Academic Emotion Regulation among Lower Secondary School Students in Vietnam

[1*] Thao Tran-Nguyen-Phuong, [1] Thien-Vu Giang

[1] Ho Chi Minh City University of Education, Ho Chi Minh City, Viet Nam.

***Corresponding Author**

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ABSTRACT

Academic emotions shape adolescents' motivation, engagement, and well-being, yet how lower secondary students regulate learning-related emotions in Vietnam remains insufficiently understood. This study examined the current status of academic emotion regulation among 489 Vietnamese lower secondary school students (Grades 6-9) through a quantitative cross-sectional survey. Academic emotion regulation was measured using the Academic Emotion Regulation Questionnaire (AERQ), which assesses eight strategies: *avoiding situations*, *developing competences*, *redirecting attention*, *reappraisal*, *suppression*, *respiration*, *venting*, and *seeking social support*. Data were analyzed using descriptive statistics, Pearson correlations, independent-samples *t*-tests, and one-way ANOVA. Results showed an uneven pattern of strategy use. *Developing competences* was most frequently reported ($M = 3.83$, $SD = 0.68$), followed by *respiration*, *redirecting attention*, *seeking social support*, and *suppression*; *avoiding situations* ($M = 1.95$, $SD = 0.84$) and *venting* ($M = 2.03$, $SD = 0.97$) were least used. Correlation analysis indicated weak-to-moderate associations among strategies. Constructive and supportive strategies tended to co-occur, particularly *respiration* and *seeking social support* ($r = .420$, $p < .01$) and *developing competences* and *respiration* ($r = .410$, $p < .01$). *Avoiding situations* was positively associated with *venting* ($r = .336$, $p < .01$), suggesting a less adaptive response pattern. Gender differences were limited to *suppression*, with female students reporting higher scores than male students, $t(482.64) = 3.10$, $p = .002$. Grade-level differences emerged only for *avoiding situations*, $F(3, 485) = 5.55$, $p = .001$, with higher scores among Grades 8 and 9. These findings suggest that academic emotion regulation among Vietnamese lower secondary students is multidimensional and context-sensitive. School-based support should strengthen students' flexible use of adaptive strategies, especially during high-pressure transition years, rather than focusing only on controlling visible emotional expression.

Keywords: academic emotion regulation, emotion regulation strategies, lower secondary school students, gender differences, Vietnam

INTRODUCTION

Classrooms are emotionally rich environments in which students not only acquire knowledge but also continuously experience, interpret, and regulate the emotions that arise during learning. Research in educational psychology has shown that emotions may influence learning outcomes by shaping students' attention, cognitive resources, motivation, and engagement (Dewaele et al., 2019; Shao et al., 2020). Positive and negative emotions, however, do not operate through the same mechanisms. Negative emotions tend to narrow attentional scope and increase cognitive pressure, whereas positive emotions may broaden learning experiences and help students accumulate psychological resources for subsequent academic tasks (Bielak & Mystkowska-Wiertelak, 2020). The key issue, therefore, is not merely what emotions students experience in learning, but how they regulate these emotions in order to sustain their academic goals.

In this regard, academic emotion regulation has been recognized as an important capacity for students' school adjustment. Boekaerts (2011) conceptualizes academic emotion regulation as students' ability to use their emotions as a source of energy while also regulating aspects of emotional experience when such emotions interfere with the pursuit of important goals. Theoretically, this capacity can be understood through Lazarus and Folkman's (1984) coping model, as well as Gross's process model of emotion regulation, which emphasizes how individuals intervene in the generation and expression of emotions (Gross & John, 2003; Jacobs & Gross, 2014). Empirical evidence further suggests that emotion regulation strategies are associated with students' psychological well-being, motivation, classroom engagement, and risk of academic burnout (Kwon et al., 2017; Oram et al., 2017; Iuga & David, 2024). Nevertheless, the effectiveness of a given strategy is not absolute; rather, it depends on the type and intensity of emotion, as well as the specific learning context in which the strategy is used (De France & Hollenstein, 2022).

Internationally, research on academic emotion regulation has shifted from viewing emotions as peripheral factors to recognizing them as core components of learning and self-regulation. Studies show that students' emotions are deeply linked to their motivation, learning strategies, cognitive resources, and academic achievement (Pekrun et al., 2002). Recently, this field has expanded to explore the specific strategies students use, situational triggers, and individual differences in emotional coping (Martínez-López et al., 2021). The development of the Academic Emotion Regulation Questionnaire (AERQ) further reflects this trend, showing a growing interest in specific regulatory strategies within academic contexts rather than treating emotion regulation merely as a broad psychological trait (Burić et al., 2016).

This focus is highly relevant today, as social-emotional skills, including emotional control and stress resilience, are deemed important for academic success, well-being, and school engagement (OECD, 2024). In Vietnam, this aligns with the 2018 General Education Curriculum, which emphasizes autonomy and self-directed learning as core competencies. Simultaneously, recent reports highlight that Vietnamese adolescents face intense pressure from heavy workloads, high-stakes exams, and future expectations, all of which significantly impact their mental health (UNICEF, 2022). Therefore, investigating academic emotion regulation among lower secondary school students in Vietnam not only contributes empirical evidence to an emerging field but also provides practical value in helping students better recognize, manage, and apply their emotions during learning.

Studying academic emotion regulation among lower secondary school students is particularly important, as this developmental stage requires students to adapt to increasing academic demands, evaluative pressure, and more complex social relationships at school. In Vietnam, the 2018 General Education Curriculum also emphasizes learners' self-learning, self-regulation, and adaptive capacities (Ministry of Education and Training, 2018). However, existing Vietnamese studies have mainly examined emotion regulation as a general psychological capacity or in relation to students' social-emotional health, while academic emotion regulation, as a set of strategies through which students manage emotions arising directly from learning activities, has received insufficient empirical attention (Giang Thien Vu, 2021). To address this gap, the present study investigates the current status of academic emotion regulation among lower secondary school students in Vietnam. The findings are expected to provide empirical evidence for supporting students in recognizing, managing, and using emotions more adaptively in the learning process.

THEORETICAL FRAMEWORK

In this study, academic emotion regulation is approached as a conceptual construct in educational psychology, referring to the process through which students recognize, monitor, and regulate emotions arising during learning activities in order to meet task demands, personal goals, and classroom requirements. This understanding draws on the broader concept of emotion regulation proposed by Gross (1998, 2015), according to which individuals can influence which emotions they have, when these emotions occur, and how they experience and express them. Within educational contexts, emotion regulation should not be reduced to the suppression or control of emotions in a narrow sense. Rather, it is an adaptive process that enables learners to use emotions as a resource for learning. From Boekaerts's (2011) perspective, academic emotion regulation is not simply a matter of reducing negative emotions; rather, it involves students' ability to mobilize, manage, and reshape emotional experiences in ways that support the pursuit of meaningful academic goals.

However, it is necessary to distinguish clearly between academic emotion regulation and academic emotion regulation strategies. While the former refers to the broad theoretical construct capturing the overall process of managing emotions in learning, the latter encompasses the specific, concrete methods students employ to influence their emotions in particular situations. This distinction is crucial in empirical research: a broad psychological construct is rarely measured directly in its entirety; rather, it must be operationalized through these observable and measurable strategies.

This study is grounded in Gross's Process Model of Emotion Regulation. This model views emotion as a dynamic process that unfolds through several stages, including situation, attention, cognitive appraisal, and emotional response. Correspondingly, individuals may intervene in the emotion-generative process at different points through situation selection, situation modification, attentional deployment, cognitive change, and response modulation (Gross, 1998; Jacobs & Gross, 2014). This framework is particularly relevant to learning contexts, as students may regulate their emotions before, during, or after emotions arise, depending on the nature of the task, the intensity of the emotion, and their available personal resources.

Guided by this theoretical model, the present study utilizes the Academic Emotion Regulation Questionnaire (AERQ), developed by Burić, Sorić, and Penezić (2016), to examine the current status of academic emotion regulation among lower secondary school students. The AERQ is a multidimensional self-report instrument specifically designed for learning contexts. It measures the extent to which students use emotion regulation strategies in situations such as studying, listening to lectures, taking tests, or coping with academic difficulties. The version for secondary school students consists of 37 items distributed across eight subscales, corresponding to eight strategies: (1) avoiding situations, (2) developing competences, (3) redirecting attention, (4) reappraisal, (5) suppression, (6) respiration, (7) venting, and (8) seeking social support.

Because the AERQ is structured around eight distinct strategies, this study does not treat academic emotion regulation as a unitary competence represented by a single total score. Instead, the "current status of academic emotion regulation" in this article is understood more specifically as the current pattern of students' use of academic emotion regulation strategies, as reflected in the mean score of each AERQ subscale. A higher score on a given subscale indicates a stronger tendency to use the corresponding strategy in learning situations. This approach preserves the broader conceptual framing of the research variable while ensuring consistency between the theoretical construct, the measurement instrument, and the interpretation of results.

In the original validation study, the AERQ demonstrated a suitable eight-factor structure and acceptable internal consistency among secondary school students, with Cronbach's alpha coefficients for the subscales ranging from .63 to .85 (Burić et al., 2016). In the present study, the scale was translated, culturally adapted, and pilot-tested before being administered to Vietnamese lower secondary school students. The pilot results showed good internal consistency for the Vietnamese version of the AERQ, with Cronbach's alpha coefficients for the eight subscales ranging from .64 to .86. Therefore, the AERQ was considered appropriate for examining students' tendencies to use academic emotion regulation strategies in the Vietnamese lower secondary school context.

METHODOLOGY

Study design

This study employed a quantitative cross-sectional survey design to examine the patterns of academic emotion regulation among lower secondary school students in Vietnam. A cross-sectional design was considered appropriate because it allows data to be collected from a defined population at a single point in time, thereby enabling the description of students' regulatory tendencies, the examination of associations among variables, and the comparison of subgroups without manipulating the research context (Setia, 2016; Wang & Cheng, 2020). In this study, the design served three specific purposes: (1) to describe the current status of students' academic emotion regulation as reflected in their use of the eight AERQ strategies; (2) to examine the intercorrelations among the AERQ subscales; (3) to test whether the use of these strategies differed by gender and grade level. Given the non-experimental nature of this research and its reliance on self-report instruments, the ensuing findings are inherently descriptive and correlational, precluding any causal inferences.

Participants

Participants were recruited from five lower secondary schools located in a major urban area in southern Vietnam, using convenience sampling. The schools were selected because they met the research objectives, provided access to students in Grades 6 to 9, and granted permission for data collection. Although this sampling strategy enabled the study to reach a relatively large group of lower secondary students within the available time and institutional conditions, it was non-random; therefore, the findings should not be interpreted as statistically representative of all lower secondary school students in Vietnam.

Students were eligible to participate if they were currently enrolled in Grades 6 to 9, were able to read and respond to the questionnaire in Vietnamese, and voluntarily agreed to take part in the study with the required consent procedures for minors. Questionnaires with incomplete responses, uniform response patterns, or clear signs of careless responding were excluded during data screening.

The final valid sample consisted of 489 lower secondary school students (M_{age} = 13.23 years), with no missing data in the analyzed dataset. Of the total sample, 281 students were male (57.5%) and 208 were female (42.5%). Regarding grade level, 133 students were in Grade 6 (27.2%), 120 in Grade 7 (24.5%), 124 in Grade 8 (25.4%), and 112 in Grade 9 (22.9%). The sample therefore included students from all four lower secondary grade levels, allowing comparisons across both gender and grade groups (see Table 1).

Table 1. Participant characteristics

Characteristics		N	Percentage (%)
Gender	Female	208	42.5
	Male	281	57.5
Grade	6	133	27.2
	7	120	24.5
	8	124	25.4
	9	112	22.9
Total		**489**	**100**

The sample was obtained through a non-random approach from a limited number of schools and featured an unequal gender distribution, caution is warranted when generalizing these findings to the wider population of lower secondary school students in Vietnam.

Instrument

Academic emotion regulation was measured using the Academic Emotion Regulation Questionnaire (AERQ), developed by Burić, Sorić, and Penezić (2016). Designed specifically for educational contexts, this multidimensional self-report scale measures how students manage emotions triggered by learning situations such as studying, attending classes, taking exams, or dealing with poor academic outcomes.

The original secondary-school version of the AERQ contains 37 items grouped into eight distinct subscales. Participants rate each item on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). These eight subscales represent different modes of emotional coping. Specifically, the *avoiding situations* subscale (4 items) measures the tendency to evade stressful academic tasks. The *developing competences* subscale (5 items) reflects proactive efforts to prepare and organize study routines to reduce stress. The *redirecting attention* subscale (originally 6 items) evaluates the tendency to shift focus away from academic stressors. The *reappraisal* subscale (5 items) assesses how students cognitively reinterpret a threatening learning situation to make it more manageable. The *suppression* subscale (5 items) measures the tendency to hide outward emotional expressions. The *respiration* subscale (3 items) captures the use of deep breathing to lower physiological tension. The *venting* subscale (5 items) reflects the outward expression of unpleasant emotions. Finally, the *seeking social support* subscale (4 items) measures the tendency to share emotional difficulties and seek help from others.

Subscale scores were calculated by averaging their respective items, with higher mean scores indicating a stronger preference for that strategy. Importantly, an overall AERQ score was not computed. This aligns with the instrument's theoretical framework, which treats academic emotion regulation as a set of distinct strategies rather than a single unitary skill. This scoring approach also fits the primary aim of this study: to describe students' specific regulatory patterns across the eight AERQ domains.

Instrument adaptation and validity considerations

The original validation study of the AERQ supported an eight-factor structure and reported acceptable internal consistency for the subscales among secondary school students. For the present study, the AERQ was translated and culturally adapted into Vietnamese before formal data collection. This rigorous adaptation process involved independent forward translation, translation reconciliation, cognitive interviews with the target age group, pilot testing, post-pilot back-translation, and final revision. These steps were undertaken to ensure linguistic clarity, cultural appropriateness, and conceptual equivalence between the original and Vietnamese versions.

To verify comprehensibility, cognitive interviews were first conducted with a small group of lower secondary school students to confirm that the wording, instructions, and response format were age-appropriate. Subsequently, a pilot study involving 80 students from Grades 6 to 9 was conducted to evaluate the preliminary functioning of the Vietnamese AERQ. The pilot results demonstrated acceptable internal consistency across all eight subscales, with Cronbach's alpha coefficients ranging from .64 to .86. These findings confirmed that the translated version was sufficiently clear and reliable for deployment in the main survey

Reliability in the main study

Internal consistency was re-evaluated using the final sample of 489 students. Specifically, Cronbach's alpha and corrected item-total correlations were computed for each AERQ subscale. During this process, one item from the *redirecting attention* subscale was excluded due to a low corrected item-total correlation (.222). Its removal improved the subscale's Cronbach's alpha from .734 to .768, resulting in a refined 36-item instrument for the main analysis.

For the final AERQ subscales, Cronbach's alpha coefficients ranged from .713 to .875: *avoiding situations* (α = .850), *developing competences* (α = .713), *redirecting attention* (α = .768), *reappraisal* (α = .758), *suppression* (α = .726), *respiration* (α = .847), *venting* (α = .875), and *seeking social support* (α = .798). These values demonstrate adequate to robust internal reliability across all eight subscales in the current sample.

Data collection procedure

Data collection proceeded following formal approval from the participating schools. Prior to administration, students were thoroughly briefed on the study's purpose, the voluntary nature of their participation, the strict confidentiality of their responses, and their right to withdraw at any time. The questionnaire was then administered to students who met the inclusion criteria and provided informed consent. Upon completion, the collected responses were screened for missing data, coded, and entered into SPSS version 20.0 for statistical analysis.

Data analysis

Data were screened, coded, and analyzed using SPSS version 20.0. Descriptive statistics, including frequencies, percentages, means (*M*), and standard deviations (*SD*), were computed to summarize participant characteristics and students' use of the eight academic emotion regulation strategies. Because the AERQ is structured as a multidimensional instrument, scores were calculated separately for each subscale by averaging the items belonging to that subscale; thus, no total AERQ score was computed.

The internal consistency of the Vietnamese AERQ was examined using Cronbach's alpha and corrected item-total correlations. Items with low corrected item-total correlations were reviewed before final scoring. Pearson's correlation analysis was then conducted to examine the associations among the eight AERQ subscales. To assess gender differences in academic emotion regulation, independent-samples *t*-tests were performed. When Levene's

test indicated unequal variances, adjusted results based on the assumption of unequal variances were interpreted. Furthermore, one-way analysis of variance (ANOVA) was conducted to test grade-level differences. When a significant ANOVA result was detected, Tukey's HSD post-hoc test was applied to identify specific differences between grade groups. The level of statistical significance was set at $p < .05$.

Ethical considerations

This study received ethical approval from the Ethics Advisory Council for Research in Social Sciences and Humanities, Ho Chi Minh City University of Education (ECSH-2026-008; approved May 7, 2026). Participation was voluntary, and all participants were informed about the study purpose, confidentiality of data, and their right to withdraw from the study. Given that the participants were minors, informed consent procedures were strictly implemented in accordance with the approved ethical protocol.

RESULTS

Descriptive statistics of academic emotion regulation strategies

Descriptive statistics revealed that the sampled lower secondary school students exhibited varying levels of use across the different academic emotion regulation strategies. On a 5-point scale, mean scores ranged from 1.95 to 3.83. Among these, *developing competences* recorded the highest mean score ($M = 3.83$, $SD = 0.68$), followed by *respiration* ($M = 3.65$, $SD = 0.95$), *redirecting attention* ($M = 3.62$, $SD = 0.76$), *seeking social support* ($M = 3.56$, $SD = 0.90$), and *suppression* ($M = 3.50$, $SD = 0.78$). The use of *reappraisal* was reported at a moderate level ($M = 3.28$, $SD = 0.82$). Conversely, the least frequently employed strategies were *venting* ($M = 2.03$, $SD = 0.97$) and *avoiding situations* ($M = 1.95$, $SD = 0.84$).

Table 2. Descriptive statistics for lower secondary school students' academic emotion regulation

Academic emotion regulation strategies	N	*M*	*SD*	Ranking
Developing competences	489	3.83	0.68	1
Respiration	489	3.65	0.95	2
Redirecting attention	489	3.62	0.76	3
Seeking social support	489	3.56	0.90	4
Suppression	489	3.50	0.78	5
Reappraisal	489	3.28	0.82	6
Venting	489	2.03	0.97	7
Avoiding situations	489	1.95	0.84	8

As shown in Table 2, students predominantly relied on strategies related to academic preparation, physiological calming, and interpersonal support. In contrast, they reported much lower use of strategies involving withdrawal from academic situations or outward emotional discharge. These findings confirm that academic emotion regulation in this sample does not operate as a single, uniform skill. Rather, students exhibited a multidimensional profile, showing a clear preference for proactive and stabilizing coping mechanisms over avoidance-based behaviors.

Correlations among academic emotion regulation strategies

Pearson's correlation was used to examine how the eight AERQ subscales related to one another. As shown in Table 3, although several strategies were significantly correlated, most correlations were only weak to moderate in strength. The strongest positive correlation emerged between *respiration* and *seeking social support* ($r = .420$, $p < .01$), followed closely by *developing competences* and *respiration* ($r = .410$, $p < .01$). Other remarkable positive associations included *redirecting attention* and *reappraisal* ($r = .338$, $p < .01$), as well as *avoiding situations* and *venting* ($r = .336$, $p < .01$).

Table 3. Pearson's correlations among AERQ subscales

	AERQ1	AERQ2	AERQ3	AERQ4	AERQ5	AERQ6	AERQ7	AERQ8
AERQ1	-							
AERQ2	-.165**	-						
AERQ3	.197**	.152**	-					
AERQ4	.148**	.203**	.338**	-				
AERQ5	.036	.094*	.146**	.165**	-			
AERQ6	-.146**	.410**	.210**	.294**	.122**	-		
AERQ7	.336**	-.175**	.072	-.079	-.055	-.225**	-	
AERQ8	-.068	.313**	.248**	.254**	.009	.420**	-.110*	-

** $p < .05$. ** $p < .01$.*

Note. AERQ1 = *Avoiding situations*; AERQ2 = *Developing competences*; AERQ3 = *Redirecting attention*; AERQ4 = *Reappraisal*; AERQ5 = *Suppression*; AERQ6 = *Respiration*; AERQ7 = *Venting*; AERQ8 = *Seeking social support*.

A clearer pattern emerged when examining the direction of the correlations. Proactive and supportive strategies tended to be positively associated with one another. For example, *developing competences* was positively correlated with *respiration* ($r = .410$, $p < .01$), *seeking social support* ($r = .313$, $p < .01$), *reappraisal* ($r = .203$, $p < .01$), and *redirecting attention* ($r = .152$, $p < .01$). Similarly, *seeking social support* was positively associated with *respiration* ($r = .420$, $p < .01$), *reappraisal* ($r = .254$, $p < .01$), and *redirecting attention* ($r = .248$, $p < .01$).

In contrast, *avoiding situations* and *venting* were positively correlated with each other ($r = .336$, $p < .01$), suggesting a distinct pattern of less adaptive regulatory responses. These two strategies also showed negative associations with several constructive strategies. Specifically, *avoiding situations* was negatively correlated with *developing competences* ($r = -.165$, $p < .01$) and *respiration* ($r = -.146$, $p < .01$). *Venting* was negatively correlated with *developing competences* ($r = -.175$, $p < .01$), *respiration* ($r = -.225$, $p < .01$), and *seeking social support* ($r = -.110$, $p < .05$).

Finally, *suppression* showed only weak correlations with a limited number of strategies, including *developing competences* ($r = .094$, $p < .05$), *redirecting attention* ($r = .146$, $p < .01$), *reappraisal* ($r = .165$, $p < .01$), and *respiration* ($r = .122$, $p < .01$). Overall, these findings support the multidimensional nature of academic emotion regulation, confirming that different strategies are related but not interchangeable.

Gender differences in academic emotion regulation

Independent-samples *t*-tests were conducted to examine gender differences in the use of academic emotion regulation strategies. As shown in Table 4, a statistically significant gender difference was found only for *suppression*. Female students reported higher use of *suppression* ($M = 3.63$, $SD = 0.68$) than male students ($M = 3.41$, $SD = 0.83$). Because Levene's test indicated unequal variances for this comparison ($p = .023$), adjusted results not assuming equal variances were interpreted. The difference was statistically significant, $t(482.64) = 3.10$, $p = .002$.

Table 4. Gender differences in academic emotion regulation

Academic emotion regulation strategies	Gender	N	*M*	*SD*	*t*	*p*
Avoiding situations	Female	208	1.97	0.80	0.38	.702
	Male	281	1.94	0.87		
Developing competences	Female	208	3.86	0.59	0.69	.490
	Male	281	3.82	0.75		
Redirecting attention	Female	208	3.61	0.71	-0.24	.809
	Male	281	3.63	0.80		

Reappraisal	Female	208	3.29	0.78	0.35	.729
	Male	281	3.27	0.84		
Suppression	Female	208	3.63	0.68	3.10	.002
	Male	281	3.41	0.83		
Respiration	Female	208	3.69	0.86	0.82	.412
	Male	281	3.62	1.01		
Venting	Female	208	1.99	0.92	-0.77	.440
	Male	281	2.06	1.01		
Seeking social support	Female	208	3.57	0.89	0.35	.725
	Male	281	3.54	0.90		

Note. For the *suppression* and *respiration* strategies, Welch's adjusted *t*-tests (equal variances not assumed) are reported due to significant Levene's tests.

No statistically significant gender differences were found for the remaining seven strategies: *avoiding situations* ($p = .702$), *developing competences* ($p = .490$), *redirecting attention* ($p = .809$), *reappraisal* ($p = .729$), *respiration* ($p = .412$), *venting* ($p = .440$), and *seeking social support* ($p = .725$). These results suggest that male and female students exhibited broadly similar patterns of academic emotion regulation, with the only significant difference occurring in the tendency to suppress emotional expression.

School grade-level differences in academic emotion regulation

A one-way analysis of variance (ANOVA) was conducted to examine whether students' academic emotion regulation differed across grade levels (Grade 6, Grade 7, Grade 8, and Grade 9). As presented in Table 5, a statistically significant grade-level difference was found only for *avoiding situations*, $F(3, 485) = 5.55$, $p = .001$. Specifically, the mean scores for *avoiding situations* progressively increased across grade levels, from Grade 6 ($M = 1.78$, $SD = 0.76$) and Grade 7 ($M = 1.84$, $SD = 0.73$) to Grade 8 ($M = 2.06$, $SD = 0.89$) and Grade 9 ($M = 2.16$, $SD = 0.94$).

Table 5. School grade-level differences in academic emotion regulation

Academic emotion regulation strategies	**Grade 6**		**Grade 7**		**Grade 8**		**Grade 9**		***F***	***p***
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***		
Avoiding situations	1.78	0.76	1.84	0.73	2.06	0.89	2.16	0.94	5.55	.001
Developing competences	3.85	0.80	3.86	0.64	3.70	0.69	3.94	0.54	2.60	.052
Redirecting attention	3.60	0.85	3.56	0.74	3.61	0.77	3.74	0.66	1.22	.301
Reappraisal	3.26	0.81	3.20	0.91	3.23	0.78	3.43	0.73	1.77	.152
Suppression	3.55	0.82	3.52	0.80	3.48	0.76	3.46	0.73	0.37	.776
Respiration	3.62	1.13	3.62	0.93	3.65	0.86	3.73	0.82	0.38	.771
Venting	1.97	0.99	2.13	1.09	2.03	0.89	1.99	0.91	0.58	.632
Seeking social support	3.50	0.95	3.65	0.86	3.47	0.91	3.63	0.84	1.32	.266

Tukey's HSD post-hoc tests revealed that Grade 9 students scored significantly higher on *avoiding situations* than both Grade 6 students ($p = .003$) and Grade 7 students ($p = .018$). Additionally, Grade 8 students scored significantly higher than Grade 6 students ($p = .044$). No statistically significant differences across grade levels were found for *redirecting attention*, *reappraisal*, *suppression*, *respiration*, *venting*, or *seeking social support* ($p > .05$). Although *developing competences* approached statistical significance, the result did not reach the conventional threshold, $F(3, 485) = 2.60$, $p = .052$. Taken together, these findings indicate that grade level was not associated with broad changes across all academic emotion regulation strategies. Rather, the primary grade-related difference was concentrated in *avoiding situations*, with higher scores observed among students in the upper grades of lower secondary school.

DISCUSSION

Descriptive statistics for lower secondary school students' academic emotion regulation

Descriptive statistics showed that lower secondary school students did not use all emotion regulation strategies equally. Instead, they clearly favored certain strategies over others. *Developing competences* was the most frequently reported strategy, followed by *respiration*, *redirecting attention*, *seeking social support*, and *suppression*. In contrast, *venting* and *avoiding situations* were the least used. This pattern suggests that academic emotion regulation is not a single, uniform capacity. Instead, students dynamically choose different strategies based on academic demands, emotional intensity, and available personal and interpersonal resources.

The high mean score for *developing competences* indicates that many students tend to regulate negative academic emotions by strengthening their sense of control over learning tasks. When facing insecurity, anxiety, or pressure, they actively respond by revising lessons, practicing more, or organizing their study schedules. This tendency is theoretically meaningful because academic emotions are closely tied to students' appraisals of control and value in achievement settings (Pekrun et al., 2002). From a self-regulated learning perspective, effective learners do not merely manage behaviors; they actively coordinate goals, effort, strategies, and emotional states to navigate academic outcomes (Zimmerman, 2002). Therefore, the prominence of *developing competences* suggests that a large proportion of students use task-directed action as a primary mechanism to alleviate distress and restore mastery.

The frequent endorsement of *respiration*, *redirecting attention*, and *seeking social support* further demonstrates that students rely on both self-stabilizing and resource-seeking mechanisms. *Respiration* likely helps reduce physiological arousal during high-pressure situations such as examinations, oral presentations, or difficult classroom tasks. This aligns with recent evidence that structured breathing practices contribute significantly to stress and anxiety reduction when applied appropriately (Bentley et al., 2023; Fincham et al., 2023). Meanwhile, *seeking social support* shows that students do not regulate academic emotions solely through individual effort. Instead, they turn to interpersonal resources, including peers, teachers, and family members. This supports the view that adaptive help-seeking is a core component of self-regulated learning, requiring students to recognize their emotional thresholds and seek appropriate assistance to maintain engagement (Newman, 2002). Support from teachers and peers is also vital for academic motivation and a sense of school belonging during early adolescence (Kiefer et al., 2015).

Conversely, the notable score for *suppression* requires a cautious interpretation. In classroom contexts, suppression can help students maintain appropriate behavior, avoid conflict, and preserve order. In this sense, it should not be treated as entirely maladaptive. However, suppression primarily targets the outward expression of emotion rather than the underlying experience. If it becomes a habitual response without constructive strategies like reappraisal or problem-solving, students may appear calm while their emotional distress remains unresolved. Prior research cautions that relying too much on suppression often leads to poorer psychological adjustment (Chervonsky & Hunt, 2019; Zimmermann & Iwanski, 2014). Thus, emotional control highlights a dual role in school settings: it supports short-term behavioral appropriateness but does not guarantee deeper emotional processing.

Additionally, *reappraisal* was reported at a moderate level but ranked lower than several more direct behavioral strategies. This may be partially explained by the high cognitive demands of reappraisal. To successfully reframe an academic situation, students must cognitively reinterpret the meaning of failure, grades, mistakes, or classroom pressure. Such reflective capacity continues to develop during adolescence and is often harder to apply than immediate actions like studying harder, deep breathing, or seeking distraction. Developmental research suggests that coping and emotion regulation strategies become increasingly differentiated with age and experience, rather than emerging fully formed at the onset of adolescence (Skinner & Zimmer-Gembeck, 2007; Zimmermann & Iwanski, 2014). Accordingly, the lower ranking of *reappraisal* likely reflects the developmental stage of these lower secondary students, who are still consolidating more cognitively complex forms of emotion regulation.

Finally, the low scores for *venting* and *avoiding situations* present an encouraging trend. These strategies involve emotional outbursts or academic withdrawal, both of which damage learning engagement if used chronically.

Prior literature has established that avoidance and poorly regulated emotional expression are generally less adaptive for psychological adjustment than problem-solving or cognitive restructuring (Aldao et al., 2010; Compas et al., 2017). Nevertheless, this finding should be interpreted carefully due to the limitations of self-report data, as students may hide socially undesirable school behaviors, such as skipping class, withdrawing from tasks, or expressing anger toward others.

Overall, the descriptive results suggest that students in this study predominantly managed academic emotions through proactive and stabilizing strategies. However, the concurrent reliance on *suppression* and the lower positioning of *reappraisal* indicate that school-based support must move beyond encouraging students simply to "control" visible emotional reactions. More importantly, interventions should focus on providing students with the tools to identify their emotions, understand the root causes of academic distress, cognitively reframe difficult situations, and seek help in healthier ways.

Correlations patterns among lower secondary school students' academic emotion regulation strategies

The correlation results indicate that the eight academic emotion regulation strategies were related to one another, but the relationships were generally weak to moderate in magnitude. This finding supports the view that academic emotion regulation is a multidimensional construct. The strategies measured by the AERQ belong to the same broader domain of emotion regulation in learning, yet they remain conceptually and empirically distinct. This is consistent with the original structure of the AERQ, which was designed to assess separate regulatory strategies rather than a single general score (Burić et al., 2016).

A noticeable trend was the positive association among proactive, stabilizing, and support-oriented strategies. For example, *developing competences* was positively correlated with *respiration*, *seeking social support*, *reappraisal*, and *redirecting attention*. The strongest associations in this group occurred between *respiration* and *seeking social support*, as well as between *developing competences* and *respiration*. These results suggest that students who actively respond to academic stress by improving their preparation are also more likely to employ physiological calming strategies or seek interpersonal support. In other words, constructive academic emotion regulation does not rely on an isolated strategy; rather, it involves a flexible combination of behavioral, cognitive, physiological, and interpersonal responses. This cohesive configuration aligns with self-regulated learning perspectives, which emphasize that students manage learning not only through cognition and behavior, but also through motivation and affective regulation (Efklides, 2011; Pintrich, 2004).

In contrast, *avoiding situations* and *venting* were positively correlated with each other, while both showed negative associations with several more constructive strategies. This pattern highlights two contrasting approaches to emotional coping: an adaptive one based on active engagement and resource-seeking, versus a maladaptive one defined by withdrawal and dysregulated emotions. Such a finding is consistent with broader coping research, which shows that coping strategies often cluster into functional categories, including problem-focused coping, support-seeking, emotion-focused coping, and avoidance-oriented responses (Skinner et al., 2003). In academic contexts, students who rely more on avoidance or venting may be less inclined to engage in competence-building, physiological regulation, or appropriate help-seeking when facing learning-related stress.

However, these findings should not be interpreted as a rigid division between "good" and "bad" strategies. Contemporary emotion regulation research emphasizes that the adaptiveness of a strategy depends on context, goals, emotional intensity, and regulatory flexibility (Bonanno & Burton, 2013; Webb et al., 2012**)**. *Redirecting attention*, for instance, may be highly adaptive when emotions are overwhelmingly intense and students need temporary emotional relief, but it can become problematic if used as a means of academic task avoidance. Similarly, *suppression* may help students maintain classroom order and social appropriateness, yet it does not necessarily help them process the underlying emotional experience. The relatively limited and weak correlations involving *suppression* in this study further suggest that it occupies an ambivalent position rather than clearly belonging to either an adaptive or maladaptive group of strategies.

In general, the correlation findings show that lower secondary school students' academic emotion regulation is not a collection of unrelated behaviors, nor is it a single undifferentiated capacity. Instead, it operates as a structured system of strategies. Some students may combine preparation, calming, reappraisal, and support-

seeking to sustain academic engagement, whereas others may be more inclined toward avoidance and emotional discharge when facing academic pressure. From an educational perspective, this suggests that school-based interventions should not simply promote one "best" strategy. Rather, they should help students develop regulatory flexibility: the capacity to recognize academic emotions, evaluate the situation, and choose strategies that fit the specific demands of learning.

Gender differences in lower secondary school students' academic emotion regulation

Results showed no broad gender differences in how students regulated their academic emotions. Among the eight AERQ strategies, *suppression* was the only strategy that differed significantly by gender, with female students reporting higher scores than male students. No significant gender differences were found for *avoiding situations*, *developing competences*, *redirecting attention*, *reappraisal*, *respiration*, *venting*, or *seeking social support*. This pattern suggests that male and female students in the present sample did not rely on entirely different regulatory repertoires when dealing with academic emotions. Instead, the gender difference was concentrated specifically in the regulation of outward emotional expression.

The higher level of *suppression* among female students can be interpreted in relation to gendered emotion socialization and classroom norms. In many educational contexts, students are expected to regulate visible emotional responses to maintain discipline, respect teachers, and preserve classroom harmony. However, such expectations may operate differently for male and female students. In the Vietnamese context, influenced by Southeast Asian and Confucian values, traditional gender norms have often emphasized gentleness, emotional restraint, compliance, and relational harmony as desirable qualities for girls and young women (Saigon Children's Charity & MSD, 2023; Vu & Yamada, 2020). Within this normative environment, female students may be more likely to hide frustration, anger, disappointment, or resistance in academic situations to avoid being perceived as disrespectful, disruptive, or emotionally inappropriate.

This interpretation is also consistent with broader research on gender and emotional expression. Studies on emotion socialization suggest that girls are often encouraged to express emotions in socially acceptable and less confrontational ways, whereas boys may be granted more tolerance for overt expressions of anger or externalizing responses (Chaplin & Aldao, 2013; Chaplin, 2015). Similarly, a UNICEF (2022) report notes that adolescent females tend to experience more internalizing emotional issues like anxiety and depression, whereas males generally show higher rates of externalizing behavioral problems. In this sense, the higher *suppression* scores among Vietnamese female students should not be understood simply as an individual preference. Rather, they may reflect the interaction between adolescent emotional development, school expectations, and culturally embedded gender norms.

Nevertheless, this result does not imply that female students regulate their academic emotions "better" or "worse" than male students. From a practical point of view, *suppression* has clear immediate benefits: it helps students maintain appropriate classroom behavior, sidestep conflicts, and avoid disrupting lessons. At the same time, *suppression* primarily manages the outward display of emotion rather than the internal emotional experience. If it becomes a dominant strategy, students may appear calm while their underlying distress and emotional triggers remain unprocessed. Furthermore, emotion regulation research shows that using different coping styles does not equate to unequal outcomes. For example, studies on cognitive reappraisal reveal that males and females can manage negative emotions equally well, even if they rely on different neural pathways to get there (McRae et al., 2008).

The absence of gender differences across the other seven strategies also carries practical implications. It suggests that school-based emotion regulation support does not need to be designed as entirely separate programs for male and female students. Instead, interventions can be implemented at the whole-class or whole-school level, focusing on core regulatory skills such as recognizing emotions, reducing physiological arousal, reappraising academic difficulties, developing learning competence, and seeking appropriate support. At the same time, educators should remain sensitive to gendered nuances of emotional expression. Female students, in particular, may benefit from safe and non-judgmental opportunities to express academic distress rather than just concealing it. This perspective embraces the reality of adolescent development: emotional coping is not a fixed trait, but a flexible skill that adapts to different ages, contexts, and specific emotions (Zimmermann & Iwanski, 2014).

School grade-level differences in lower secondary school students' academic emotion regulation

The findings showed that grade-level differences in academic emotion regulation were limited rather than widespread. Among the eight AERQ strategies, *avoiding situations* was the only strategy that differed significantly across grade levels. Students in the upper lower-secondary grades, particularly Grades 8 and 9, reported higher use of avoiding situations than students in the lower grades. In contrast, no significant grade-level differences were found for *developing competences*, *redirecting attention*, *reappraisal*, *suppression*, *respiration*, *venting*, or *seeking social support*. This pattern suggests that grade level did not broadly reshape students' overall academic emotion regulation. Rather, its effect was concentrated in a specific avoidance-oriented response to academic emotion.

Because most strategies did not differ by grade level, students in this sample appeared to share a relatively stable pattern of coping with academic emotions across lower secondary school. This observation aligns with the developmental perspective that although the school environment significantly shapes adolescents' emotions, motivation, and learning behaviors, its influence does not necessarily appear as linear grade-by-grade differences across all coping mechanisms (Eccles & Roeser, 2011). In other words, moving up in grade level did not seem to alter students' overall regulatory repertoire, but it may have activated specific responses to increasing academic pressure.

The increase in *avoiding situations* among students in Grades 8 and 9 may be understood in relation to the changing academic demands of the lower secondary education. As students progress through school, they face more complex learning tasks, higher performance expectations, increased assessment pressure, and greater concern about future educational pathways. In the Vietnamese context, these pressures may become particularly salient in the later years of lower secondary education, when students prepare for important examinations and transition-related decisions. Recent evidence on Vietnamese adolescents has identified grades, examinations, extra tutoring, family expectations, and school workload as major sources of academic stress (Hong-Van Thi Dinh et al., 2021; Tran et al., 2024; UNICEF, 2022). Within this context, *avoiding situations* may emerge as a short-term attempt to reduce emotional discomfort when academic demands are perceived as overwhelming or difficult to control.

From an emotion regulation perspective, *avoiding situations* can provide immediate emotional relief by allowing students to distance themselves from stressful tasks, evaluative situations, or anticipated failure. However, repeated reliance on avoidance may also reduce opportunities for students to confront academic difficulties, seek help, strengthen learning competence, and develop more adaptive coping strategies. Developmental research suggests that coping and emotion regulation strategies are shaped not only by age, but also by the type of stressor, perceived controllability, available resources, and the fit between individual capacities and environmental demands (Zimmer-Gembeck & Skinner, 2011). Therefore, the higher use of *avoiding situations* among upper-grade students should be interpreted not simply as a maturational change, but as a possible response to intensified academic pressure during a critical school transition period.

At the same time, it is important not to overinterpret this result. The *avoiding situations* subscale in the AERQ reflects a tendency to avoid stressful academic situations as an emotion regulation strategy; it should not be directly equated with clinical school refusal or chronic absenteeism. Nevertheless, avoidance-oriented responses may still be educationally concerning if they become frequent or persistent. Prior research on school avoidance and absenteeism indicates that withdrawal from school-related situations can be associated with anxiety, adjustment difficulties, and reduced academic engagement (Kearney, 2008). In the present study, the relatively higher avoidance scores among Grades 8 and 9 therefore point to a group that may require closer attention from teachers, school counselors, and parents.

The absence of significant grade-level differences in the remaining seven strategies is also meaningful. It suggests that many components of students' academic emotion regulation may remain relatively stable across lower secondary grades, at least within the limits of the present cross-sectional data. Students across grade levels reported broadly comparable use of competence development, attentional redirection, reappraisal, suppression, respiration, venting, and social support. This finding implies that the later years of lower secondary school may

not require entirely different emotion regulation programs, but they may require stronger support in preventing avoidance-based coping under academic pressure.

Practically, these findings suggest that school-based support should pay particular attention to students in Grades 8 and 9, especially during examination periods and transition preparation. Educators can help reduce avoidance by strengthening students' sense of academic control, breaking difficult tasks into manageable steps, teaching time management and exam preparation skills, encouraging adaptive help-seeking, and identifying early signs of emotional exhaustion. Support should not frame avoidance simply as a disciplinary issue. Instead, it should be understood as a possible signal that students are experiencing academic demands as emotionally difficult or insufficiently manageable. Because the present study used a cross-sectional design, future longitudinal and qualitative research is needed to clarify whether avoidance increases within individuals over time and to identify the specific classroom, family, and psychological conditions that contribute to this pattern.

Finally, these results must be interpreted within the constraints of the study's design. The cross-sectional nature of the data captures group differences at a single time point; it cannot confirm a developmental pathway where individual students basically become more avoidant over time. Future research should employ longitudinal designs or employ qualitative interviews to exploring the deeper underlying themes of student experiences, to understand better the specific classroom conditions that drive students to abandon proactive engagement in favor of avoidance.

Limitations of the study

Several limitations should be considered when interpreting these findings. First, reliance on a convenience sample from a limited range of schools means the results cannot be broadly generalized to all lower secondary students in Vietnam. Second, the use of self-report questionnaires introduces potential social desirability bias, particularly regarding sensitive strategies like *avoiding situations*, *venting*, or *suppression*. Finally, the cross-sectional design captures only a snapshot in time; while it allows for descriptive, correlational, and group comparisons, it precludes causal conclusions about how academic emotion regulation evolves over time. Moving forward, future research should broaden the sample base and incorporate longitudinal or qualitative designs. Doing so would allow researchers to explore the deeper themes behind how students develop, select, and deploy these strategies across varying academic contexts.

CONCLUSION

This study focuses on clarifying the current practices of academic emotion regulation among lower secondary students in Vietnam, examined through specific behaviors across the eight strategies of the AERQ. The results show that academic emotion regulation in these students does not operate as a singular ability, but is instead expressed through various approaches. Notably, students tend to use proactive and self-stabilizing methods more often such as *developing competences*, *respiration*, *redirecting attention*, and *seeking social support*, while relying less on *avoiding situations* and *venting*. This shows that the majority of the sample leans toward a fairly adaptive pattern of emotion regulation, prioritizing their academic competence and maintaining emotional stability during the learning process.

Furthermore, the associations between the strategies reveal that academic emotion regulation is a multidimensional construct; the strategies are interrelated yet distinct. Proactive, learning-supportive strategies tend to cluster together, whereas *avoiding situations* and *venting* form a more maladaptive grouping. Regarding group differences, gender differences were exclusively observed in *suppression* (with females scoring higher), while grade-level differences were restricted to *avoiding situations* (with older students reporting higher usage). These findings highlight the need to interpret emotion regulation through the viewpoint of developmental contexts, school norms, and cultural-gender intersections.

Rationally, the study suggests that supporting adolescents should not only focus on "controlling" emotions. Instead, efforts should aim to cultivate a flexible set of strategies tailored to specific learning situations. Schools can focus on helping students identify and label their emotions, enhance their sense of academic control, and seek appropriate support, thereby reducing reliance on suppression or avoidance. In summary, these findings

provide foundational evidence on the characteristics of academic emotion regulation among Vietnamese lower secondary school students, serving as a basis for social-emotional learning (SEL) programs and school psychological support within the current educational landscape.

REFERENCES

1. Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review*, *30*(2), 217-237.
2. Bentley, T. G., D'Andrea-Penna, G., Rakic, M., Arce, N., LaFaille, M., Berman, R., ... & Sprimont, P. (2023). Breathing practices for stress and anxiety reduction: Conceptual framework of implementation guidelines based on a systematic review of the published literature. *Brain sciences*, *13*(12), 1612.
3. Bielak, J., & Mystkowska-Wiertelak, A. (2020). Investigating language learners' emotion-regulation strategies with the help of the vignette methodology. *System*, *90*, 102208.
4. Boekaerts, M. (2011). Emotions, emotion regulation, and self-regulation of learning: center for the study of learning and instruction, Leiden University, The Netherlands, and KU Leuven. In *Handbook of self-regulation of learning and performance* (pp. 422-439). Routledge.
5. Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on psychological science*, *8*(6), 591-612.
6. Burić, I., Sorić, I., & Penezić, Z. (2016). Emotion regulation in academic domain: Development and validation of the academic emotion regulation questionnaire (AERQ). *Personality and Individual Differences*, *96*, 138-147.
7. Chaplin, T. M. (2015). Gender and emotion expression: A developmental contextual perspective. *Emotion Review*, *7*(1), 14-21.
8. Chaplin, T. M., & Aldao, A. (2013). Gender differences in emotion expression in children: A meta-analytic review. *Psychological Bulletin, 139*(4), 735–765.
9. Chervonsky, E., & Hunt, C. (2019). Emotion regulation, mental health, and social wellbeing in a young adolescent sample: A concurrent and longitudinal investigation. *Emotion*, *19*(2), 270.
10. Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., ... & Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. *Psychological bulletin*, *143*(9), 939.
11. De France, K., & Hollenstein, T. (2022). Emotion Regulation Strategy Use and Success During Adolescence: Assessing the Role of Context. *Journal of Research on Adolescence*, *32*(2).
12. Dewaele, J. M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in psychology*, *10*, 2128.
13. Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of research on adolescence*, *21*(1), 225-241.
14. Efklides, A. (2011). Interactions of metacognition with motivation and affect in self-regulated learning: The MASRL model. *Educational psychologist*, *46*(1), 6-25.
15. Fincham, G. W., Strauss, C., Montero-Marin, J., & Cavanagh, K. (2023). Effect of breathwork on stress and mental health: A meta-analysis of randomised-controlled trials. *Scientific reports*, *13*(1), 432.
16. Giang Thien Vu (2021). The situation of emotional competence of Vietnamese adolescents accessed from the social and emotional health approach. Ho Chi Minh City University of Education Journal of Science, 18(7), 1200-1212.
17. Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, *2*(3), 271-299.
18. Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological inquiry*, *26*(1), 1-26.
19. Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of personality and social psychology*, *85*(2), 348.
20. Hong-Van Thi Dinh, L. H., Do, T., & Phan, M. H. T. (2021). School factors causing Vietnamese adolescents' anxiety in secondary schools. *PSYCHOLOGY AND EDUCATION*, *58*(1), 883-894.

21. Iuga, I. A., & David, O. A. (2024). Emotion Regulation and Academic Burnout Among Youth: a Quantitative Meta-analysis. *Educational Psychology Review*, *36*(3).
22. Jacobs, S. E., & Gross, J. J. (2014). Emotion regulation in education: Conceptual foundations, current applications, and future directions. *International handbook of emotions in education*, 183-201.
23. Kearney, C. A. (2008). School absenteeism and school refusal behavior in youth: A contemporary review. *Clinical psychology review*, *28*(3), 451-471.
24. Kiefer, S. M., Alley, K. M., & Ellerbrock, C. R. (2015). Teacher and peer support for young adolescents' motivation, engagement, and school belonging. *Rmle Online*, *38*(8), 1-18.
25. Kwon, K., Hanrahan, A. R., & Kupzyk, K. A. (2017). Emotional expressivity and emotion regulation: Relation to academic functioning among elementary school children. *School Psychology Quarterly*, *32*(1).
26. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.
27. Martínez-López, Z., Villar, E., Castro, M., & Tinajero, C. (2021). Self-regulation of academic emotions: recent research and prospective view. *Anales de Psicología*, *37*(3), 529.
28. McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J., & Gross, J. J. (2008). Gender differences in emotion regulation: An fMRI study of cognitive reappraisal. *Group processes & intergroup relations*, *11*(2), 143-162.
29. Ministry of Education and Training. (2018). *Thông tư số 32/2018/TT-BGDĐT ban hành Chương trình giáo dục phổ thông* [Circular No. 32/2018/TT-BGDDT promulgating the General Education Curriculum]. Hanoi, Vietnam.
30. Newman, R. S. (2002). How self-regulated learners cope with academic difficulty: The role of adaptive help seeking. *Theory into practice*, *41*(2), 132-138.
31. OECD (2024), *Social and Emotional Skills for Better Lives: Findings from the OECD Survey on Social and Emotional Skills 2023*, OECD Publishing, Paris. https://doi.org/10.1787/35ca7b7c-en
32. Oram, R., Ryan, J., Rogers, M., & Heath, N. (2017). Emotion regulation and academic perceptions in adolescence. *Emotional and Behavioural Difficulties*, *22*(2).
33. Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational psychologist*, *37*(2), 91-105.
34. Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational psychology review*, *16*(4), 385-407.
35. Saigon Children's Charity CIO, & Management and Sustainable Development Institute (MSD). (2023). *PowHERful: Education - The gender-based challenges faced by girls in Vietnam*.
36. Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian journal of dermatology*, *61*(3), 261-264.
37. Shao, K., Nicholson, L. J., Kutuk, G., & Lei, F. (2020). Emotions and instructed language learning: Proposing a second language emotions and positive psychology model. *Frontiers in psychology*, *11*, 2142.
38. Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. *Psychological bulletin*, *129*(2), 216.
39. Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annu. Rev. Psychol.*, *58*(1), 119-144.
40. Tran, T. V., Nguyen, H. T. L., Tran, X. M. T., Tashiro, Y., Seino, K., Van Vo, T., & Nakamura, K. (2024). Academic stress among students in Vietnam: a three-year longitudinal study on the impact of family, lifestyle, and academic factors. *Journal of Rural Medicine*, *19*(4), 279-290.
41. UNICEF Viet Nam. (2022). *Comprehensive study on school-related factors impacting mental health and well-being of adolescent boys and girls in Viet Nam*. UNICEF. https://www.unicef.org/vietnam/reports/study-school-related-factors-impacting-mental-health-and-well-being-adolescents-viet-nam.
42. Vu, T. M., & Yamada, H. (2020). The legacy of Confucianism in gender inequality in Vietnam.
43. Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*, *158*(1), S65-S71.

44. Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: a meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological bulletin*, *138*(4), 775.
45. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, *41*(2), 64-70.
46. Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). The development of coping across childhood and adolescence: An integrative review and critique of research. *International journal of behavioral development*, *35*(1), 1-17.
47. Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International journal of behavioral development*, *38*(2), 182-194.