Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.17, No.6, 2026

Exploring the Impact of Emotional Regulation on Undergraduate Academic Performance

Adam Marshall, M.Ed.
College of Education, Texas Tech University
Box 41071 | Lubbock, TX 79409-1071
E-mail: adamarsh@ttu.edu

Amani Zaier, PhD.
College of Education, Texas Tech University
Box 41071 | Lubbock, TX 79409-1071
E-mail: amani.zaier@ttu.edu

Sharon Atieno, M.Ed.
College of Education, Texas Tech University
Box 41071 | Lubbock, TX 79409-1071
E-mail: satieno@ttu.edu

Abstract

Guided by Self-Regulation Theory and Social Cognitive Theory, this study examined the relationship between emotional regulation and undergraduate students' academic performance. A total of 163 undergraduate students from a large public university in the Southwestern United States completed an adapted version of the Cognitive Emotion Regulation Questionnaire (CERQ). Pearson correlation analyses indicated that overall emotion regulation score was not associated with GPA ($r = –.14$, $p = .136$). Similarly, a simple linear regression revealed that emotion regulation did not significantly predict academic performance, $F(1, 112) = 2.25$, $p = .136$. Ultimately, accounting for a small proportion of variance in GPA (R2 = .02). Exploratory analyses of individual emotion regulation items suggested that specific behaviors including perceived ability to manage stress and avoidance of maladaptive coping strategies, reveal small and nuanced associations with GPA. Overall, the findings highlight the multidimensional nature of emotional regulation and its nuanced role in supporting academic performance. The results suggest that not all regulation strategies are equally beneficial and that specific adaptive coping skills may play a more direct role in supporting students' academic success. Implications for university support services, faculty advising, and future research directions are discussed.

Keywords: emotional regulation, GPA, undergraduate students, self-regulation, self-efficacy
DOI: 10.7176/JEP/17-6-09
Publication date: June 30th 2026

Introduction

Undergraduate students face a multitude of academic, social, and personal challenges that require emotional endurance to successfully complete their college degrees. The transition from adolescence to emerging adulthood entails navigating new freedoms and responsibilities, which can create substantial stressors that impact students' ability to maintain satisfactory academic progress (Arnett, 2000). Factors such as demanding coursework, competitive academic environments, and balancing school with work or family responsibilities contribute to heightened stress levels. Emotional regulation, broadly defined as the ability to monitor, evaluate, and modify emotional reactions in adaptive ways (Gross, 1999), is fundamental to how students respond to academic setbacks and pressures. Effective emotion regulation can help students stay motivated, manage anxiety during exams, and recover from academic disappointments, all of which play a key role in maintaining or improving GPA.

Although several studies have shown the relevance of emotional competence in youth and adolescents (Collado-Solar et al, 2023; Denham, S. A. 2019; Gupta & Gehlawat, 2020), there is still limited empirical evidence

focusing specifically on undergraduates in the U.S. context. College students are at a unique developmental stage where they are expected to manage their emotional and academic responsibilities with greater autonomy compared to high school. This heightened autonomy can expose gaps in their self-regulation skills, making the examination of emotional regulation strategies especially important. Furthermore, all the recent changes to the higher education system post-COVID-19 pandemic and the subsequent move to online learning environments have increased emotional stressors for many college students (Grazzani et al., 2022; Tang et al., 2022; Wang et al., 2023). The abrupt shift in learning modes, isolation from peers, and uncertainties about academic and career trajectories have heightened the need for effective coping mechanisms and self-regulatory skills. Given these challenges, understanding how emotional regulation relates with academic performance can deliver valuable insights for educators, counselors, and policymakers working to support student success.

The research is guided by the following questions:

RQ1: What is the relationship between emotional regulation and academic performance for undergraduate students?

RQ2: Does emotional regulation significantly predict undergraduate GPA?

Theoretical Framework

This research is anchored in Self-Regulation Theory (SRT) and Social Cognitive Theory (SCT), which together offer a solid framework for understanding the processes connecting emotion regulation and academic outcomes. SCT, proposed by Bandura (1977), suggests that human behavior is shaped by reciprocal interactions between personal factors, environmental influences, and behavior itself. A central component of SCT is self-efficacy, the belief in one's capacity to organize and execute the actions required to achieve desired outcomes. Higher self-efficacy beliefs are linked with greater persistence in the presence of challenges and more efficient coping strategies when encountering setbacks. Emotional regulation can be seen as both a learned behavior formed by social modeling and an outcome of self-efficacy beliefs. For example, undergraduate students who believe they can handle stress efficiently tend to engage in adaptive emotion regulation strategies (Lopez, et al, 2024; Santos Alves Peixoto, et al.2022).

Self-Regulation Theory (Zimmerman, 2000) extends this perspective by emphasizing how individuals set goals, monitor their progress, and adjust behaviors to stay aligned with their desired outcomes. In the context of higher education, self-regulation includes both cognitive and emotional components. Emotional regulation enables students to manage feelings that could interfere with goal pursuit, including frustration while facing complex assignments or anxiety before exams. By cultivating these skills, students can maintain focus and sustain motivation even if confronted with obstacles. Research on self-regulated learning (Pintrich, 2004) highlights that this integration of cognitive and emotional strategies allows learners to adapt more flexibly to academic challenges. Similarly, Gross's (1998) model of emotional regulation demonstrates how managing emotions is not only reactive but also proactive, shaping the conditions for effective learning. In this way, self-regulation provides a comprehensive framework that links emotional resilience with goal-directed behavior.

The integration of these theories validates the idea that emotional regulation is not a standalone skill but part of a larger system of self-directed learning and adaptation. Rather than viewing it in isolation, emotional regulation can be seen as deeply interconnected with cognitive, motivational, and behavioral processes that influence how students approach challenges. When learners can manage stress, frustration, or setbacks, they free up cognitive resources that can be directed toward problem-solving and persistence. In parallel, when these emotional skills are coupled with practical cognitive strategies such as time management, goal setting, and self-monitoring, students are better equipped to sustain their effort over time and navigate academic demands more effectively. This combined approach not only elevates academic performance but also fosters resilience, allowing students to adapt to new learning environments and maintain motivation in the face of difficulties. Ultimately, emotional regulation acts as a critical foundation that supports the broader system of self-regulated learning, making it a key driver of long-term academic success.

Methods

This study employed a non-experimental, cross-sectional correlational research design. This design involved collecting quantitative survey data from undergraduate students at one point in time to examine the relationship between emotional regulation and GPA and to test whether emotional regulation significantly predicts GPA. This approach allowed the researcher to describe and analyze naturally occurring relationships without

manipulating any variables. The cross-sectional correlational design supported the use of Pearson product-moment correlation and simple linear regression analyses to address the research questions while acknowledging that causality cannot be established from correlational findings alone. This study was conducted with IRB approval.

Participants

The final sample consisted of 163 undergraduate students enrolled at a large university in the Southwestern United States recruited through a university-wide online announcement and convenience sampling. Of the 143 participants who reported gender, 66.4% identified as female (n = 95), 31.5% as male (n = 45), and 2.1% as other (n = 3). Age was reported categorically, with 75.5% of participants between 18–25 years old (n = 123), 18.4% between 26–35 (n = 30), 4.3% between 36–45 (n = 7), and 1.8% aged 46 or older (n = 3). Students were self-selected into the study via an online survey hosted on Qualtrics. Inclusion criteria required participants to be currently enrolled undergraduates. No age restrictions were imposed to allow broader representation of undergraduate students at this large university. Exclusion criteria included graduate students, those seeking professional degrees (MD/JD/PhD) and individuals who could not read and write in the English language.

Instrument

Emotional regulation was measured using an adapted version of the Cognitive Emotion Regulation Questionnaire CERQ (Garnefski et al., 2002; Garnefski & Kraaij., 2006). The CERQ includes items that assess how individuals cognitively manage their emotions in response to academic stressors. The survey consisted of three sections, in addition, a background subscale was added by the research team, approved by the IRB committee. The Emotional Regulation Questionnaire ERQ and academic performance were tailored to gather an overall encompassing profile of the participants. Academic performance was operationalized as undergraduate students' self-reported cumulative Grade Point Average (GPA) on a 4.0 scale. The survey, via Qualtrics, was active over the course of two months, until the desired participation number was reached. A full set of survey items is provided in (Appendix A).

Procedure

After IRB approval, the email received by participants contained a consent form and survey link. The survey took no more than 10-15 minutes for the participants to complete. Participants were not compensated for their responses. Participants completed a series of questions covering background, academic information, and emotional regulation strategies. Responses were anonymous, and ethical safeguards were upheld to ensure confidentiality, autonomy, and minimal risk. While convenience sampling facilitated participant access, it presents limitations to include potential self-selection and response biases. These factors were considered in the interpretation of results discussed later.

Analysis

Data was analyzed using IBM SPSS Statistics (Version 30). Prior to analysis, data was screened for missing values, normality, and outliers. Descriptive statistics and reliability analyses were conducted for all study variables. Additional preliminary analyses included examination of frequency distributions, means, and standard deviations to summarize participant characteristics and overall patterns in the data. Internal consistency reliability was assessed using Cronbach's alpha coefficients to evaluate the reliability of multi-item scales. Assumptions relevant to subsequent inferential analyses, including linearity, homoscedasticity, and multicollinearity, were also evaluated as appropriate. These procedures ensured the data met the necessary assumptions for valid statistical interpretation and analysis.

To address Research Question 1, a Pearson product-moment correlation analysis was conducted to examine the strength and direction of the relationship between emotional regulation (as measured by the Cognitive Emotion Regulation Questionnaire) and academic performance (self-reported GPA). In addressing research Question 2, a simple linear regression analysis was performed with GPA as the dependent variable and emotional regulation as the independent variable. This analysis tested whether emotion regulation significantly predicted undergraduate students' GPA and provided an estimate of the proportion of variance in GPA explained by emotional regulation. Statistical significance was evaluated at an alpha level of .05.

Results

The purpose of this study was to examine the relationship between emotion regulation and academic performance in undergraduate students. The overall findings of this study provided useful information and lays the foundation for additional research to be conducted on the phenomenon. Due to academic performance being operationalized as self-reported on a 4.0 scale, prior to the analysis being conducted, the GPA variable was thoroughly reviewed for accuracy. Upon review, three GPA values exceeded the possible 4.0 scale and therefore were removed from the GPA analyses. After cleaning the data, valid GPA scored ranged from 1.00 to 4.00. A mean of 2.30 and a standard deviation of 0.86 were determined. While the information from the results yielded outcomes that were not what the researchers had hoped for, the implications for future studies were insightful.

As previously stated, the participants for this study were undergraduate students currently enrolled at a large university in the Southwest. Within the survey, Q11 sought to specify which college the participants were housed in within the university. The following three colleges are the most popular colleges at this university, based on the number of graduates (College of Business, Arts & Sciences, and Education). College affiliated data was included for descriptive purposes to characterize the sample.

The final sample varied across analyses due to missing responses. Among the participants with valid emotion regulation and GPA data collected, the emotion composite had a mean of 2.62 and a standard deviation of 0.56. Means, standard deviations, and Pearson correlation coefficients for emotion regulation and GPA are presented in Table 1.

For research question 1, a Pearson correlation analysis was conducted to examine the relationship between emotion regulation and academic performance (GPA). Results of the analysis revealed a small, negative, non-significant correlation between emotion regulation and GPA, $r(112) = -.14$, $p = .136$. Subsequently, high overall emotion regulation scores were not significantly associated with higher GPA within this sample.

For Research Question 2, a simple linear regression analysis was also conducted to determine if emotion regulation predicted undergraduate GPA. The overall regression model was not statistically significant, $F(1, 112) = 2.25$, $p = .136$, with an R^2 of .020. Emotion regulation accounted for approximately 2.0% of the variance in GPA. The unstandardized regression coefficient for emotion regulation was also non-significant, $B = –0.21$, $SE = 0.14$, $\beta = –.14$, $t(112) = –1.50$, $p = .136$, suggesting that emotion regulation scores did not significantly predict GPA scores.

Table 1

Variable	M	SD	1	2
1.Emotion Regulation	2.62	0.56	__	-.14
2.GPA	2.30	0.86	-.14	__

Note. Pairwise $N = 114$. GPA values above 4.0 were excluded prior to analysis. This correlation was not statistically significant, $p = .136$.

Exploratory item-level correlations were also examined to better understand if specific emotion regulation-related behaviors were associated with GPA. Most individual items were not significantly correlated with GPA. One item assessing unhealthy coping behaviors was significantly and negatively associated with GPA, $r = -.19$, $p = .048$. This suggests that greater endorsement of unhealthy coping behaviors was associated with lower GPA. The item assessing students' perceived ability to manage stress or negative emotions showed a small positive association with GPA. Although this relationship did not reach statistical significance, $r = .18$, $p = .052$.

When considered collectively, the findings do not support the conclusion that overall emotion regulation significantly predicts GPA. However, the exploratory item-level results suggest that specific coping-related behaviors, particularly unhealthy coping and perceived stress-management ability, may be more relevant to academic performance than the overall emotion regulation composite score.

Relationship Between Emotional Regulation and Academic Performance

To examine the relationship between emotional regulation and academic performance (GPA), Pearson product-moment correlation analyses were conducted between students' self-reported GPA and individual items assessing emotion regulation (Q16–Q27; Q31-33; Q37, & Q39). Most items were measured on a 5-point Likert

scale (1 = Strongly Disagree to 5 = Strongly Agree). Some items used alternative categorical response formats, including frequency descriptors and self-ratings.

Results indicated that most individual emotion regulation items were not statistically associated with GPA. However, a small number of items did indicate meaningful trends. For example, an individual's perceived ability to manage stress or negative emotions (e.g., Q27) reflected a small positive association with GPA. Despite this relationship not reaching statistical significance. As opposed to items that reflect maladaptive or unhealthy coping behaviors were negatively associated with GPA. For example, one item did reach statistical significance (r = -.19, p < .05).

Exploratory Mechanisms: Motivation and Self-Efficacy in Emotion Regulation and GPA

Although not statistically tested and present within this study, open-ended responses and other related survey items such as perceived ability to manage stress, efforts to reframe stressful situations, and active engagement in coping behaviors (e.g., focusing on positive aspects of life or employing self-care strategies) suggest that intrinsic motivation and self-efficacy may influence the relationship between emotion regulation and GPA. For example, items that best illustrate self-efficacy related processes include Q27: "How would you describe your ability to manage stress or negative emotions?" This question is direct perceived capability (core self-efficacy concept). While Q20: "When I am faced with a stressful situation, I make myself think about it in a way that helps me stay calm" illustrates emotion management confidence and control.

Next, the following items were designed to best Illustrate Intrinsic Motivation–Related Processes. These items include "When you are feeling overwhelmed by academic pressure, which of the following do you typically do to regulate your emotions?" (Q28). This question suggests active coping behaviors (especially "take breaks," "talk to a friend," "self-care ritual"). Whereas Q16 / Q22 / Q25 (ERQ Reappraisal items) deduce cognitive effort to improve emotional state, often linked to intrinsic engagement. However, as these findings were not tested with inferential statistical methods, these interpretations are exploratory and should be interpreted with caution. Overall, these findings do not support the hypothesis that stronger emotion regulation skills are associated with higher academic performance in undergraduate students. However, they do suggest that specific emotional regulation behaviors may warrant further investigation in relation to academic outcomes.

Discussion

The purpose of this study was to examine the relationship between emotional regulation and academic performance among undergraduate students, guided by Self-Regulation and Social Cognitive Theories. The findings revealed that emotional regulation did not significantly predict undergraduate GPA. Therefore, the findings do not support the conclusion that general emotional regulation, specifically measure in this study, serve as a direct predictor of academic performance.

However, selected findings suggested that certain adaptive emotional regulation behaviors showed small positive associations with GPA. Although these relationships were limited and not consistently statically significant. Students who reported stronger abilities to adapt emotionally, remain calm under pressure, and manage emotions when receiving negative feedback, specifically from instructors, tended to report slightly higher GPAs. These results suggest that while the overall emotional regulation construct was not a significant predictor, specific emotional competencies may still contribute to academic functioning. These findings also align with SCT's emphasis on self-efficacy and learned coping skills, they are also central to motivation and self-regulated behavior.

These findings align with prior literature indicating that particular emotional regulation strategies may be more relevant to academic outcomes than broad composite measures. For example, Nadeem et al, (2023) found that cognitive reappraisal was positively associated with academic performance. Whereas expressive suppression was negatively associated with performance among college students. Similarly, Romo et al, (2025) reported in their systematic review and meta-analysis that problem solving strategies were positively associated with academic achievement, while avoidance and self-blame were negatively associated. No significant associations were found for cognitive-reappraisal, expressive-suppression, acceptance, and social support. These outcomes reported in the recent literature highlight the need to further explore these relationships by targeting specific emotional regulation strategies such as cognitive and metacognitive-reappraisal, social learning support system (including peers, advisors, and instructors), problem-solving, and the four sources of self-efficacy.

When combined, the present findings suggest that emotional regulation may be better understood as multi-dimensional construct within academic contexts. Instead of assuming that total emotional regulation scores predict one's GPA, additional future research would benefit from examining how specific strategies influence student success. These strategies include stress tolerance, feedback, cognitive reappraisal, emotional awareness and problem-solving behaviors.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, the use of convenience sampling limits the generalizability of the results. Participants were recruited based on availability rather than through random or stratified sampling methods, which may result in sampling bias. Consequently, the findings may not be representative of the broader undergraduate population across institutions, academic disciplines, or demographic groups.

Second, the study relied exclusively on self-reported survey data. This introduces the potential for response bias, including social desirability effects and inaccurate self-assessment. Additionally, the absence of qualitative data limited the ability to explore students' emotional regulation experiences in greater depth. The study also did not include access to objective academic performance indicators, such as official GPA records or course performance scores. In doing so, this prevented cross-validation of self-reported academic outcomes.

Third, while the study assessed general emotion regulation tendencies, it did not directly measure specific emotional regulation strategies beyond those broadly captured by the survey items. In particular, strategies such as acceptance-based regulation, problem-focused coping, and the role of social support systems were not explicitly examined. As a result, the findings may not fully capture the complexity or diversity of emotion regulation processes that influence academic performance.

Despite these limitations, the study provides meaningful preliminary insights into the relationship between emotion regulation and academic performance among undergraduate students and highlights important directions for future research. Future studies employing randomized sampling, mixed methods design, and objective academic performance data may provide a more comprehensive understanding of how specific emotional regulation strategies influence academic outcomes.

Implications

These results have practical implications for educators and student affairs professionals such as advisors and mentors. Interventions that could help students develop emotional regulation strategies and effective coping mechanisms such as stress management programs, mindfulness workshops, or skills-based counseling may help enhance academic performance. In particular, programs that focus on cognitive reappraisal, emotional awareness, and adaptive coping skills may improve students' ability to manage academic stressors. Thereby reducing emotional reactivity and promoting sustained engagement with academic tasks. Mindfulness-based interventions (Mrazek et al., 2013; Zenner et al., 2014) may further support students' capacity to observe and regulate emotional responses without avoidance or suppression. This has been associated with improved concentration, emotional balance, and resilience in academic settings.

Additionally, skills-based counseling and psychoeducational interventions (Durlak et al., 2011; Richardson et al., 2012) that emphasize goal setting, self-monitoring, and reflective coping may strengthen students' self-efficacy and intrinsic motivation. When students perceive greater control over their emotional responses, they may be more likely to persist through academic challenges, seek support when needed, and employ adaptive problem-solving strategies. Integrating these interventions within university support services such as counseling centers, first-year seminars, or academic success programs may provide accessible and scalable opportunities to enhance both emotional regulation and academic outcomes among undergraduate students.

Embedding emotional competence training into successful academic performance courses, freshman seminars, or student support services could equip students with adaptive coping tools early on. Further, these results suggest that strengthening students' motivation and self-efficacy may reinforce their ability to better regulate emotions and persist academically. Academic coaching, mentoring, and supportive feedback practices could play a role in nurturing this.

Recommendations for Future Research

This study's cross-sectional design limits causal conclusions. Longitudinal studies are recommended to examine how emotion regulation and GPA influence each other over time. Additionally, future research should verify GPA using formally posted institutional records to reduce self-report bias. Given the sample was only from one university in the Southwest, more diverse samples from multiple institutions would strengthen generalizability. Future studies should also test the moderating or mediating roles of motivation and self-efficacy more directly using advanced statistical approaches such as structural equation modeling. Combining quantitative and qualitative methods could further illuminate how students develop emotion regulation skills and how these skills affect their academic paths.

Conclusion

This study examined the relationship between emotional regulation and academic performance among undergraduate students. In this investigative query, two primary researcher questions guided the study, (1) whether overall emotional regulation is associated with GPA, and (2), whether emotional regulation predicts academic performance. The findings indicated that overall emotional regulation was not significantly correlated with GPA and did not significantly predict academic performance. The results suggest that general measures of emotional regulation, specifically as operationalized by this study, may not serve as reliable indicators of academic success.

However, exploratory analyses revealed that certain emotion regulation-related behaviors, such as the ability to remain calm under academic pressure, manage negative feedback received, and avoid maladaptive coping strategies all showed small and nuanced associations with GPA. Despite these relationships being limited in their strength, as well as consistently not being statistically significant, they reveal that potential importance of examining specific emotional competencies. As opposed to relying solely on global emotional regulation scores.

In conjunction, the findings emphasize the complexity of emotional regulation as a multidimensional construct within academic contexts. Emotional regulation may influence student success through specific adaptive strategies and coping behaviors. Rather than functioning as a singular predictor of academic performance. This study aids in contributing to the growing body of literature by emphasizing the need for more targeted investigations. Particularly for those that investigate how distinct emotional regulation processes operate within higher education settings. Assisting in understanding these nuanced relationships could protentionally help inform future research. Also, the development of interventions aimed at helping support students' emotional and academic success.

References

Anfara, V. A., & Mertz, N. T. (2015). *Theoretical frameworks in qualitative research* (2nd ed.). SAGE.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child Development, 74*(3), 769–782. https://doi.org/10.1111/1467-8624.00567

Collado-Soler, R., Trigueros, R., Aguilar-Parra, J. M., & Navarro, N. (2023). Emotional intelligence and resilience outcomes in adolescent period, is knowledge really strength?. *Psychology Research and Behavior Management*, 1365-1378.

Denham, S. A. (2019). Emotional competence during childhood and adolescence. In *Handbook of emotional development* (pp. 493-541). Cham: Springer International Publishing

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Garnefski, N., & Kraaij, V. (2006). Relationships between cognitive emotion regulation strategies and depressive symptoms: A comparative study of five specific samples. *Personality and Individual Differences, 40*(8), 1659–1669. https://doi.org/10.1016/j.paid.2005.12.009

Grazzani, I., Agliati, A., Cavioni, V., Conte, E., Gandellini, S., Lupica Spagnolo, M., ... & Oriordan, M. R. (2022). Adolescents' resilience during COVID-19 pandemic and its mediating role in the association between SEL skills and mental health. *Frontiers in psychology*, *13*, 801761.

Gross, J. J. (1999). Emotion regulation: Past, present, and future. *Cognition & Emotion, 13*(5), 551–573. https://doi.org/10.1080/026999399379186

Gupta, T., & Gehlawat, P. (2020). Emotional regulation in adolescents: A narrative review. *Journal of Indian Association for Child and Adolescent Mental Health, 16*(3), 171–193.

Mrazek, M. D., Franklin, M. S., Phillips, D. T., Baird, B., & Schooler, J. W. (2013). Mindfulness training improves working memory capacity and GRE performance while reducing mind wandering. *Psychological Science, 24*(5), 776–781. https://doi.org/10.1177/0956797612459659

Lopez, R. B., Courtney, A. L., Liang, D., Swinchoski, A., Goodson, P., & Denny, B. T. (2024). Social support and adaptive emotion regulation: Links between social network measures, emotion regulation strategy use, and health. *Emotion*, *24*(1), 130.

Nadeem, A., Umer, F., & Anwar, M. J. (2023). Emotion regulation as predictor of academic performance in university students. *Journal of Professional & Applied Psychology*, *4*(1), 20-33.

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387. https://doi.org/10.1037/a0026838

Romo, Javiera, J. Carola Pérez, Patricio Cumsille, Tom Hollenstein, Adriana Olaya-Torres, Matías E. Rodríguez-Rivas, and Josefina Melero. "Emotion regulation strategies and academic achievement among secondary and university students: a systematic review and meta-analysis." *Educational Psychology Review* 37, no. 3 (2025): 80.

Santos Alves Peixoto, L., Guedes Gondim, S. M., & Pereira, C. R. (2022). Emotion regulation, stress, and well-being in academic education: Analyzing the effect of mindfulness-based intervention. *Trends in Psychology*, *30*(1), 33-57.

Tang, W., Yan, Z., Lu, Y., & Xu, J. (2022). Prospective examination of adolescent emotional intelligence and post-traumatic growth during and after COVID-19 lockdown. *Journal of Affective Disorders*, *309*, 368-374.

Wang, Y., Xia, M., Guo, W., Xu, F., & Zhao, Y. (2023). Academic performance under COVID-19: The role of online learning readiness and emotional competence. *Current psychology*, *42*(34), 30562-30575.

Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools—A systematic review and meta-analysis. *Frontiers in Psychology, 5*, 603. https://doi.org/10.3389/fpsyg.2014.00603

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.