

# Journal of Social Science and Human Research Studies

Volume : 02 Issue : 07 July-2026

## Emotional Intelligence and Motivation Learning Strategies Among College Students in DMC College Foundation, Inc.: Basis for A Proposed Intervention Program

**Marjorie M. Rulog, MAEM**

Instructor; Dipolog Medical Center College Foundation, Inc., Dipolog City, Philippines

**Leo C. Naparota, PhD**

Dean, School of Criminal Justice Education and College of Arts and Sciences, Andres Bonifacio College, Inc., Dipolog City, Philippines

**Published Date: July 13, 2026****Article DOI: 10.65150/EP-jsshrs/V2E7/2026-19**

**ABSTRACT:** This study aimed to determine the relationship between the perceived level of emotional intelligence and the perceived level of motivational learning strategies among the DMC College Foundation Inc. college students during the school year 2025-2026 using a quantitative descriptive-correlational design. Data were analyzed using weighted mean, standard deviation, and Spearman Rank Order Correlation Coefficient (Spearman rho). Students' overall perceived emotional intelligence was rated high, with Assessment of My Own Emotion as the highest-rated dimension and Emotional Expression as the lowest, though still within the high category. Similarly, overall motivation learning strategies were rated high, with Intrinsic Goal Orientation and Self-Regulation of Effort as the strongest dimensions, while Assessment of Homework and Test Anxiety were comparatively weaker and rated moderate. A strong, positive, and significant relationship was found between emotional intelligence and motivation learning strategies. The findings suggest that higher emotional intelligence is associated with stronger motivational learning strategies, highlighting the need for targeted interventions to enhance students' emotional and academic development. Based on the findings, DMC College Foundation, Inc. would implement program- and year-level-targeted emotional intelligence and self-regulate learning interventions, strengthen support for homework and assessment routines through structured study planning and monitoring, and reduce test anxiety through counseling services, coping-skills training, and test-taking strategy workshops.

**KEYWORDS:** Emotional intelligence; motivational learning strategies; self-regulated learning; college students; DMCCFI, Philippines

### INTRODUCTION

Emotional intelligence (EI) emerged as significant in understanding how college students managed academic pressures, sustained motivation, and employed effective learning strategies. In higher education, where autonomy, collaboration, and sustained effort were increasingly required, EI played a critical role in helping students regulate emotions, maintain motivation, and apply self-regulated learning strategies such as goal setting, self-efficacy regulation, persistence, help-seeking, and self-monitoring (Quílez-Robres et al., 2023).

Globally, emotional intelligence is recognized as a key factor in students' engagement and performance. It enhances learners' ability to regulate emotions, maintain intrinsic motivation, and apply adaptive learning strategies (MacCann et al., 2020). Similarly, studies show that EI helps explain how students handle academic pressures, persist in difficult tasks, and engage in meaningful, goal-directed study behaviors. Recent research among university learners confirms that EI is significantly associated with academic functioning and related learning processes, highlighting the role of emotion-related skills in helping students cope with academic demands and stay engaged (Quílez-Robres et al., 2023). Likewise, contemporary higher education increasingly recognized that academic success and holistic student development were influenced not only by intellectual ability but also by non-cognitive factors. Among these, emotional intelligence and learning motivation consistently emerged as strong contributors to students' engagement, effective use of learning strategies, and overall academic performance (Nhi & Dao, 2025). Emotional intelligence, commonly defined as the capacity to recognize, understand, and regulate one's own emotions while empathizing with others, shaped how students responded to setbacks, collaborated with peers, and maintained focus on their goals. In higher education settings, this ability became especially important, as it influenced how individuals navigated academic challenges, adapted to new environments, and sustained their commitment to learning. Meanwhile, learning motivation referred to the driving force that helped determine to what extent the student could engage towards their academic goals. Together, these factors formed an important foundation for understanding how students succeeded and persisted in higher education (Tawakkal, 2025).

In the Philippine context, emotional intelligence was also identified as a significant factor associated with college students' academic performance and holistic development, suggesting that emotional competencies complemented cognitive abilities by helping learners maintain motivation and consistently employ effective learning strategies in challenging academic environments (Bance & Acopio, 2016). In Philippine

higher education, understanding emotional intelligence (EI) and motivational learning strategies was particularly important due to the increasing implementation of flexible, blended, and technology-supported learning modalities. Filipino college students often faced multiple academic and personal demands, including heavy coursework, financial pressures, family responsibilities, and the transition to independent learning. These challenges made emotional regulation and sustained motivation essential for academic success. Research suggested that emotional intelligence could support academic performance partly through self-regulatory processes such as monitoring learning progress, adjusting study approaches, and controlling learning behaviors, which were essential for maintaining consistent performance in college (Bordbar et al., 2025). Moreover, studies on self-regulated learning (SRL) indicated that strengthening motivational learning strategies significantly improved learning outcomes, especially in online/blended settings, underscoring the value of integrating strategic learning supports and motivational scaffolds into Philippine higher education programs and student-development initiatives (Ukaul et al., 2024).

Moreover, Emotional Intelligence (EI) was highly relevant to college students because it significantly influenced their capacity to manage academic, social, and personal challenges in higher education. Research across diverse contexts identified several mechanisms by which EI contributed to student success. EI predicted academic achievement by enabling students to regulate stress, maintain motivation, and persist through rigorous coursework. For example, a study of college freshmen in Italy found that EI was a strong predictor of academic success during the transition to higher education. Moreover, college students underwent a distinct developmental phase as they moved from adolescence to adulthood. EI supported effective emotional management during this period, facilitated the development of healthy relationships, and enhanced decision-making under pressure. It also promoted empathy and effective communication, which were essential for collaboration in group projects, leadership roles, and cross-cultural interactions. Additionally, EI reduced anxiety and burnout by helping students regulate their emotions and balance academic and personal responsibilities. It strengthened resilience, enabling students to recover from setbacks and sustain motivation (Alhur, 2025).

On the other hand, motivation learning strategies refer to the combination of students' desire to learn and their effective study strategies. These strategies include interest, confidence, goal setting, organization, time management, seeking help, effort regulation, and self-monitoring. In short, it refers to what drives students to learn and how they approach reaching their goals (Dayel, et.al, 2018). These strategies are closely related to self-regulated learning, where students take responsibility for their own learning by planning, monitoring, and evaluating their progress (Pintrich et al., 1991). Motivated students use cognitive and metacognitive strategies. They also manage resources by using their time effectively, asking for help, and creating a good study environment (Credé & Phillips, 2011). Motivation affects how students use learning strategies. When students believe in themselves, care about the task, and are interested in what they are learning, they are more likely to keep working, use deeper learning methods, and do better in school. In contrast, students with low motivation often struggle to stay engaged and consistent, which can hurt their grades (Cook et al., 2011). This highlights how motivation and learning strategies support academic success.

The relationship between Emotional Intelligence (EI) and motivation learning strategies is both theoretically and empirically plausible. Students with higher EI are generally better able to manage stress, maintain task focus, and recover from setbacks, leading to stronger motivation and more consistent use of effective learning strategies (Chang et al., 2022). Additionally, research further shows that emotionally intelligent students are more likely to use adaptive approaches to studying and learning (Sheikhbardsiri et al., 2020), while motivation can influence academic outcomes through mechanisms such as learning strategy regulation (e.g., regulation of motivation alongside cognition and behavior), indicating that strategy use can function as a pathway through which motivational processes shape performance (Kim et al., 2020).

Despite these findings, existing research often relies on cross-sectional designs and fails to examine contextual differences such as year level, program/department, sex, academic load, and clinical duty exposure that may strengthen or weaken the emotional intelligence–motivational strategy link. In the researcher's classroom experience at DMCCFI, noticeable differences in students' learning behaviors have been observed. Some students remain composed during quizzes, presentations, and skills demonstrations, recover quickly after setbacks, and maintain consistency in their study routines, often demonstrating effective emotion regulation, goal setting, and persistence. In contrast, other students appear easily overwhelmed by deadlines and performance demands, show reduced confidence, procrastinate, or disengage from learning tasks, manifesting weaker self-monitoring, help-seeking, and motivational control. These classroom observations suggest that students' emotional competencies may be closely tied to how they sustain motivation and apply strategies to manage learning demands, particularly in programs with heavier workloads and performance-based requirements. However, there is a notable lack of institutionally localized data within DMCCFI that can guide student support services, guidance programs, and instructional improvements aligned with the college's unique student profile. Therefore, the research gap centers on the scarcity of localized, strategy-specific, and program-sensitive evidence on the relationship between emotional intelligence and motivational learning strategies among DMCCFI college students, which this study aims to address.

## LITERATURE

### Emotional intelligence

Emotional intelligence (EI) was commonly described as a set of abilities and dispositions that help students recognize emotions, understand their meanings, and manage emotional responses in ways that support learning and relationships. In higher education, EI was often associated with stronger academic adjustment because it enhanced students' coping with pressured motivation and the regulation of responses and actions during demanding tasks and evaluations (MacCann et al., 2020). EI was also linked to how learners managed their studying, particularly through self-regulated learning processes such as planning, monitoring, and emotion regulation, which might have interfered with concentration and persistence, making EI a relevant factor in understanding students' learning experiences (Albani et al., 2022).

### Assessment of My Own Emotions

Assessment of one's own emotions (often described as emotional self-awareness) referred to an individual's ability to accurately notice, identify, and understand their feelings and the situations that triggered them, which helped guide appropriate responses and decisions in everyday and academic contexts. In the literature, emotional self-awareness was considered a foundational emotional competence skill because recognizing internal emotional states supported better self-management and more intentional behavior (Merlin et al., 2024). Among university students, this

License: This is an open access article under the CC BY 4.0 license: <https://creativecommons.org/licenses/by/4.0/>

capacity was also discussed as a factor that could strengthen self-regulated learning by helping learners monitor emotional reactions (e.g., frustration, anxiety) and adjust strategies to stay focused and persistent (Albani et al., 2022).

### **Valuing Emotions in Others**

Valuing emotions in others often described as others' emotion appraisal or empathy refers to a student's ability to notice, understand, and take seriously other people's emotional cues, which supports respectful communication, cooperation, and positive peer interactions in academic settings. In the emotional-intelligence framework commonly applied in higher education research, others' emotion appraisal is treated as a core dimension of emotional competence that can shape students' social functioning and adjustment in school environments (Elshaer et al., 2025). Alongside this, emotional expression refers to communicating one's feelings in an appropriate and constructive way (e.g., verbalizing emotions clearly, expressing concerns respectfully, and using suitable tone and nonverbal cues), and literature on college populations emphasizes that emotional expression is closely tied to interpersonal relationships and overall functioning during the university years (Chen et al., 2025).

### **Emotional Expression**

Emotional expression referred to the ability of an individual to communicate their internal feelings either through verbal or non-verbal channels. It was found in a study that emotional expression was significantly related to the psychological well-being of an individual. The study emphasized that those students who expressed their emotions more openly and authentically tended to experience higher life satisfaction and better communication skills, which were essential to succeed in a high-pressure higher education academic setting. Simply put, expressing one's emotions was not only important for others but also played a key role in supporting students' mental and emotional health (Ye et al., 2023).

### **Emotional Self-Regulation**

Emotional self-regulation refers to a student's capacity to manage emotional reactions (e.g., anxiety, frustration, discouragement) by monitoring feelings, controlling impulses, and using adaptive strategies to stay focused and goal-directed during academic tasks. In higher education literature, emotional self-regulation is viewed as a key personal resource that supports self-regulated learning helping students sustain effort, recover from setbacks, and maintain productive study behaviors under pressure (Albani et al., 2022). Recent evidence also emphasizes that students' everyday emotion-regulation habits are closely tied to their emotional well-being in demanding contexts, reinforcing the importance of developing healthy self-regulation practices to prevent distress that can interfere with learning (Zhao et al., 2026).

### **Emotional Regulation of Others**

Emotional regulation of others is often discussed in the literature as interpersonal (or extrinsic) emotion regulation refers to deliberate efforts to influence another person's emotional state through supportive, calming, encouraging, or reframing responses during social interaction. This construct is recognized as a distinct form of emotion regulation because it has an affective goal (changing emotions) and a social target (another person), making it especially relevant in peer and classroom settings where students frequently co-manage stress and motivation (Niven, 2017). Among university students, interpersonal emotion regulation is also described as part of how individuals seek and provide emotional support across both face-to-face and digital contexts, shaping the quality of communication and adjustment in academic life (McFarland et al., 2022).

### **Uncategorized**

In emotional intelligence (EI) instruments, "uncategorized" items typically refer to responses or statements that reflect emotional functioning but do not clearly align with any of the study's specified EI indicators (e.g., self-awareness, valuing others' emotions, emotional expression, self-regulation). In measurement literature, items that fail to fit a defined dimension are usually examined through psychometric procedures (e.g., factor analysis) to determine whether they should be reassigned based on item meaning, revised, or removed to protect construct clarity and validity (Güvendir, 2022). Likewise, EI scale refinement studies emphasize that some items may perform inconsistently with the intended structure, supporting the practice of evaluating "uncategorized" items and retaining only those that meaningfully represent the EI construct as operationalized in the study (Dåderman et al., 2025).

### **Motivation Learning Strategies**

Motivation learning strategies refer to the motivational beliefs and self-regulated learning behaviors students use to initiate, direct, and sustain learning such as setting goals, managing effort, monitoring understanding, and using cognitive strategies (e.g., rehearsal, elaboration, organization, and critical thinking). Research in higher education emphasizes that these strategies are central to how students engage with coursework and persist through challenges, and that structured support or training can strengthen students' strategic learning and motivation over time (Theobald, 2021; von Keyserlingk et al., 2025).

## **ASSESSMENT OF HOMEWORK**

Assessment of homework refers to students' deliberate review of their completed homework to judge accuracy, completeness, and quality (often by checking solutions, applying criteria/rubrics, and reflecting on errors) so they can decide what to revise and what to study next. In literature, homework self-assessment is treated as a formative practice that strengthens learner responsibility and supports improvement because students actively evaluate their own work rather than relying solely on teacher marking (Beumann & Wegner, 2018). It also aligns with self-regulated learning perspectives, where self-assessment functions as a monitoring and reflection activity that helps learners identify gaps, adjust strategies, and improve subsequent learning behaviors (Yan, 2020).

### **Test Anxiety**

Test anxiety is commonly described in literature as an unpleasant emotional state that arises in evaluative situations and involves cognitive (e.g., worry, negative thoughts), physiological (e.g., tension), and behavioral reactions that can interfere with concentration and effective test-taking. It is often framed as more than ordinary pre-exam nervousness because it can persist before, during, and after assessments and may impair students' ability to demonstrate what they know, particularly in high-stakes academic contexts where fear of poor results is heightened (Jarso et al., 2024; Kassaw et al., 2024).

### **Preparation Strategies**

Preparation strategies refer to the planned and deliberate actions students use to get ready for learning tasks or assessments, such as setting study goals, planning what to review, selecting appropriate cognitive strategies (e.g., rehearsal, elaboration, organization), and managing resources like time and effort. In the learning-strategies literature, preparation is commonly situated within broader self-regulated learning, where students proactively organize how they will learn and monitor progress as they study (Diseth, 2025). Preparation strategies are also emphasized as teachable and improvable behaviors; interventions that explicitly develop self-regulated learning skills typically highlight planning, monitoring, and strategic studying as key components of effective preparation for academic demands (Theobald, 2021).

### **Organizational Strategies**

Organizational strategies refer to students' deliberate methods for structuring learning materials and information to make studying more efficient and meaningful such as outlining key ideas, categorizing concepts, arranging notes logically, using charts/concept maps, and identifying main points versus supporting details. In self-regulated learning research, these strategies are treated as practical cognitive tools that help learners manage information load and improve understanding by giving content a clearer structure for review and recall (Hemmler & Ifenthaler, 2024). Consistent with this view, organizational strategies are also operationalized in widely used learning-strategy measures (e.g., the MSLQ "Organization" subscale), underscoring their role as a core component of students' learning-strategy repertoire across academic contexts (Brouwer et al., 2025).

### **Critical Thinking**

Critical thinking, as a motivation-learning strategy, refers to students' purposeful use of higher-order thinking to analyze ideas, evaluate evidence, connect concepts, and apply prior knowledge to new academic situations, so learning goes beyond memorization toward reasoned judgment and problem solving. In self-regulated learning research, critical thinking is treated as a cognitive strategy that supports deeper processing and more meaningful learning because students actively interpret information, test assumptions, and make justified conclusions while studying (Muwonge et al., 2020). Likewise, higher education literature emphasizes that developing critical thinking requires intentional instructional and reflective practices that encourage students to question, evaluate, and refine their reasoning as part of academic learning (Golden, 2023).

### **Self-Regulation of Metacognition**

Self-regulation of metacognition (often called metacognitive self-regulation) refers to students' ability to plan, monitor, and evaluate their own learning by setting goals, checking understanding while studying, and adjusting strategies when difficulties arise. In self-regulated learning research, metacognitive strategies are emphasized as higher-level control processes that guide how learners select and manage cognitive strategies to sustain effective learning across tasks and contexts (Hemmler & Ifenthaler, 2024). This construct is also commonly operationalized in widely used learning-strategy measures (e.g., the MSLQ), where metacognitive self-regulation represents learners' ongoing monitoring and strategic control of learning activities, underscoring its central role in academic learning and study management (de Araujo et al., 2023).

### **Study Time and Habits**

Study time and habits refer to students' consistent routines and time-management behaviors that support learning, such as scheduling study sessions, setting priorities, minimizing distractions, and maintaining regular review practices, while self-regulation of effort refers to the ability to persist and sustain attention and hard work despite difficulty, boredom, or competing demands (Xu et al., 2022; Zhao et al., 2025).

### **Self-Regulation of Effort**

Self-regulation of effort means students can keep their attention on tasks, stick with their work, and keep trying even when things get tough, boring, or distracting. In research on self-regulated learning, effort regulation is seen as a key resource-management skill, along with time management. Both help students stay engaged with their studies. These skills let students use their mental and behavioral resources well, so they can keep working toward their academic goals, even when learning is challenging. Students who are good at self-regulating their effort are more likely to finish their work, stay engaged, and push through difficulties. Studies show that these skills are especially important for academic success and persistence in higher education, where students often need to learn on their own (Xu et al., 2022; Zhao et al., 2025).

### **Intrinsic Goal Orientation**

Intrinsic goal orientation refers to a student's internal drive to learn for personal growth showing interest, curiosity, and a desire to master course content rather than focusing mainly on external rewards (e.g., grades or approval). In learning-motivation literature, intrinsic goal orientation is commonly framed as a mastery-focused motive that encourages deeper engagement and more meaningful learning behaviors (Dayel et al., 2018). It is also frequently discussed within self-regulated learning models as a motivational foundation that energizes students to persist, use effective strategies, and sustain effort across academic tasks (Diseth, 2025).

### **Conceptual Framework**

This study was anchored on the assumption that emotional intelligence influenced students' motivational learning strategies, while selected profile variables might have affected these relationships. As shown in Figure 1, Part I, which is the independent variable consists of emotional intelligence variable consists of emotional intelligence with seven (7) indicators namely; assessment of my own emotions, valuing emotions in others, emotional expression, emotional self-regulation, emotional regulation of others, using emotions in problem solving, and uncategorized, adopted from Coronado-Maldonado, et al. (2025). Part II, the dependent variable consists of motivation learning strategies with eight (8) indicators namely; assessment of homework, test anxiety, preparation strategies, organizational strategies, critical thinking, self-regulation of metacognition, study time and habits, self-regulation of effort, and intrinsic goal orientation adopted from Coronado-Maldonado, et al. (2025).

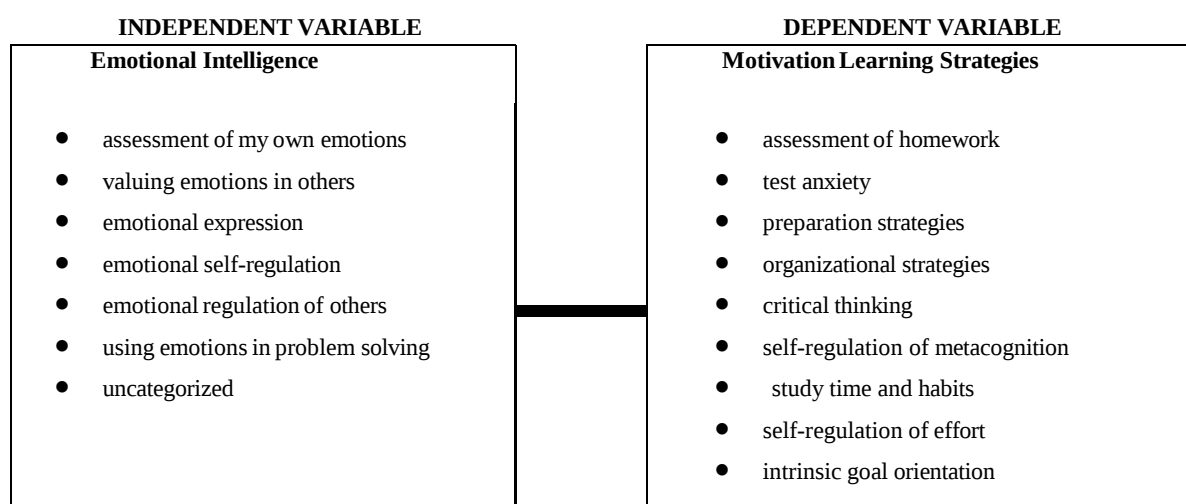


Figure 1. Conceptual Framework of the Study

### Statement of the Problem

This study aimed to determine the relationship between the perceived level of emotional intelligence and the perceived level of motivational learning strategies among DMC College Foundation, Inc. college students during the school year 2025-2026.

Specifically, it sought to answer the following questions:

1. What is the perceived level of emotional intelligence of the respondents in terms of:

- 1.1 assessment of my own emotions;
- 1.2 valuing emotions in others;
- 1.3 emotional expression;
- 1.4 emotional self-regulation;
- 1.5 emotional regulation of others;
- 1.6 using emotions in problem solving; and
- 1.7 uncategorized?

2. What is the perceived level of motivation learning strategies of the respondents in terms of:

- 2.1 assessment of homework;
- 2.2 test anxiety;
- 2.3 preparation strategies;
- 2.4 organizational strategies;
- 2.5 critical thinking;
- 2.6 self-regulation of metacognition;
- 2.7 study time and habits;
- 2.8 self-regulation of effort;
- 2.9 intrinsic goal orientation?

3. Is there a significant relationship between the perceived level of emotional intelligence and perceived level of motivation learning strategies?

### Hypothesis

1. There is no significant relationship between the perceived level of emotional intelligence and perceived level of motivation learning strategies.

## RESEARCH METHODOLOGY

### Method Used

This study employed both survey and descriptive-correlational research methods. The survey method was used to collect data on emotional intelligence and motivation learning strategies through a questionnaire. According to Check and Schutt (2017), survey research is a structured approach for gathering information from a sample of individuals using questionnaires or interviews to assess attitudes, beliefs, behaviors, and personal characteristics. They further note that surveys allow researchers to efficiently collect large volumes of data and are often combined with experimental or observational methods to confirm and strengthen research findings. Moreover, Creswell and Guetterman (2019) define correlational research as the systematic investigation of relationships among two or more variables, conducted without experimental manipulation. Correlational research is a non-experimental approach in which variables are quantified and the statistical relationship between emotional intelligence and motivation learning strategies is assessed without the influence of extraneous variables.

### Research Instrument

The research instrument was a structured questionnaire composed of three parts. Part I assessed emotional intelligence, adopted from Coronado-Maldonado et al. (2025), using seven indicators: assessment of one's own emotions, valuing emotions in others, emotional expression, emotional self-regulation, emotional regulation of others, using emotions in problem-solving, and uncategorized. Part II measured motivation learning strategies, also adopted from Coronado-Maldonado et al. (2025), using nine indicators: assessment of homework, test anxiety, preparation

strategies, organizational strategies, critical thinking, self-regulation of metacognition, study time and habits, self-regulation of effort, and intrinsic goal orientation.

#### Ethical Consideration

This study secured approval from the Research and Ethics Committee of the DMC College Foundation, Inc. before the conduct of data gathering. Informed consent was obtained from the institution and the individual respondents prior to their participation. The questionnaire was written in clear and understandable language to ensure voluntary and informed participation. The identities of the respondents were kept anonymous, and all information gathered was treated with strict confidentiality. Only essential research data were retained for academic and future research purposes.

#### Statistical Treatment of the Data

The following are the statistical tools used to treat and analyze the data gathered.

**Weighted Mean.** This is used to quantify the respondents' ratings on the emotional intelligence and motivation learning Strategies.

**Standard Deviation.** This is used to determine the homogeneity and heterogeneity of the employee's score, where  $SD \leq 3$  is homogenous and  $SD > 3$  is heterogeneous Aiken & Susane (2001); Refugio et al. (2019).

**Spearman Rank-Order Correlation Coefficient (Spearman Rho).** This is used to determine the correlation between emotional intelligence and motivation learning strategies.

#### DATA PRESENTATION AND ANALYSIS

The data are presented following the statement of the problems of the current study. The study aimed to answer the following questions:

##### Statement of the Problem

This study aimed to determine the relationship between the perceived level of emotional intelligence and the perceived level of motivational learning strategies among DMC College Foundation, Inc. college students during the school year 2025-2026.

Specifically, it sought to answer the following questions:

1. What is the perceived level of emotional intelligence of the respondents in terms of:

- 1.1 assessment of my own emotions;
- 1.2 valuing emotions in others;
- 1.3 emotional expression;
- 1.4 emotional self-regulation;
- 1.5 emotional regulation of others;
- 1.6 using emotions in problem solving; and
- 1.7 uncategorized?

**Table 1: Summary of the students' perceived level of emotional intelligence**

| Descriptors                        | Mean        | SD           | Description  | Interpretation |
|------------------------------------|-------------|--------------|--------------|----------------|
| Assessment of My Own               | 4.04        | 0.866        | Agree        | High           |
| Emotion Valuing Emotions in Others | 3.73        | 0.684        | Agree        | High           |
| Emotional Expression               | 3.55        | 0.867        | Agree        | High           |
| Emotional Self-Regulation          | 3.76        | 0.720        | Agree        | High           |
| Emotional Regulation of            | 3.81        | 0.779        | Agree        | High           |
| Others Using Emotions in Problem   | 3.70        | 0.806        | Agree        | High           |
| Solving Uncategorized              | 3.94        | 0.757        | Agree        | High           |
| <b>Overall</b>                     | <b>3.81</b> | <b>0.612</b> | <b>Agree</b> | <b>High</b>    |

*SD-Standard Deviation*

Table 1 presents the summary of students' perceived emotional intelligence across different dimensions. The overall mean score is 3.81 ( $SD = 0.612$ ), labeled "Agree" and interpreted as High. Among the dimensions, Assessment of My Own Emotion obtained the highest mean of 4.04 ( $SD = 0.866$ ), described as "Agree" and interpreted as High. This shows that students demonstrate strong emotional self-awareness, particularly in recognizing and understanding their own emotional states. This is followed by the Uncategorized dimension, with an overall mean of 3.94 ( $SD = 0.757$ ), also interpreted as High. These results mean that respondents exhibit strong emotional insight, empathy, and appreciation of emotions. The lowest mean was recorded in Emotional Expression, with a mean of 3.55 ( $SD = 0.867$ ), described as "Agree" and interpreted as High. While all domains are high, emotional expression is comparatively weaker. Students generally show high emotional intelligence, with stronger self-awareness and emotional insight. Their ability to express emotions is slightly lower but still high, indicating greater competence in understanding emotions than in expressing them. Furthermore, this implies that DMCCFI can strengthen student support and development by maintaining activities that build emotional self-awareness and regulation, while focusing more on improving healthy emotional expression. This includes teaching students to communicate feelings, self-disclose constructively, and seek help. These areas support students' motivation, persistence, collaboration, and coping, especially in academic and clinical settings.

This finding is supported by MacCann et al. (2020), who reported that emotional intelligence correlates with academic performance, showing that students with stronger emotional skills perform better. Sánchez-Álvarez et al. (2020) also linked emotional intelligence to academic outcomes, supporting the importance of emotional skills in education. Quílez-Robres et al. (2023) found consistent evidence for the link between emotional intelligence and academic performance, confirming that self-awareness and regulation promote learning engagement and achievement.

Overall, students display high emotional intelligence in many areas, supporting effective learning and social interaction. However, a lower ability to express emotions highlights room for growth. Programs can target emotional communication, self-control, and productive emotional use to boost academic performance and well-being.

2. What is the perceived level of motivation learning strategies of the respondents in terms of:

- 3.1 assessment of homework;
- 2.2 test anxiety;
- 2.3 preparation strategies;
- 2.4 organizational strategies;
- 2.5 critical thinking;
- 2.6 self-regulation of metacognition;
- 2.7 study time and habits;
- 2.8 self-regulation of effort;
- 2.9 intrinsic goal orientation?

**Table 2: Summary of the students' perceived level of motivation learning strategies**

| Descriptors                         | Mean        | SD           | Description    | Interpretation |
|-------------------------------------|-------------|--------------|----------------|----------------|
| Assessment of homework              | 3.22        | 0.963        | Somewhat Agree | Moderate       |
| Test Anxiety                        | 3.37        | 0.872        | Somewhat       | Moderate       |
| Preparation Strategies              | 3.90        | 0.749        | Agree Agree    | High           |
| Organizational Strategies           | 3.87        | 0.827        | Agree          | High           |
| Critical Thinking                   | 3.77        | 0.826        | Agree          | High           |
| Self-Regulation of                  | 3.85        | 0.750        | Agree          | High           |
| Metacognition Study Time and Habits | 3.76        | 0.827        | Agree          | High           |
| Self-Regulation of Effort           | 3.95        | 0.770        | Agree          | High           |
| Intrinsic goal orientation          | 3.99        | 0.805        | Agree          | High           |
| <b>Overall</b>                      | <b>3.77</b> | <b>0.600</b> | <b>Agree</b>   | <b>High</b>    |

*AWV-Average Weighted Value, SD-Standard Deviation*

Table 2 summarizes students' perceived levels of motivational learning strategies across different dimensions. The results reveal an average weighted value of 3.77 (SD = 0.600), described as "Agree" and interpreted as "High." Among the dimensions, the highest average weighted value is for Intrinsic Goal Orientation (M = 3.99, SD = 0.805), followed by Self-Regulation of Effort (M = 3.95, SD = 0.770), Preparation Strategies (M = 3.90, SD = 0.749), and Organizational Strategies (M = 3.87, SD = 0.827). These findings suggest that students are primarily driven by internal motivation and demonstrate strong effort regulation, planning, and organization in academic tasks. Self-Regulation of Metacognition (M = 3.85, SD = 0.750), Critical Thinking (M = 3.77, SD = 0.826), and Study Time and Habits (M = 3.76, SD = 0.827) also receive high ratings, indicating active engagement in reflective thinking, structured learning, and time management. Simply put, students generally demonstrate a high level of motivational learning strategies, particularly in intrinsic motivation, effort regulation, and preparation behaviors. However, moderate challenges remain in homework and assessment management, as well as test anxiety, which may hinder consistent performance during assessment periods. While students already possess strong strategic learning behaviors (e.g., preparation, organization, metacognitive monitoring, and sustained effort), the institution can further improve outcomes by prioritizing interventions that (1) strengthen assessment-related routines (such as consistent review schedules, timely completion of requirements, and structured homework planning) and (2) reduce test anxiety through coping and test-taking supports (such as relaxation techniques, cognitive reframing, exam wrappers, and consultation with guidance services). Addressing these areas may help students translate their generally high strategy use into more stable academic performance and well-being.

This finding is supported by Panadero (2017), who explained that self-regulated learning involves learners' regulation of cognition, motivation, and behavior, including strategies such as planning, monitoring, and effort control, skills reflected in the high ratings across most dimensions. Theobald (2021) likewise reported, through meta-analytic evidence, that self-regulated learning training programs can improve academic performance and motivation, indicating that strengthening strategy use can yield measurable learning benefits.

In addition, Svartdal et al. (2022) highlighted that weaknesses in study routines and self-efficacy are associated with procrastination and ineffective learning habits, which aligns with the moderate rating in the assessment of homework. Lastly, Huntley et al. (2019) emphasized that test anxiety can undermine academic performance among university students, supporting the need for targeted strategies to manage anxiety during assessments.

3. Is there a significant relationship between the perceived level of emotional intelligence and perceived level of motivation learning strategies?

**Table 3: Relationship between the Students' Perceived Level of Emotional Intelligence and Motivation Learning Strategies**

| Variables                                |                         | Assessment of My Own Emotions | Valuing Emotions in Others | Emotional Expression | Emotional Self-Regulation | Emotional Regulation of Others | Using Emotions in Problem Solving | Uncategorized | Emotional Intelligence |
|------------------------------------------|-------------------------|-------------------------------|----------------------------|----------------------|---------------------------|--------------------------------|-----------------------------------|---------------|------------------------|
| <b>Assessment of homework 20, 26, 39</b> | Correlation Coefficient | 0.103                         | 0.191*                     | 0.212*               | 0.207*                    | 0.177*                         | 0.178*                            | 0.194*        | 0.208*                 |
|                                          | Sig.(2-tailed)          | 0.09                          | 0.002                      | 0                    | 0.001                     | 0.004                          | 0.003                             | 0.001         | 0.001                  |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Test Anxiety</b>                      | Correlation Coefficient | 0.083                         | 0.224*                     | 0.154*               | 0.183*                    | 0.147*                         | 0.206*                            | 0.129*        | 0.190*                 |
|                                          | Sig.(2-tailed)          | 0.173                         | 0                          | 0.012                | 0.003                     | 0.015                          | 0.001                             | 0.035         | 0.002                  |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Preparation strategies</b>            | Correlation Coefficient | 0.376*                        | 0.399*                     | 0.350*               | 0.516*                    | 0.556*                         | 0.633*                            | 0.667*        | 0.648*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Organizational Strategies</b>         | Correlation Coefficient | 0.405*                        | 0.429*                     | 0.317*               | 0.490*                    | 0.496*                         | 0.576*                            | 0.680*        | 0.630*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Critical Thinking</b>                 | Correlation Coefficient | 0.426*                        | 0.387*                     | 0.366*               | 0.497*                    | 0.522*                         | 0.548*                            | 0.642*        | 0.613*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Self-Regulation of Metacognition</b>  | Correlation Coefficient | 0.407*                        | 0.429*                     | 0.389*               | 0.575*                    | 0.592*                         | 0.672*                            | 0.731*        | 0.712*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Study Time and Habits</b>             | Correlation Coefficient | 0.417*                        | 0.416*                     | 0.385*               | 0.509*                    | 0.502*                         | 0.583*                            | 0.621*        | 0.633*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Self-Regulation of Effort</b>         | Correlation Coefficient | 0.412*                        | 0.401*                     | 0.325*               | 0.480*                    | 0.513*                         | 0.572*                            | 0.641*        | 0.613*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Intrinsic Goal Orientation</b>        | Correlation Coefficient | 0.377*                        | 0.388*                     | 0.314*               | 0.466*                    | 0.507*                         | 0.512*                            | 0.583*        | 0.592*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |
|                                          | N                       | 269                           | 269                        | 269                  | 269                       | 269                            | 269                               | 269           | 269                    |
| <b>Motivation Learning Strategies</b>    | Correlation Coefficient | 0.441*                        | 0.484*                     | 0.416*               | 0.596*                    | 0.606*                         | 0.681*                            | 0.740*        | 0.734*                 |
|                                          | Sig.(2-tailed)          | 0                             | 0                          | 0                    | 0                         | 0                              | 0                                 | 0             | 0                      |

\*Correlation is significant at the 0.05 level

Table 3 presents the relationship between students' perceived level of emotional intelligence and motivational learning strategies. The results reveal that almost all dimensions of emotional intelligence are significantly and positively correlated ( $p < 0.05$ ) with components of motivational learning strategies, indicating that higher emotional intelligence is generally associated with better motivational learning behaviors among students. In terms of overall relationships, Emotional Intelligence was positively correlated with overall motivation learning strategies ( $r = 0.734$ ,  $p = 0.000$ ). This indicates a highly positive relationship, suggesting that students with higher emotional intelligence tend to demonstrate stronger learning strategies, including planning, organization, metacognition, effort regulation, and intrinsic motivation.

Among the emotional intelligence dimensions, the Uncategorized domain shows the highest correlations with many motivation learning strategies, including overall motivation learning strategies ( $r = 0.740$ ,  $p = 0.000$ ) and Self-Regulation of Metacognition ( $r = 0.731$ ,  $p = 0.000$ ). Using Emotions in Problem Solving also demonstrates consistently high positive relationships with key domains, such as Self-Regulation of Metacognition ( $r = 0.672$ ,  $p = 0.000$ ) and overall motivation learning strategies ( $r = 0.681$ ,  $p = 0.000$ ). Emotional Self-Regulation and Emotional Regulation of Others likewise exhibit moderate-to-high correlations with strategic learning domains, with coefficients commonly ranging from  $r = 0.480$  to  $r = 0.606$  (all  $p = 0.000$ ).

These results suggest that students who can effectively regulate and use their emotions are more likely to engage in adaptive learning behaviors, such as preparation strategies, critical thinking, and self-regulated learning. In contrast, the weakest relationships appear in Assessment of Homework and Test Anxiety, where correlations with overall emotional intelligence are relatively small, though still significant (Assessment of Homework:  $r = 0.208$ ,  $p = 0.001$ ; Test Anxiety:  $r = 0.190$ ,  $p = 0.002$ ).

Notably, Assessment of My Own Emotions is not significantly related to Assessment of Homework ( $r = 0.103$ ,  $p = 0.090$ ) and Test Anxiety ( $r = 0.083$ ,  $p = 0.173$ ). This indicates that self-awareness of one's own emotions alone may not consistently predict homework-assessment routines and test-anxiety experiences. However, broader emotional intelligence competencies remain strongly associated with more complex learning behaviors.

These findings imply that strengthening emotional intelligence, particularly skills in emotion regulation, problem-solving, and interpersonal emotional management, can help students improve their learning strategies, especially in metacognitive self-regulation and persistence. Since homework assessment and test anxiety show comparatively weaker links with emotional intelligence, the institution may need targeted interventions for these concerns, such as structured homework planning systems, accountability supports, and test-anxiety management programs involving coping skills, relaxation techniques, and cognitive reframing.

These findings are supported by MacCann et al. (2020), who reported that emotional intelligence is positively associated with academic performance, partly through learners' adaptive functioning in academic contexts. Quílez-Robres et al. (2023) likewise synthesized evidence that emotional intelligence is meaningfully related to academic outcomes, reinforcing the role of emotional competencies in learning and performance. Panadero (2017) emphasized that self-regulated learning involves regulating cognition, motivation, and behavior, which aligns with the strong correlations found between emotional intelligence and the metacognitive and effort regulation domains. Finally, Hodzic et al. (2018) showed, through a meta-analysis, that emotional intelligence could be improved through training, suggesting that institutions could have enhanced EI-related competencies to support more effective learning strategies.

Overall, the null hypothesis stating that there is no significant relationship between students' perceived level of emotional intelligence and motivational learning strategies is rejected. The findings confirm that emotional intelligence is significantly associated with students' motivational and strategic approaches to learning, highlighting its important role in academic development.

## DISCUSSION

The findings demonstrate that college students at DMC College Foundation, Inc. generally possess high levels of emotional intelligence and motivational learning strategies, indicating that they are capable of recognizing and managing emotions while applying effective approaches to learning. Students showed particular strength in assessing their own emotions, intrinsic goal orientation, and self-regulation of effort, suggesting that they are internally motivated, persistent, and aware of their emotional responses to academic demands. However, emotional expression, homework assessment, and test-anxiety management emerged as comparatively weaker areas, highlighting the need for additional support in communicating emotions constructively, maintaining consistent study routines, evaluating completed academic work, and coping with examination-related pressure. More importantly, the strong, positive, and statistically significant relationship between emotional intelligence and motivational learning strategies ( $p = 0.734$ ,  $p < 0.001$ ) indicates that students with stronger emotional competencies are more likely to demonstrate effective preparation, organization, critical thinking, metacognitive regulation, time management, effort regulation, and intrinsic motivation. This finding supports the view that emotional intelligence is closely connected to students' capacity to regulate their cognition, motivation, and behavior during learning. Therefore, the institution should strengthen emotional-intelligence and self-regulated-learning programs through counseling, emotional-expression activities, structured study-planning sessions, metacognitive training, coping-skills development, and test-taking workshops to help students transform their emotional strengths into more consistent academic engagement and performance.

## CONCLUSION

The study concludes that DMC College Foundation, Inc. students generally demonstrate high emotional intelligence and high motivational learning strategies, reflecting their ability to understand and regulate emotions while sustaining effective learning behaviors. Their strongest areas were assessment of their own emotions, intrinsic goal orientation, and self-regulation of effort, whereas emotional expression, assessment of homework, and test anxiety were comparatively weaker. The significant and strong positive relationship between emotional intelligence and motivational learning strategies ( $p = 0.734$ ,  $p < 0.001$ ) confirms that students with greater emotional competence are more likely to use effective strategies in planning, organizing, monitoring, and regulating their learning. Thus, the null hypothesis was rejected, and the findings affirm that emotional intelligence plays an important role in strengthening students' motivation, persistence, and strategic approaches to academic learning.

**Authors' contribution:** Conceptualization, research methodology, data gathering and analysis is performed by the authors.

**Conflict of interest statement:** All authors declare no conflict of interest.

**Ethical review statement:** the research is submitted to the ethical review committee and approved for the conduct of the study. It does not involve human-sensitive issues.

**Funding:** the study is funded by the authors

## REFERENCES

- 1) Albani, G., Schimmenti, A., La Marca, L., & Granieri, A. (2022). Emotional intelligence, stress, and self-regulated learning in university students: A moderated mediation model. *Frontiers in Psychology*, 13, 940837. <https://doi.org/10.3389/fpsyg.2022.940837>
- 2) Bance, L. O., & Acopio, J. R. B. (2016). Exploring emotional intelligence and academic performance of Filipino university academic achievers. *International Journal of Psychological Studies*, 8(3), 164–174. <https://doi.org/10.5539/ijps.v8n3p164>
- 3) Beumann, S., & Wegner, E. (2018). Self-assessment of homework: A formative assessment approach to support self-regulated learning. *Assessment in Education: Principles, Policy & Practice*, 25(4), 1–19.
- 4) Bordbar, S., Hasannejad Mogadammorki, S., Atashbahar, O., Bahmaei, J., Vejdani, M., & Yusefi, A. R. (2025a). The effect of emotional intelligence on academic performance perceptions: The mediating role of academic self-regulation. *Discover Education*.
- 5) Bordbar, S., Rad, H. F., Bahmaei, J., & Vejdani, M. (2025b). The effect of emotional intelligence on academic performance with the mediating role of academic self-regulation: Evidence from college students. *Current Psychology*. <https://doi.org/10.1007/s44217-025-00952-2>
- 6) Brouwer, J., Jansen, E., Severiens, S., & Meeuwisse, M. (2025). Examining the factor structure of the MSLQ in higher education: Evidence for refinement and context sensitivity. *Higher Education Research & Development*.
- 7) Chang, M., Lee, J., & Kim, S. (2022). Emotional intelligence and self-regulated learning in college students: Links to motivation and academic engagement. *Educational Psychology*, 42(7), 1–18.
- 8) Check, J., & Schutt, R. K. (2012). *Research methods in education*. SAGE Publications.

- 9) Chen, X. (2025). Differences in emotional expression among college students: A study on Integrating psychometric methods and algorithm optimization. *BMC Psychology*, 13, Article 280. <https://doi.org/10.1186/s40359-025-02506-5>
- 10) Cook, D. A., Thompson, W. G., & Thomas, K. G. (2011). The Motivated Strategies for Learning Questionnaire: Score validity among medicine residents. *Medical Education*, 45(12), 1230–1240.
- 11) Coronado-Maldonado, I., Díaz-Muñoz, R., & González Sodis, J. L. (2025). *Emotional intelligence, motivation and learning strategies: The SSREI and MSLQ-SF questionnaires*.
- 12) Credé, M., & Phillips, L. A. (2011). A meta-analytic review of the Motivated Strategies for Learning Questionnaire. *Learning and Individual Differences*, 21(4), 337–346. <https://doi.org/10.1016/j.lindif.2011.03.002>
- 13) Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.
- 14) Dåderman, A. M., Albinsson, J., & Jönsson, P. (2025). Refining the Trait Emotional Intelligence Questionnaire–Short Form: An item response theory approach. *BMC Psychology*, 13, Article 271. <https://doi.org/10.1186/s40359-025-03271-1>
- 15) Dayel, A. E., Al-Mobaireek, K. F., Al-Achkar, M. A., & Al-Ajlan, M. S. (2018). Psychometric properties of the Motivated Strategies for Learning Questionnaire among medical students. *BMC Medical Education*, 18, Article 198.
- 16) de Araujo, A. M., de Almeida, L. S., & Núñez, J. C. (2023). Validity evidence for the MSLQ in higher education: A contemporary measurement review. *Frontiers in Psychology*, 14, 1–15.
- 17) Diseth, Å. (2025). Motivation and learning strategies across academic levels: Differences in intrinsic goals, organization, and effort management. *Educational Psychology*, 45(2), 1– 20.
- 18) Elshaer, I. A., Azazz, A. M. S., & Fayyad, M. (2025). Emotional intelligence, social functioning, and academic adjustment among university students: Evidence from a higher education context. *BMC Psychology*, 13, Article 100.
- 19) Golden, C. (2023). Fostering critical thinking in higher education through reflective and dialogic practices. *Teaching in Higher Education*, 28(5), 1–16.
- 20) Güvendir, M. A. (2022). Item misfit and “uncategorized” responses in scale development: Implications for construct clarity and validity. *Educational Measurement: Issues and Practice*, 41(3), 1–10.
- 21) Hemmler, Y. M., & Ifenthaler, D. (2024). Self-regulated learning strategies in continuing education: A systematic review and meta-analysis. *Educational Research Review*, 45, 100629. <https://doi.org/10.1016/j.edurev.2024.100629>
- 22) Hodzic, S., Scharfen, J., Ripoll, P., Holling, H., & Zenasni, F. (2018). How efficient are emotional intelligence trainings? A meta-analysis. *Emotion Review*, 10(2), 138–148.
- 23) Huntley, C. D., Young, B., Jha, V., & Fisher, P. L. (2019). The efficacy of interventions for test-anxious university students: A meta-analysis. *Journal of Anxiety Disorders*, 64, 36–50.
- 24) Jarso, J. A., & Jaiswal, A. (2024). Test anxiety in higher education: A contemporary review of cognitive and affective mechanisms. *Educational Psychology Review*, 36(1), 1–25.
- 25) Kassaw, C., Mekonnen, A., & Workneh, B. (2024). Test anxiety and academic performance among university students: A cross-sectional study. *BMC Psychology*, 12, Article 240.
- 26) Kim, Y., Fong, C. J., & Gonzales, C. (2020a). Motivation regulation and learning strategy regulation as pathways to achievement in higher education. *Journal of Educational Psychology*, 112(6), 1–15.
- 27) Kim, Y., Wang, Y., Ahn, H. S., & Bong, M. (2020b). College students’ regulation of cognition, motivation, behavior, and context: Distinct or overlapping processes? *Learning and Individual Differences*, 84, 101973.
- 28) MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. <https://doi.org/10.1037/bul0000219>
- 29) McFarland, S., & Hay, A. (2022). Digital and in-person interpersonal emotion regulation: The role of anxiety, depression, and stress. *Journal of Psychopathology and Behavioral Assessment*.
- 30) Merlin, C., Rinaldi, C., & Riva, P. (2024). Emotional self-awareness in university students: Foundations for emotion regulation and adaptive functioning. *Frontiers in Psychology*, 15, 1–12.
- 31) Muwonge, C. M., Ssenyonga, J., & Kibedi, H. (2020). Self-regulated learning and critical thinking among university students: A cross-sectional study. *Heliyon*, 6(8), e04776.
- 32) Niven, K. (2017). The four key characteristics of interpersonal emotion regulation. *Current Opinion in Psychology*, 17, 89–93. <https://doi.org/10.1016/j.copsyc.2017.06.014>
- 33) Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8, Article 422.
- 34) Pintrich, P. R., Smith, D. A. F., García, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire*. National Center for Research to Improve Postsecondary Teaching and Learning, University of Michigan.
- 35) Quílez-Robres, A., Moyano, N., Cortés Pascual, A., & Romero-Pérez, E. (2023a). Emotional intelligence and academic performance: A systematic review and meta-analysis. *Learning and Individual Differences*, 101, 102229.
- 36) Quílez-Robres, A., Usán, P., Lozano-Blasco, R., & Salavera, C. (2023b). Emotional intelligence and academic performance: A systematic review and meta-analysis. *Thinking Skills and Creativity*, 50, 101355. <https://doi.org/10.1016/j.tsc.2023.101355>
- 37) Refugio, C. N., Galleto, J. D., & Torres, M. A. (2019). Interpreting variability in survey-based educational research: Practical guidance on standard deviation reporting. *Asia Pacific Journal of Multidisciplinary Research*, 7(2), 1–8.

- 38) Sánchez-Álvarez, N., Berrios Martos, M. P., & Extremera, N. (2020). A meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. *Frontiers in Psychology*, 11, Article 1517. <https://doi.org/10.3389/fpsyg.2020.01517>
- 39) Sheikhbardsiri, H., Sheikhasadi, H., Mahani, S. A., & Doust Mohamadi, M. M. (2020). Emotional intelligence and learning strategies of postgraduate students at Kerman University of Medical Sciences in the southeast of Iran. *Journal of Education and Health Promotion*, 9, 1–7.
- 40) Svartdal, F., Sæle, R. G., Dahl, T. I., Nemtcan, E., & Gamst-Klaussen, T. (2022). Study habits and procrastination: The role of academic self-efficacy. *Scandinavian Journal of Educational Research*.
- 41) Theobald, M. (2021a). Self-regulated learning training programs enhance academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Learning and Instruction*, 71, 101397.
- 42) Theobald, M. (2021b). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology*, 66, 101976.
- 43) Ukaul, M., Guntur, M., & Purnomo, E. (2024). A meta-analysis of self-regulated learning intervention studies on learning outcomes in online and blended environments. *Online Learning Journal*, 28(3), 557–590.
- 44) von Keyserlingk, L., Schwerter, J., Kunina-Habenicht, O., & Laueremann, F. (2025). Motivation and self-regulated learning as predictors of learning-resource use in learning-management systems in higher education. *Educational Psychology*. <https://doi.org/10.1080/01443410.2025.2564891>
- 45) Xu, L., Chen, G., & Wang, Q. (2022a). The impact of self-regulated learning strategies on academic performance in online learning. *Frontiers in Psychology*, 13, 1047680.
- 46) Xu, Z., Zhao, Y., Zhang, B., Liew, J., & Kogut, A. (2022b). A meta-analysis of the efficacy of self-regulated learning interventions on academic achievement in online and blended environments in K–12 and higher education. *Behaviour & Information Technology*, 42(16), 2911–2931. <https://doi.org/10.1080/0144929X.2022.2151935>
- 47) Yan, Z. (2020). Self-assessment in learning: A review of effects on self-regulated learning and achievement. *Educational Research Review*, 30, 100308.
- 48) Ye, S., Ho, K. K. W., Wakabayashi, K., et al. (2023). Relationship between university students' emotional expression on tweets and subjective well-being: Considering the effects of their self-presentation and online communication skills. *BMC Public Health*, 23, Article 594. <https://doi.org/10.1186/s12889-023-15485-2>
- 49) Zhao, X., Li, Y., & Wang, H. (2025). Self-regulated learning strategies in online learning: A systematic review of predictors and outcomes. *Frontiers in Psychology*, 16, 1–18.
- 50) Zhao, Y., Xu, Z., & Liew, J. (2026). Emotion-regulation habits and student well-being in demanding learning contexts: Implications for persistence and study engagement. *Educational Psychology Review*, 38(1), 1–22.