DEVELOPING COGNITIVE AND EMOTION REGULATION COMPETENCIES IN LOWER SECONDARY SCHOOL STUDENTS FROM THE PERSPECTIVE OF DEVELOPMENTAL PSYCHOLOGY

TRAN KIEU DUNG*, NGUYEN BA PHUONG BAC**, *tkdung@iemh.edu.vn*

* Institute of Education Management in Ho Chi Minh City

** High School for the Gifted, Ho Chi Minh City National University.

INFORMATION	ABSTRACT
	This article highlights the pivotal role of developmental psychology in enhancing cognitive competency and emotional regulation among secondary school students - two core competencies within the Social and Emotional Learning (SEL) framework. Based on theoretical analysis and a survey of 350 students in Thu Duc, the study reveals that students at this age often struggle with identifying, expressing and managing emotions, while emotional education in schools remains unsystematic and disconnected from age-specific psychological traits. Using competency-based and developmental approaches, the paper proposes several school-level management solutions to improve emotional education. These include integrating SEL into the formal curriculum, enhancing teacher capacity, strengthening the roles of school administrators and fostering collaboration with families and the community to create a holistic support system.

1. Introduction

In the current context of general Education reform in Vietnam, the development of emotional regulation competencies is considered a fundamental component in shaping students' personalities and promoting their holistic development-particularly at the lower secondary school level. During this stage, students undergo significant physiological and psychological changes, making them more prone to emotional instability, which in turn affects their behavior and academic performance. Within the framework of social and Emotional Learning (SEL), cognitive and emotional regulation are identified as two core competencies that play a pivotal role in fostering students' personal and social development.

The development of these competencies must be grounded in scientific principles, among which developmental psychology offers a foundational theoretical framework. This discipline helps educators understand the developmental characteristics of students at different age levels, thereby enabling them to design appropriate and effective interventions. Applying developmental psychology in emotional Education not only enhances the relevance and efficacy of Educational programs but also provides Educational managers with a scientific basis for planning and organizing

school activities that meet the developmental needs of lower secondary students.

Rooted in practical Educational demands and the goal of comprehensive student development, this article aims to achieve two main objectives: (1) to clarify the role of developmental psychology in fostering cognitive competency and emotional regulation among lower secondary school students and (2) to analyze the current situation and propose several school-level management strategies to support this process in a systematic, sustainable and context-appropriate manner.

2. Research content

2.1. Research methodology

To conduct this study, the authors employed the method of documentary analysis, referencing and categorizing both primary and secondary sources. Information was analyzed and synthesized using a combination structural-systematic, historical-logical, competency-based and developmental approaches. These theoretical frameworks provided the basis for drawing conclusions relevant to the research problem. In addition, the study conducted a questionnaire survey involving 350 lower secondary school students (grades 6 to 9) from schools (BT, LQĐ, TVN, LT, HL) in Thu Duc during the 2024 - 2025 academic year. The survey focused on students' awareness and behaviors related to emotional regulation. It also assessed teachers' understanding off their capacity to support students' emotional development and examined the extent of school management involvement in providing emotional Education aligned with students' developmental characteristics.

2.2. Research results

General issues related to cognitive and emotional regulation competencies in lower secondary school students:

- Self-awareness, cognitive competency and emotional regulation

Self-awareness is the first and foundational competency among the five core domains of the Social and Emotional Learning (SEL) framework. According to the collaborative for academic, Social and Emotional Learning (Casel, 2020), self-awareness is defined as the ability to accurately recognize one's own emotions, thoughts and values, as well as the capacity to understand the connection between emotions and behavior. This competency helps students build self-confidence and develop a positive self-concept.

Self-awareness involves the accurate identification of one's emotions, thoughts and personal values, forming the foundation for making decisions that align with both internal and environmental contexts (Casel, 2020).

Cognitive competency refers to the intellectual skills required to process information, reason logically, solve problems and apply knowledge effectively in both academic and real-life situations (Oecd, 2005; Zins et al., 2004).

Emotional regulation refers to the ability to manage emotions in order to adapt to various situations. It includes skills such as controlling impulses, managing stress and maintaining intrinsic motivation (Goleman, 1995). Mayer and Salovey (1997) identify emotional regulation as one of the four key domains of emotional intelligence, defining it as the ability to monitor and regulate one's emotional responses, enhance positive emotions, mitigate negative ones and manage emotional expression to achieve social goals or influence others effectively.

According to Nguyen Ba Minh (2008) and Nguyen Thi Hai (2014), the ability to manage one's own emotions involves applying knowledge of emotional regulation techniques to identify, control and appropriately express emotions in order to maintain emotional balance during practical activities. Tran Trong Tuan and Nguyen Minh Huy (2015) further explain that emotional self-regulation includes accurate emotional

recognition, understanding others' emotions and regulating one's emotional responses to match specific situations.

These two competencies not only contribute to comprehensive personality development but also facilitate students' academic success, social relationship building and mental well-being in school settings (Zins & Elias, 2007).

In this study, the concepts of cognitive competency and emotional regulation among lower secondary school students are defined as the ability to consciously recognize, understand and reflect on one's emotions, thoughts and values, while also managing and adjusting emotional responses in learning, social and personal contexts in a constructive and age-appropriate manner. This includes: the ability to identify and name one's emotions; the capacity to reflect on the relationship between emotions, behaviors and outcomes; the ability to control impulses and adjust negative emotional reactions and the persistence and internal motivation necessary for learning and social engagement.

- Psychological development characteristics of lower secondary school students

Lower secondary school students (approximately aged 11-15) are in a critical stage of identity formation, characterized by rapid changes in physical, cognitive and emotional domains. According to Erikson (1968), this is the "identity vs. role confusion" stage, during which adolescents begin to form a sense of self. However, without proper guidance, they may experience uncertainty and confusion about their identity. Physiologically, students enter puberty, which brings about hormonal changes that directly impact emotional states (Steinberg, 2014). Cognitively, following The Psychology of the child of Piaget, J (1972), students are transitioning from concrete operational thinking to formal operational thinking. This shift allows for abstract reasoning, although such thinking may still lack depth and consistency. Vietnamese

Educational psychology literature also emphasizes that this stage is when students begin to develop a strong desire for self-affirmation and seek recognition and respect from adults, particularly teachers and peers (Nguyen Quang Uan, 2006). However, due to their limited life experience and emotional immaturity, students often act based on emotions, are easily influenced by peer pressure and may struggle with self-regulation. While moral awareness and idealism begin to take shape, these are often expressed in exaggerated or unrealistic ways. Moreover, the disparity in the development of physical, cognitive and emotional capacities may lead to internal conflicts. Without appropriate support and guidance from families, schools and society, students are at greater risk of expressing negative behaviors and experiencing psychological instability.

- Developmental psychology and its application in emotional education

For lower secondary school students, developmental psychology emphasizes the rapid and complex transformations in physical, emotional, cognitive and behavioral domains-factors that directly affect their cognitive competency and emotional regulation capacities. According to Casel (2020), effective development of Social and Emotional Learning competencies requires that educational programs be tailored to learners' developmental characteristics. In this context, developmental psychology functions as an analytical and predictive tool that helps educators understand: (1) at what age students can accurately identify and name their emotions; (2) the extent to which they are able to regulate emotional responses to social situations and (3) the appropriate timing to cultivate skills such as empathy, reflection and behavioral adjustment. Such insights are critical to ensuring the feasibility, developmental appropriateness and individualization of Emotional Education programs. Developmental psychology also provides structured developmental frameworks

for each SEL component, serving as a foundation for educators and school managers to design educational content that is responsive to the specific age, context and characteristics of students.

In Vietnam, the integration of developmental psychology into emotional education has been emphasized in The new general education curriculum (2018), particularly through experiential learning, school-based counseling and moral education. However, implementation remains limited due to insufficient training in developmental psychology for teachers. As a result, emotional education activities are often superficial and not truly aligned with students' psychological characteristics (Tran Thi Le Thu, 2010; Ministry of Education and Training, 2022).

Integrating these theoretical foundations not only helps explain students' psychological phenomena but also serves as a basis for designing context-specific education management strategies. Therefore, enhancing the application of developmental psychology in managing and designing emotional education activities has become an urgent necessity amid the broader movement toward comprehensive educational reform.

2.3. The current state of cognitive competency and emotional regulation competency development among lower secondary students from the perspective of developmental psychology

2.3.1. Emotional awareness and expression among lower secondary students

This study first examines the current state of emotional awareness and expression among lower secondary school students in Thu Duc. The results are presented in table 1 below:

Table 1. Survey results on emotional awareness and expression among lower secondary students in Thu Duc (n = 350)

Survey item	Percentage of students (%)	Mean score (M)	Standard deviation (SD)
Able to accurately name emotions such as joy, sadness, anger, anxiety, etc	42.6%	3.18	0.94
Often feel uncomfortable but cannot identify the cause	58.3%	–	–
Rarely share emotions with adults (teachers, parents, etc)	62.1%	2.74	–
Have experienced prolonged negative emotions (anger, sadness, loss of control)	66.9%	–	–
Increase in negative emotional expression in grades 8-9	Observed trend	–	–
Common reactions to negative emotions: silence or emotional outbursts	Empirical observation	–	–

70

The data from the 350 students surveyed reveal that their emotional awareness and regulation abilities remain limited. Only 42.6% of students reported being able to "accurately name emotions such as joy, sadness, anger and anxiety" (M = 3.18/5; SD = 0.94), while 58.3% admitted that they "often feel uncomfortable but are unsure why." Regarding emotional expression, 62.1% of students stated they rarely share emotions with adults (M = 2.74), indicating a tendency toward emotional avoidance or a lack of emotional vocabulary and communication skills. Notably, 66.9% of students reported having experienced extended negative emotional states such as anger, sadness or loss of control in learning or peer interactions. These negative emotions were more frequently observed among students in grades 8 and 9. However, most students did not know how to self-regulate and tended to either suppress their emotions or express them in uncontrolled outbursts. These findings highlight the urgent need to enhance emotional education programs that are tailored to students' developmental characteristics, with a particular focus on building cognitive competency and emotional regulation skills within the school environment.

In addition, the study also compared the differences in cognitive and emotional management scores by gender and grade level in table 2 as follows:

Table 2. Comparison of emotional competency by gender and grade level (n = 350)

Group	Sample size (n)	Mean score: Emotional identification	Mean score: Emotional sharing	% Experienced prolonged negative emotions
Male	172	3.02	2,61	71,5
Female	178	3.33	2,87	62,4
Grades 6-7	180	3.25	2,81	58,2
Grades 8-9	170	3.11	2,66	75,9

The analysis by gender indicates that female students demonstrate higher levels of emotional self-awareness and expression than male students. Specifically, females scored higher in both "emotional identification" (3.33 vs. 3.02) and "emotional sharing" (2.87 vs. 2.61). These results are consistent with previous research suggesting that adolescent girls tend to be more emotionally sensitive and expressive than boys (Goleman, 1995; Mayer & Salovey, 1997). However, male students reported a higher rate of experiencing prolonged negative emotions (71.5%), which points to a pressing need for targeted support in helping boys develop emotional expression and regulation skills.

When analyzed by grade level, students in grades 6-7 had higher mean scores on both "naming emotions" and "sharing emotions" than students in grades 8-9. However, the proportion of students in grades 8-9 who experienced persistent negative emotions (75.9%) was significantly higher than that of the 6-7 group

(58.2%). This suggests that as students grow older, they face more academic pressure, identity crisis and social conflicts, while their emotional regulation skills do not increase correspondingly. This is a clear demonstration of the importance of designing emotional education activities longitudinally (age-based development) instead of just organizing them in a scattered and unsystematic manner.

2.3.2. Emotional regulation competencies among lower secondary students in Thu Duc, Ho Chi Minh City

Table 3. Emotional regulation competencies among lower secondary students in Thu Duc (n = 350)

No.	Indicators of emotional regulation competency	Percentage of students (%)	Mean score (M)	Standard deviation (SD)
1	Able to stay calm when angry or stressed	36.9%	2.91	0.89
2	Able to self-soothe when sad (e.g., deep breathing, rest, positive thinking, etc)	41.2%	3.07	0.95
3	Habitually thinks before reacting emotionally	29.4%	2.73	0.82
4	Can regulate emotions when criticized or in conflict with peers	34.7%	2.86	0.91
5	Has been guided by teachers on emotional regulation strategies in class or homeroom activities	22.3%	2.41	0.97

The results presented in table 3 reveal that students' emotional regulation competencies are generally limited. Only 36.9% of students reported that they could "stay calm when angry or stressed" with a mean score of 2.91 out of 5. While 41.2% claimed they could calm themselves when feeling sad or anxious (M = 3.07), only 29.4% indicated that they typically "think before reacting emotionally" (M = 2.73), demonstrating a lack of reflective and preventive emotional strategies.

Notably, only 22.3% of students said they had been explicitly instructed by teachers on emotional regulation techniques during formal lessons or class meetings. This figure reflects a significant gap between students' needs and the emotional education support provided by schools. The relatively high standard deviations (ranging from 0.82 to 0.97) indicate substantial variation among individual students, further supporting the need for personalized approaches to emotional education rather thana one-size-fits-all solutions.

These findings are consistent with assertions by Goleman (1995) and Elias et al. (1997) that emotional self-regulation is not an innate ability but a competency that must be cultivated through structured and sustained social-emotional learning programs. This is particularly critical at the lower secondary level, where students are confronted with numerous psychological challenges and internal changes, yet often lack age-appropriate coping strategies.

2.4. Discussion and recommendations
2.4.1. Discussion

The synthesis of survey data from 350 lower secondary students in Thu Duc indicates that their cognitive competency and emotional regulation competencies remain underdeveloped. The proportion of students who are able to accurately identify their emotions is relatively low and their ability to share and regulate emotional behaviors is limited-particularly among older students and male students.

Interviews with some students from this group indicate that: "among older students, although they generally have a better ability to recognize their own emotions compared to younger students, many still experience difficulties in sharing and regulating their emotional behaviors. This is sometimes attributed to social pressures and expectations to "control emotions" or to demonstrate "maturity" as they grow older, which results in these students infrequently expressing their true feelings or occasionally struggling to manage their emotions effectively. Moreover, male students often face greater challenges than their female counterparts in recognizing, expressing, and regulating emotions. Social and cultural norms frequently encourage males to be strong and resilient, leading many male students to suppress their emotions or feel uncomfortable sharing them. Consequently, their capacity for emotional awareness and regulation tends to be more limited.

Negative emotional expressions such as prolonged sadness, emotional outbursts or social withdrawal occur frequently, while students often lack reflective thinking and self-regulation skills to respond appropriately.

In addition, many students have not yet formed the habit of emotional reflection consciously revisiting and evaluating their emotional experiences and behaviors. They also possess limited emotional vocabulary and often struggle to express their emotions in appropriate language. Some tend to avoid negative emotions by staying silent or withdrawing, while others express their emotions inappropriately in communication with peers or teachers. Moreover, in today's context, where students are increasingly influenced by social media and face heightened academic pressure, they are more susceptible to chronic stress and psychological tension, yet lack the internal tools to manage these challenges effectively. If left unaddressed, these issues may hinder their personal development, academic success and social relationships both inside and outside of school.

Meanwhile, emotional education activities in schools are often superficial, lacking systematic implementation and misaligned with students' developmental psychology. The low proportion of students receiving direct instruction in emotional regulation from teachers reveals a significant gap between students' psychological needs and the current state of implementation within schools.

The clear differences in emotional competency development across gender and grade levels highlight the need to design emotional education programs that are developmentally appropriate, age-progressive and grounded in principles of developmental psychology. Furthermore, it is essential to reposition the roles of schools-particularly homeroom teachers and educational administrators-as key agents responsible for organizing, guiding and coordinating emotional support activities for students in a systematic, consistentm and research-informed manner.

2.4.2. Proposed measures to improve cognitive and emotional management capacity for middle school students

First, emotional education should be integrated into the official curriculum and extracurricular activities. This can be achieved through the inclusion of emotional learning components in subject areas such as Literature,

Civic education, History and Experiential activities. It is recommended that teachers employ interactive methods such as case studies, role-playing, emotional diaries and student forums to help learners practice emotional reflection and conflict resolution skills.

Second, it is essential to strengthen teachers' capacity to support students' emotional development. This includes providing specialized training for both homeroom and subject teachers on adolescent developmental psychology, emotional recognition skills and strategies for handling school-based psychological issues. Teachers should also be equipped with observational tools and emotional assessment instruments to help identify early signs of emotional distress in students. Schools should foster peer collaboration among teachers-particularly those with backgrounds in educational psychology-to encourage the sharing of effective practices in emotional education.

Third, the role of school administrators in organizing and coordinating emotional education initiatives must be elevated. Schools should establish a support network that includes homeroom teachers, school counselors and parents, with clearly defined responsibilities and coordinated efforts to support students' emotional well-being.

Finally, families and communities should be mobilized to actively participate in students' emotional development. Schools should regularly organize parent workshops focused on understanding the developmental psychology of adolescents and effective techniques for emotional communication during puberty. Moreover, cultivating a culture of emotional safety and empathy in everyday environments-including schools, classrooms and families-should be encouraged. This involves promoting respectful communication, healthy emotional expression and constructive conflict resolution across all spheres of students' lives.

2.5. Conclusion

Cognitive competency and emotional regulation are essential competencies for lower secondary school students, particularly during a stage of life marked by profound psychological and physiological changes. The findings from the student survey conducted in Thu Duc reveal significant limitations in students' emotional competencies, while emotional education activities in schools are still insufficiently aligned with students' developmental characteristics.

Grounded in the principles of developmental psychology, this study proposes a set of practical and sustainable solutions-spanning educational management, curriculum design, teacher capacity building and school-family collaboration-that aim to enhance students' emotional development in a comprehensive manner. By addressing both individual and systemic factors, these recommendations contribute to the creation of emotionally supportive educational environments that empower students to better understand themselves, regulate their emotions and engage positively in academic and social contexts.

REFERENCES

Ministry of Education and Training. (2022). *Training materials for core lower secondary teachers - General Education Curriculum 2018*. Vietnam Education Publishing House.

CASEL. (2020). *What is SEL?* Collaborative for Academic, Social, and Emotional Learning. https://casel.org/what-is-sel/

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. ASCD.

Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). Basic Books.

Nguyen, Q. U. (2006). *Developmental psychology and Educational psychology*. Vietnam National University Publishing House.

OECD. (2005). *The definition and selection of key competencies: Executive summary*. Organisation for Economic Co-operation and Development.

Piaget, J. (1972). *The psychology of the child*. Basic Books.

Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.

Tran, T. L. T. (2010). *Developmental psychology*. Vietnam Education Publishing House.

Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: Promoting the development of all students. *Journal of Educational and Psychological Consultation, 17*(2-3), 233-255. https://doi.org/10.1080/10474410701413152

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004*). Building academic success on social and emotional learning: What does the research say*? Teachers College Press.