world 5. When something upsets me, I try to keep my emotions stable. 6. When I'm feeling down, I tend to obsess and dwell on everything that's wrong.
Self-Esteem Scale	Self-Esteem	1 Significance (Self-acceptance 2 Virtue 3 Power 4 Competence	1. I accept my current condition 2. I often say honestly 3. I am often alone at home or at school 4. I can't accept my own shortcomings.

Procedure

The study population consists of adolescents enrolled as active students at Vocational High Schools (SMK) in the city of Padang. The sampling technique employed cluster sampling based on school accreditation categories. Schools were grouped into two clusters: those with A accreditation and those with B accreditation. From each cluster, two schools were selected as research sites based on the schools' willingness to participate. Eligible respondents—those aged 15–21 years, enrolled as active students, and willing to participate voluntarily—were included in the study until the sample size reached 800 respondents. Data collection took place over 2 months, and all participants received an explanation of the study's objectives and provided informed consent before completing the questionnaire.

Data Analysis

Construct validity and reliability were evaluated through measurement model analysis using Confirmatory Factor Analysis (CFA) within the PLS-SEM framework. Convergent validity was assessed based on outer loading values and Average Variance Extracted (AVE), with minimum thresholds of ≥ 0.70 for outer loading and ≥ 0.50 for AVE (Hair et al., 2021). Construct reliability was evaluated using Cronbach's Alpha and Composite Reliability with a minimum value of ≥ 0.70. The test results showed that all constructs met the validity and reliability criteria and were therefore suitable for use in structural analysis.

Data analysis was conducted using Smart PLS 4.0 software through two evaluation stages: outer model evaluation and inner model evaluation. Outer model evaluation included testing for convergent validity, discriminant validity using the Fornell-Larcker criteria, and construct reliability. Inner model evaluation was conducted through testing the coefficient of determination (R^2), estimating path coefficients, and hypothesis testing using the bootstrapping procedure. A hypothesis was accepted if the t-statistic value was > 1.96 and the p-value was < 0.05 (Hair et al., 2021). The research variables were coded as follows: emotional regulation (RE), self-control (SC), self-compassion (SCOMP), and self-esteem (SE).

Results

The results of the measurement model evaluation indicate that all indicators meet the criteria for construct validity and reliability. External model evaluation aims to analyze the validity and reliability of the model (Hair & Alamer, 2022). The results of the external evaluation of the research model can be seen in Figure 1.

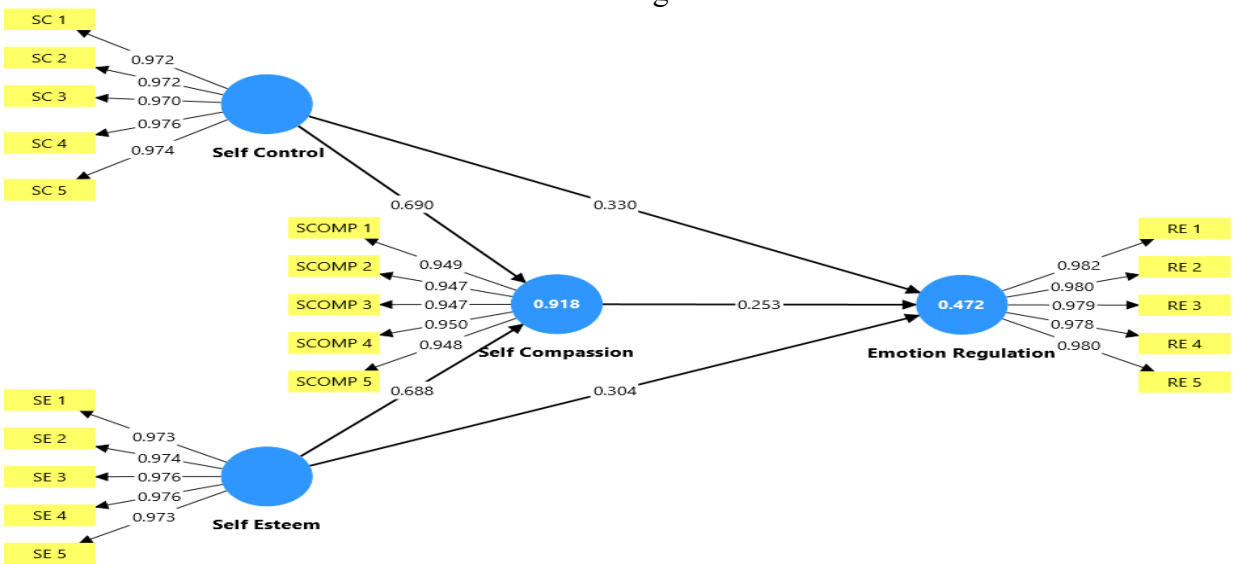

Figure 1 External Evaluation of the Research Model

The relationship between the indicators and the latent construct demonstrates adequate empirical consistency, indicating that the model is suitable for proceeding to structural testing. Validity tests evaluated the convergent and discriminant validity of the research variables (Hair et al., 2021). Additionally, reliability tests were conducted by calculating the CAV and the composite reliability values for each research variable (Ghozali & Latan, 2015).

The measurement model results show that all indicator outer loading values exceeded the recommended threshold of 0.70, indicating strong convergent validity across all constructs. The self-control indicators demonstrated loading values ranging from 0.970 to 0.976, while the self-esteem indicators ranged from 0.973 to 0.976. The self-compassion construct showed loading values between 0.941 and 0.956, indicating excellent indicator reliability. Likewise, the emotional regulation construct presented outer loading values ranging from 0.978 to 0.982, reflecting very strong construct representation. The coefficient of determination (R^2) value for self-compassion was 0.918, indicating that self-control and self-esteem explained 91.8% of the variance in self-compassion. Meanwhile, the R^2 value for emotional regulation was 0.472, showing that self-control, self-esteem, and self-compassion jointly explained 47.2% of the variance in emotional regulation. Furthermore, the structural path coefficients indicate positive direct effects of self-control on self-compassion ($\beta = 0.690$) and emotional regulation ($\beta = 0.504$), as well as self-esteem on self-compassion ($\beta = 0.688$) and emotional regulation ($\beta = 0.478$). Self-compassion also demonstrated a positive direct effect on emotional regulation ($\beta = 0.253$). These results indicate that all latent constructs exhibit strong measurement properties and substantiate the structural relationships proposed in the research model.

These findings confirm that the research instrument has representative capability in measuring emotional regulation, self-control, self-esteem, and self-compassion according to the PLS-SEM measurement model evaluation standards. All constructs demonstrate adequate convergent validity, as shown in Table 3.

Table 3 Convergent Validity Test Results

Variable	Indicator/Factor	Factor Loadings	AVE	Information
Emotional Regulation	RE1	0.982	0.960	Valid
	RE2	0.980		Valid
	RE3	0.979		Valid
	RE4	0.978		Valid
	RE5	0.980		Valid
Self-control	SC1	0.972	0.947	Valid
	SC2	0.972		Valid
	SC3	0.970		Valid
	SC4	0.976		Valid
	SC5	0.974		Valid
Self-Compassion	SCOMP1	0.949	0.899	Valid
	SCOMP2	0.947		Valid
	SCOMP3	0.947		Valid
	SCOMP4	0.950		Valid
	SCOMP5	0.948		Valid
Self-Esteem	SE1	0.974	0.949	Valid
	SE2	0.973		Valid

Variable	Indicator/Factor	Factor Loadings	AVE	Information
	SE3	0.976		Valid
	SE4	0.976		Valid
	SE5	0.973		Valid

The convergent validity test results presented in Table 3 indicate that all indicator loading values exceed the recommended threshold of 0.70, confirming strong indicator reliability across all constructs. Emotional regulation obtained factor loadings ranging from 0.978 to 0.982 with an AVE value of 0.960, indicating excellent convergent validity. Self-control demonstrated loading values between 0.970 and 0.976 with an AVE of 0.947. Self-compassion showed loading values ranging from 0.947 to 0.950 with an AVE of 0.899, while self-esteem exhibited loading values between 0.973 and 0.976 with an AVE of 0.949. Since all AVE values exceed the minimum criterion of 0.50, all constructs are considered valid and capable of adequately explaining the variance of their respective indicators. Therefore, the measurement model is deemed suitable for further analysis.

Furthermore, the discriminant validity test findings show that each notion has distinct empirical features. If a variable's Fornell-Lacker value is greater and distinct from that of other variables, it can have excellent discriminant validity (Afthanorhan et al., 2021). Table 4 displays the discriminant validity test findings.

Table 4 Discriminant Validity Test Results (Fornell–Larcker Criterion)

	RE	SCOMP	SC	SE
Emotional Regulation (RE)	0.980			
Self-Compassion (SCOMP)	0.675	0.948		
Self-control (SC)	0.489	0.667	0.973	
Self-Esteem (SE)	0.461	0.665	-0.033	0.974

The discriminant validity results presented in Table 4 demonstrate that each construct possesses adequate empirical distinctiveness. The diagonal values representing the square root of the average variance extracted (AVE) for emotional regulation (0.980), self-compassion (0.948), self-control (0.973), and self-esteem (0.974) are greater than their respective correlations with other constructs. This finding satisfies the Fornell-Larcker criterion, indicating that each construct is empirically distinct and capable of measuring its intended concept without substantial overlap with other variables. Therefore, the discriminant validity of the measurement model is considered satisfactory. These findings support the theoretical argument that emotional regulation develops through the interaction of several interrelated psychological factors, yet each retains a specific function in the process of self-regulation. Thus, emotional regulation, self-control, self-esteem, and self-compassion can be understood as constructs that are distinct both conceptually and statistically.

The reliability test of the research variables aimed to evaluate the reliability of each variable. A variable can be considered reliable if it has a CAV and composite reliability above 0.7 (Hair et al., 2021). The results of the reliability test of the research variables can be seen in Table 5.

Table 5 Reliability Test Results

	Cronbach's Alpha Value (CAV)	rho_A	Composite Reliability
Regulasi Emosi (RE)	.990	0.990	0.992
Self-Control (SC)	.972	0.992	.989
Self-Compassion (SCOMP)	.986	0.986	.978
Self-Esteem (SE)	.987	0.987	.998

The reliability test results presented in Table 5 indicate that all research variables demonstrate excellent internal consistency. Emotional regulation obtained a Cronbach's alpha value of 0.990, rho_A of 0.990, and composite reliability of 0.992. Self-control showed reliability coefficients of 0.972, 0.992, and 0.989, respectively. Self-compassion demonstrated Cronbach's alpha, rho_A, and composite reliability values of 0.986, 0.986, and 0.978, while self-esteem obtained values of 0.987, 0.987, and 0.998, respectively. Since all Cronbach's alpha, rho_A, and composite reliability values exceed the recommended threshold of 0.70, all constructs are considered highly reliable and demonstrate strong internal consistency. These findings confirm that the measurement model possesses adequate psychometric robustness to support further structural model evaluation and hypothesis testing.

High reliability indicates that the research instrument possesses adequate measurement stability, ensuring that the analysis results can be trusted as a representation of the respondents' psychological state. This reinforces the quality of the research model and supports the validity of the resulting inferences.

The Structural model evaluation shows that the constructs of self-control, self-esteem, and self-compassion simultaneously possess adequate predictive power regarding emotional regulation, while self-control and self-esteem demonstrate very strong predictive power regarding self-compassion, as shown in Table 6.

Table 6 Coefficient of Determination (R^2) Results

	R-Square	Adjusted R-Square
Emotional Regulation (ER)	0.472	0.470
Self-Compassion (SCOMP)	0.918	0.918

The coefficient of determination results indicate that the structural model has satisfactory explanatory power. Emotional regulation obtained an R-square value of 0.472 and an adjusted R-square of 0.470, indicating that self-control, self-esteem, and self-compassion jointly explain 47.2% of the variance in emotional regulation, while the remaining 52.8% is influenced by other variables outside the model. This suggests a moderate predictive accuracy of the model in explaining emotional regulation. Meanwhile, self-compassion demonstrated an R-square and adjusted R-square value of 0.918, indicating that self-control and self-esteem explain 91.8% of the variance in self-compassion. This reflects substantial predictive accuracy and confirms that self-control and self-esteem are highly influential predictors of self-compassion. These findings suggest that the proposed structural model provides strong empirical support for understanding the psychological mechanisms underlying emotional regulation among adolescents. These findings indicate that self-compassion is a central construct that mediates the influence of cognitive factors on emotional regulation ability in adolescents.

The results of the hypothesis testing indicate that all relationships between variables are statistically significant. The hypothesis is accepted if $t > 1.96$ and $\rho < 0.05$ (Hair et al., 2021). The results of the testing using the bootstrapping method can be seen in Table 7 and Table 8.

Table 7 Direct and Indirect Hypothesis Testing Results

Direct Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	ρ values	Hypothesis Result
Self Compassion → Emotional Regulation	0.253	0.255	0.090	2.794	0.005	Hypothesis 1 Accepted
Self Control → Emotional Regulation	0.504	0.504	0.024	21.279	0.000	Hypothesis 2 Accepted
Self Control → Self Compassion	0.690	0.690	0.016	43.391	0.000	Hypothesis 3 Accepted
Self Esteem → Emotional Regulation	0.478	0.478	0.024	20.151	0.000	Hypothesis 4 Accepted
Self Esteem → Self Compassion	0.688	0.688	0.015	45.237	0.000	Hypothesis 5 Accepted
Indirect Hypothesis						
Self Control → Self Compassion → Emotional Regulation	0.174	0.176	0.063	2.787	0.005	Hypothesis 6 Accepted
Self Esteem → Self Compassion → Emotional Regulation	0.174	0.175	0.062	2.797	0.005	Hypothesis 7 Accepted

Table 8 Simultaneous Hypothesis Testing Results

Variable	R-Square	Adjusted R-Square	Hypothesis Result
Self control, Self Esteem, Self Compassion → Emotional Regulation	0.472	0.472	Hypothesis H8 Accepted

The hypothesis testing results confirm that all proposed direct and indirect relationships are statistically significant. Self-compassion has a positive and significant effect on emotional regulation ($\beta = 0.253$, $t = 2.794$, $p = 0.005$), indicating that adolescents with higher self-compassion tend to demonstrate better emotional regulation abilities. Self-control shows a strong positive influence on emotional regulation ($\beta = 0.504$, $t = 21.279$, $p < 0.001$) and self-compassion ($\beta = 0.690$, $t = 43.391$, $p < 0.001$), suggesting that greater behavioral control contributes substantially to adaptive emotional functioning and compassionate self-

awareness. Similarly, self-esteem significantly affects emotional regulation ($\beta = 0.478$, $t = 20.151$, $p < 0.001$) and self-compassion ($\beta = 0.688$, $t = 45.237$, $p < 0.001$), demonstrating that positive self-evaluation strengthens emotional resilience and self-directed compassion.

Furthermore, the indirect effect results indicate that self-compassion significantly mediates the relationship between self-control and emotional regulation ($\beta = 0.174$, $t = 2.787$, $p = 0.005$) as well as between self-esteem and emotional regulation ($\beta = 0.174$, $t = 2.797$, $p = 0.005$). These findings confirm that self-compassion functions as an important psychological pathway through which cognitive self-regulatory capacities influence emotional regulation outcomes. In addition, the simultaneous hypothesis test demonstrates that self-control, self-esteem, and self-compassion collectively explain emotional regulation with substantial explanatory power ($R^2 = 0.472$), confirming the robustness of the proposed structural model.

Discussion

The results of the study indicate that all hypotheses were accepted, confirming the existence of significant relationships among the variables and demonstrating that adolescents' emotional regulation is the result of the simultaneous interaction of various psychological factors. Theoretically, these findings align with process-based models of emotion regulation, which view emotion regulation as a dynamic sequence ranging from situation selection to the modulation of emotional responses (Gross, 2015), as well as appraisal theory, which emphasizes the role of cognitive evaluation in the formation of emotions (Lazarus, 1991). Empirical support also indicates that emotional regulation develops from the interaction between executive functions and the affective system, where the coordination of both determines the effectiveness of the regulation strategies employed (McRae & Gross, 2020; Ford et al., 2022). During adolescence, the integration of cognitive and affective aspects is still in the maturation stage, so emotional regulation tends to be fluctuating yet continues to develop adaptively (Silvers, 2022; Ahmed et al., 2023). Thus, emotional regulation can be understood as a multidimensional system influenced by the interaction of various psychological factors.

Specifically, self-control, self-esteem, and self-compassion have been shown to contribute to emotional regulation. Self-control plays a role in inhibiting impulses and directing responses adaptively (Tangney et al., 2004), while self-esteem provides an evaluative foundation in the form of positive self-evaluation that supports emotional stability (Coopersmith, 1967). Meanwhile, self-compassion functions as an affective mechanism that allows individuals to accept negative experiences without excessive self-criticism (Neff, 2003). These findings reinforce research results indicating that emotional regulation is influenced by a combination of self-control factors and self-acceptance processes (Retnoningtias & Dewi, 2025), while also confirming that emotional regulation depends not only on behavioral control but also on self-evaluation and self-acceptance processes.

Furthermore, the main findings of this study indicate that the influence of self-control on emotional regulation is indirect, mediated by self-compassion. This suggests that self-control does not automatically lead to optimal emotional regulation but operates through internal processes of self-acceptance and self-understanding. From a process-based perspective on emotional regulation, self-control can be understood as a cognitive foundation that enables individuals to engage in adaptive self-reflection, which then develops into self-compassion. Thus, the ability to control impulses creates space for the development of a non-judgmental attitude toward oneself, which ultimately enhances the quality of emotional regulation

The findings of this study indicate that the role of self-control in emotional regulation is not always direct but involves more complex internal mechanisms. These findings differ from several previous studies that positioned self-control as a direct predictor of emotional regulation (Tangney et al., 2004; Baumeister et al., 2007; Posner & Rothbart, 2006; Heatherton & Baumeister, 1996; Hasmarlin & Hirmaningsih, 2019). This difference indicates

that self-regulation mechanisms in adolescents are more complex and not always linear. In a developmental context, self-control can be positioned as a prerequisite that supports the development of self-compassion, particularly in adolescents who are still in the stage of executive function maturation (Steinberg, 2010; Zelazo & Carlson, 2012). These findings are also consistent with research showing that self-compassion plays a crucial role in helping individuals manage emotions adaptively (Neff, 2003; Neff & Germer, 2013; Yarnell & Neff, 2013; Asselmann et al., 2024). However, these studies generally position self-compassion as a factor that directly influences emotional regulation, thus reflecting a functional role rather than a specific mediating role in the relationship between psychological variables. Therefore, this study contributes by demonstrating that self-compassion also functions as a mediating mechanism in emotional regulation

Descriptive analysis indicates that adolescents' emotional regulation in Padang City falls into the moderate category, suggesting that their emotional management skills have developed but are not yet optimal. This is shown in Table 9.

Table 9 Descriptive statistics for each variable

Variable	Mean	SD (±)	Category
Self-control	3.00	±1.22	Moderate
Self-Compassion	3.00	±1.18	Moderate
Self-Esteem	3.00	±1.21	Moderate
Emotional Regulation	3.00	±1.20	Moderate

This condition reflects a transitional phase of development, in which adolescents have acquired basic abilities to control their emotional responses but are not yet able to apply them consistently across various situations (Mayer & Salovey, 1997; Gross, 2015). This phenomenon aligns with developmental perspectives emphasizing that executive functions and cognitive control systems are still maturing, resulting in emotional regulation that tends to be fluctuating (Somerville, 2020; Galván, 2020). Thus, the moderate category does not indicate a weakness but rather reflects an ongoing developmental process.

The finding of moderate emotional regulation among adolescents from intact families highlights a paradox that challenges common assumptions in the developmental literature. Historically, family intactness has often been positioned as the primary protective factor in individual emotional development. However, the findings of this study indicate that structural family intactness does not automatically guarantee optimal emotional regulation. This reinforces the view that the quality of emotional relationships, communication patterns, and the psychological climate within the family play a more decisive role than the mere presence of both parents under one roof. In other words, a structurally intact family does not necessarily provide a supportive emotional environment for the development of adolescents' emotional regulation, especially if it is not accompanied by warm, responsive, and open interactions regarding emotional expression.

Other findings indicate that moderate levels of emotional regulation are still observed among adolescents from relatively intact family backgrounds. This suggests that family intactness does not automatically guarantee optimal emotional regulation. Within the frameworks of developmental ecology theory (Bronfenbrenner, 1979) and attachment theory (Bowlby, 1988), the family does indeed serve as a protective factor, but its influence is not deterministic. Research indicates that the quality of emotional interactions and parenting styles has a greater influence than the family structure itself (Morris et al., 2007; Yap et al., 2014). Furthermore, the development of adolescents' emotional regulation is more influenced by intrapersonal factors such as self-control and cognitive processes than by family structural variables (Gross, 2015; Zimmer-Gembeck & Skinner, 2016). These findings highlight a gap between family structure and emotional regulation function, while reinforcing the dominance of internal psychological factors in explaining variations in adolescent emotional regulation.

Thus, this paradox can be explained as the result of an interaction between contextual and developmental factors, where family cohesion does not always correlate directly with optimal adolescent emotional regulation.

Overall, the novelty of this study lies in the development of an integrative model of emotional regulation that positions self-compassion as a mediator between self-control and emotional regulation in adolescents. This model demonstrates that emotional regulation is influenced not only by self-control abilities but also by self-acceptance mechanisms as an adaptive internal process. Furthermore, the findings regarding moderate emotional regulation among adolescents from intact families reinforce that internal psychological factors play a more dominant role than external structural factors. Therefore, this study provides a theoretical contribution by expanding process-based models of emotional regulation, as well as practical implications that psychological interventions for adolescents should focus on developing self-compassion as a key mechanism for improving the quality of emotional regulation.

Implications

The findings of this study provide both theoretical and practical implications for the development of adolescent psychology research, particularly in the context of emotion regulation. Theoretically, the results reinforce the understanding that adolescents' emotion regulation is influenced not only by self-control and self-esteem, but also by the individual's ability to treat themselves with acceptance and kindness through self-compassion. The mediating role of self-compassion indicates that self-directed compassion serves as an important psychological mechanism that bridges the relationship between internal personal factors and the capacity for effective emotion regulation. Authors should discuss the implications of the findings.

Practically, these findings suggest that interventions aimed at improving adolescents' emotion regulation should not focus solely on strengthening self-control or enhancing self-esteem, but should also emphasize the development of self-compassion. School counseling programs may incorporate activities designed to foster self-acceptance, mindfulness, and adaptive coping strategies for dealing with failure without excessive self-criticism. Such approaches are expected to help adolescents manage emotional challenges more adaptively.

Furthermore, the results may serve as a reference for educators, school counselors, and parents in creating supportive environments that promote adolescents' psychological well-being. Warm social support, empathetic communication, and opportunities for self-reflection can strengthen self-compassion, thereby enabling adolescents to regulate their emotions more effectively when facing developmental challenges

Limitations and future directions

This study has methodological limitations regarding the selection of the research location, which was based on institutional approval; therefore, generalizing the results to a population of adolescents with similar characteristics should be done with caution.

Conclusion

This study concludes that adolescents' emotional regulation is the result of the simultaneous interaction of various psychological factors, in which self-control, self-esteem, and self-compassion play significant roles, both directly and indirectly. Specifically, self-compassion was found to be a key mediating mechanism bridging the effects of self-control and self-esteem on emotional regulation, thereby confirming that the process of self-acceptance is an essential component of adaptive emotional regulation. These findings suggest that the mechanisms of emotional regulation in adolescents are complex and not entirely

linear, but rather involve dynamic internal processes. Furthermore, the finding of moderate emotional regulation among adolescents from intact families indicates a paradox between family structural integrity and optimal emotional regulation, underscoring that the quality of internal psychological factors is more dominant than external structural factors. Thus, this study contributes to the development of an integrative mediation-based model of emotional regulation and implies that psychological interventions for adolescents should focus on strengthening self-compassion as the primary mechanism for improving the quality of emotional regulation.

Acknowledgements

The authors would like to express their appreciation and gratitude to all parties who contributed to the implementation of this study. Special thanks are extended to the students of SMK N 2 Padang, SMK N 3 Padang, SMK N 5 Padang, SMK N 6 Padang support throughout the research process.

Author Contribution Statement

This research was conducted by the student author, including problem formulation, data collection, analysis, and manuscript writing. The supervisor provided academic guidance and critical review. AFA contributed as the main author and initiator in writing and completing this article. RH contributed as a supervising lecturer who guided the research process and ensured its academic quality.

References

Afthanorhan, W. M., et al. (2021). Evaluating discriminant validity in PLS-SEM. *Journal of Physics: Conference Series, 1874*, 012002. https://doi.org/10.1088/1742 6596/1874/1/012002

Ahmed, S. P., et al. (2023). Development of emotion regulation in adolescence. *Developmental Cognitive Neuroscience, 58*, 101166. https://doi.org/10.1016/j.dcn.2022.101166

Arifin, H. H., & Milla, M. N. (2020). Adaptasi dan properti psikometrik skala kontrol diri ringkas versi Indonesia. *Jurnal Psikologi Sosial*, *18*(2), 179-195. https://doi.org/10.7454/jps.2020.18

Aslan, S., & Demir, A. G. (2023). Testing the effects of social comparisons on interpersonal problems through the mediating roles of self-esteemand emotion regulation. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, 20*(3), 1289–1319. https://doi.org/10.33711/yyuefd.1367697

Asselmann, E., et al. (2024). Self-compassion *as a protective factor for mental health outcomes: A longitudinal study*. Journal of Affective Disorders.

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science, 16*(6), 351–355. https://doi.org/10.1111/j.1467-8721.2007.00534.x

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. Basic Books.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Branden, N. (1994). *The six pillars of self-esteem*. Bantam Books

Cai, R. Y., Love, A., Robinson, A., & Gibbs, V. (2023). The inter-relationship of emotion regulation, self-compassion, and mental health. *Autism in Adulthood*. https://doi.org/10.1089/aut.2022.0068

Chen, X., et al. (2024). Mediation analysis in psychological research. *Psychological Methods.*

Coopersmith, S. (1967). *The antecedents of self-esteem.* Freeman.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

De Ridder, D. T. D., et al. (2020). Taking stock of self-control. *Personality and Social Psychology Review, 24*(4), 291–316. https://doi.org/10.1177/1088868320917055

Duckworth, A. L., & Gross, J. J. (2020). Self-controland grit. *Current Directions in Psychological Science, 29*(1), 19–25. https://doi.org/10.1177/0963721419898369

Ericson, S. M., et al. (2023). Does emotion regulation mediate the relationship between self-compassionand subjective well-being? *Journal of Health Psychology*. https://doi.org/10.1177/13591053231209668

Ford, B. Q., Mauss, I. B., & Gruber, J. (2022). The science of emotion regulation: Current directions. *Current Opinion in Psychology, 43*, 1–6. https://doi.org/10.1016/j.copsyc.2021.06.001

Galván, A. (2020). Adolescent brain development and contextual influences: A decade in review. *Journal of Research on Adolescence,* 30(S1), 154–169. https://doi.org/10.1111/jora.12511

Ghozali, I. (2016). *Aplikasi analisis multivariate dengan program IBM SPSS*. Badan Penerbit Universitas Diponegoro.

Ghozali, I., & Latan, H. (2015). *Partial least squares: Konsep, teknik dan aplikasi menggunakan program SmartPLS 3.0*. Universitas Diponegoro.

Gilbert, P. (2010). Compassion focused therapy. *American Psychologist, 65*(6), 488–498. https://doi.org/10.1037/a0019306

Gross, J. J. (2007). *Emotion regulation: Conceptual and empirical foundations. Dalam J. J. Gross (Ed.),* Handbook of emotion regulation (pp. 3–24). Guilford Press.

Gross, J. J. (2015). Emotion regulation: Current status and future prospects.*Psychological Inquiry, 26*(1), 1–26. https://doi.org/10.1080/1047840X.2014.940781

Gross, J. J., & Ford, B. Q. (Eds.). (2024). *Handbook of emotion regulation* (3rd ed.). Guilford Press.

Hair, J. F., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Journal of Asia TEFL, 19*(1), 1–16. https://doi.org/10.18823/asiatefl.2022.19.1.1.1

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage Publication. https://doi.org/10.1007/978-3-030-80519-7

Hasanah, U., & Latifah, M. (2021). Pengaruh kontrol diri terhadap regulasi emosi pada remaja. *Jurnal Psikologi Pendidikan dan Perkembangan, 10*(1), 45–56.

Hasmarlin, H., & Hirmaningsih, H. (2019). Regulasi emosi pada remaja dan implikasinya terhadap kesehatan mental. *Jurnal Psikologi*, 15(2), 120–130.

Heatherton, T. F., & Baumeister, R. F. (1996). Self-regulation failure: Past, present, and future. *Psychological Inquiry,* 7(1), 90–98. https://doi.org/10.1207/s15327965pli0701_20

Himmerich, S. J., & Orcutt, H. K. (2021). Examining a brief self-compassionintervention for emotion regulation. *Psychological Trauma*. https://doi.org/10.1037/tra0001110

Kozubal, M., Szuster, A., & Wielgopolan, A. (2023). Emotional regulation strategies in daily life: The intensity of emotions and regulation choice. *Frontiers in Psychology, 14*, 1218694. https://doi.org/10.3389/fpsyg.2023.1218694

Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist, 46*(8), 819–834. https://doi.org/10.1037/0003-066X.46.8.819

Li, C., Fu, P., Wang, M., Xia, Y., Hu, C., Liu, M., Zhang, H., & Yang, Y. (2023). The role of self-esteemand emotion regulation in the associations between childhood trauma and mental health in adulthood: A moderated mediation model. *BMC Psychiatry, 23*, 241. https://doi.org/10.1186/s12888-023-04719-7

Mahmud, A. (2023). Emotion regulation as moderator of self-esteemon fear of missing out. *Psympathic: Jurnal Ilmiah Psikologi*. https://doi.org/10.15575/psy.v10i1.20489

Mayer, J. D., & Salovey, P. (1997). *What is emotional intelligence? In Emotional development and emotional intelligence*. Basic Books.

Moodie, C. A., Suri, G., Goerlitz, D. S., Mateen, M. A., Sheppes, G., McRae, K., ... & Gross, J. J. (2020). The neural bases of cognitive emotion regulation: The roles of strategy and intensity. *Cognitive, Affective, & Behavioral Neuroscience*, 20(2), 387-407.

Mharchelya et al. (2025). *ERSIV (Emotion Regulation Scale Indonesian Version).* LPPM Universitas Negeri Padang. Padang

Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16(2), 361–388.* https://doi.org/10.1111/j.1467-9507.2007.00389.x

Muarifah, A., Fauziah, M., Saputra, W. N. E., & Da Costa, A. (2019). Pengaruh regulasi emosi terhadap harga diri siswa sekolah menengah atas di Yogyakarta. *Jurnal Kajian Bimbingan dan Konseling, 4(3), 94–100.* https://doi.org/10.17977/um001v4i32019p094

Muntamah, B. S., Wulandari, P. Y., Suminar, D. R., Pratama, M. F., & Ulwiyyah. (2024). The role of self-esteemin predicting students' emotion regulation. *Psympathic: Jurnal Ilmiah Psikologi*. https://doi.org/10.15575/psy.v12i2.44457

Muris, P. (2023). Self-compassionand mental health in adolescents. *Journal of Child and Family Studies.*

Muris, P. (2023). Self-compassionand mental health in youth. *Clinical Child Psychology and Psychiatry*. https://doi.org/10.1177/13591045231156789

Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*(2), 85–101. https://doi.org/10.1080/15298860309032

Neff, K. D., & McGehee, P. (2010). Self-compassionand psychological resilience among adolescents and young adults. *Self and Identity, 9*(3), 225–240. https://doi.org/10.1080/15298860902979307

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful Self-compassionprogram. *Journal of Clinical Psychology,* 69(1), 28–44. https://doi.org/10.1002/jclp.21923

Orth, U., Robins, R. W., & Widaman, K. F. (2008). Life-span development of self-esteemand its effects on important life outcomes. *Journal of Personality and Social Psychology,* **95**(3), 645–658. https://doi.org/10.1037/0022-3514.95.3.645

Orth, U., & Robins, R. W. (2022). The development of self-esteem. *Annual Review of Psychology, 73*, 123–146. https://doi.org/10.1146/annurev-psych-020821-114026

Pan, W., Long, Y., Wang, H., & Yue, C. (2023). More proactive but less efficient: The effect of trait self-controlon emotion regulation and its neural mechanisms. *Behavioural Brain Research, 452*, 114567. https://doi.org/10.1016/j.bbr.2023.114567

Park, Y. W., & Gentzler, A. L. (2023). Parenting and courage: Exploring the mediating role of self-esteemand emotion regulation among adolescents. *Journal of Applied Developmental Psychology, 87*, 101558. https://doi.org/10.1016/j.appdev.2023.101558

Posner, M. I., & Rothbart, M. K. (2006). Developing mechanisms of self-regulation. *Trends in Cognitive Sciences, 10*(9), 444–451. https://doi.org/10.1016/j.tics.2006.07.006

Rahmi, A. S., Hariko, R., Nurfarhanah, & Febriani, R. D. (2025). Regulasi emosi sebagai faktor protektif dari stres akademik pada siswa. *Journal of Authentic Research, 4*(Special Issue), 945–955. https://doi.org/10.36312/jar.v4iSpecial%20Issue.3410

Retnoningtias, P., & Dewi, N. L. (2023). Hubungan antara kecerdasan emosional dengan prestasi belajar siswa SMP di Denpasar. *Jurnal Psikologi UAD,* 19(1), 45–54. https://journal.uad.ac.id/index.php/Psikologi/article/view/30262

Riswanto, A. (2019). Perkembangan psikologis remaja dalam konteks sosial budaya. *Jurnal Psikologi Indonesia*, 8(1), 45–56.

Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior, 17*(1), 72–82. https://doi.org/10.1016/j.avb.2011.09.00

Rokhmatika, N., & Muslikah, M. (2024). Pengembangan instrumen self-esteem coopersmith (Citra Diri). *Jurnal Literasi Indonesia*, *1*(1), 1-8.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

Seeram, E. (2019). An overview of correlational research. *Radiologic Technology, 91*(2), 176–179.

Silvers, J. A. (2022). Adolescence and emotion regulation. *Annual Review of Psychology, 73*, 1–25. https://doi.org/10.1146/annurev-psych-012420-105019

Somerville, L. H. (2020). Searching for signatures of brain maturity: What are we missing? *Neuron*, 104(4), 532–537. https://doi.org/10.1016/j.neuron.2019.10.003

Steinberg, L., & Lerner, R. M. (2004). *Handbook of adolescent psychology* (2nd ed.). Wiley.

Steinberg, L., & Lerner, R. M. (2004). The scientific study of adolescence: A brief history. *Journal of Early Adolescence, 24*(1), 45–54. https://doi.org/10.1177/0272431603260879

Steinberg, L. (2010). A dual systems model of adolescent risk-taking. *Developmental Psychobiology, 52*(3), 216–224. https://doi.org/10.1002/dev.20445

Sugianto, D., Suwartono, C., & Sutanto, S. H. (2020). Reliabilitas dan validitas self-compassion scale versi Bahasa Indonesia. *Jurnal Psikologi Ulayat*, *7*(2), 177-191. https://journal.ui.ac.id/index.php/jpu

Tammilehto, J., Flykt, M., Peltonen, K., Kuppens, P., Bosmans, G., & Lindblom, J. (2023). Roles of effortful control in adult daily emotion regulation. *Cognition and Emotion, 37*(4), 795–817. https://doi.org/10.1080/02699931.2023.2209711

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271–324. https://doi.org/10.1111/j.0022-3506.2004.00263.x

Tornquist, M., & Miles, E. (2023). Trait self-control and beliefs about the utility of emotions and emotion regulation in self-control performance. *Self and Identity, 22*(4), 639–668. https://doi.org/10.1080/15298868.2022.2146183

Troy, A. S., et al. (2022). Emotion regulation and mental health. *Annual Review of Clinical Psychology, 18*, 1–29. https://doi.org/10.1146/annurev-clinpsy-072220-021329

Unayah, N., & Sabarisman, M. (2015). Fenomena kenakalan remaja dan kriminalitas. *Sosio Informa, 1*(2), 121–140. https://doi.org/10.33007/inf.v1i2.142

UNICEF. (2024). *The State of the World's Children 2024.* https://www.unicef.org/reports/state-of-worlds-children-2024

Vidal, J., Ciudad-Fernández, V., & Navarrete, J. (2024). From self-criticism to self-compassion: Exploring the mediating role of emotion dysregulation. *Current Psychology*.https://doi.org/10.1007/s12144-024-06325-6

Werner, K. M., & Ford, B. Q. (2023). Self-control: An integrative framework. *Social and Personality Psychology Compass, 17*(5). https://doi.org/10.1111/spc3.12738

Wooten, W., Heyn, S., & Herringa, R. (2024). A comparison of reappraisal and self-compassionas an emotion regulation strategy in the context of maltreatment. *Child*

Abuse & Neglect. https://doi.org/10.1016/j.chiabu.2024.107063

Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2014). Parental factors associated with depression and anxiety in young people. *Journal of Affective Disorders, 156*, 82–91. https://doi.org/10.1016/j.jad.2013.11.007

Yarnell, L. M., & Neff, K. D. (2013). Self-compassion, interpersonal conflict resolutions, and well-being. *Self and Identity,* 12(2), 146–159. https://doi.org/10.1080/15298868.2011.649545

Zelazo, P. D., & Carlson, S. M. (2012). Hot and cool executive function in childhood and adolescence: Development and plasticity. *Child Development Perspectives*, 6(4), 354–360. https://doi.org/10.1111/j.1750-8606.2012.00246.x

Zimmer-Gembeck, M. J., & Skinner, E. A. (2016). The development of coping: Implications for psychopathology. *Annual Review of Clinical Psychology, 12*, 1–23. https://doi.org/10.1146/annurev-clinpsy-032814-112739