THE IMPACT OF EMOTIONAL REGULATION OF EARLY CHILDHOOD STUDY PROGRAM STUDENTS ON TIME MANAGEMENT IN DISTANCE LEARNING

Apri Kasman^{1*}, Sri Tatminingsih², Della Raymena Jovanka³, Erna Risnawati⁴

*apri.kasman@ecampus.ut.ac.id.

Abstract

This research aims to examine the impact of emotional regulation on time management among students in the Early Childhood Education Study Program during distance learning. As higher education increasingly adopts online learning systems, students are required to take more responsibility in managing their academic activities independently. This condition demands not only cognitive readiness but also emotional maturity. Emotional regulation the ability to recognize, understand, and manage one's emotional responses is considered a key factor in supporting students' ability to manage their time effectively, particularly in an autonomous and distraction prone environment like distance learning. The results showed a significant positive correlation between emotional regulation and time management. Students who demonstrated strong emotional regulation skills were more likely to organize their schedules effectively, complete assignments on time, and maintain consistent learning routines. These students were better equipped to handle academic stress, avoid procrastination, and remain focused during virtual classes. Conversely, students with lower emotional regulation tended to struggle with maintaining discipline, frequently experienced anxiety or frustration, and often failed to manage their time efficiently. The findings indicate that emotional competencies play an essential role in shaping academic behaviors, particularly in flexible learning environments where external supervision is minimal. In the context of early childhood education, where future professionals are expected to possess high emotional intelligence, strengthening these skills during their academic formation is critical. Based on the results, it is recommended that universities integrate emotional regulation training into their learning support programs or curriculum. Workshops, counseling, and reflective practices may help students develop greater self-awareness and self-regulation, which in turn can lead to improved academic performance.

Keywords: emotional regulation, time management, distance learning, early childhood education.

1 INTRODUCTION

The rapid development of technology and the increasing use of digital learning platforms have significantly transformed the landscape of higher education. Distance learning, which offers flexibility and accessibility, has become an integral part of modern education systems (Moore et al., 2011). However, despite its advantages, distance learning presents unique challenges for students, particularly in terms of managing learning time independently and

maintaining consistent academic discipline (Broadbent & Poon, 2015). Effective time management is a critical skill for academic success, especially in online learning environments where students must take greater responsibility for organizing their schedules, meeting deadlines, and balancing multiple tasks (Claessens et al., 2007). Poor time management has been associated with lower academic performance, increased stress levels, and procrastination (Steel, 2007). In contrast, students who demonstrate strong time management skills tend to show better academic outcomes and personal well-being. One psychological factor believed to significantly influence time management behavior is emotional regulation. Emotional regulation refers to the process by which individuals monitor, evaluate, and modify their emotional reactions in order to achieve goals or adapt to environmental demands (Gross, 1998). In the context of learning, emotional regulation plays a key role in helping students cope with academic pressure, manage frustration, and stay focused on tasks (Pekrun et al., 2002). Students with high emotional regulation are better equipped to avoid procrastination, make thoughtful decisions, and persevere through academic challenges (Tice & Baumeister, 1997).

In the field of early childhood education, the ability to regulate emotions is particularly important not only for personal academic success, but also as a foundation for future professional roles. Early childhood educators are expected to possess high levels of emotional intelligence to effectively interact with young children and support their emotional development (Denham, 2006). Therefore, fostering emotional regulation among early childhood education students during their training is essential. Despite its importance, few studies have specifically examined the relationship between emotional regulation and time management among students in early childhood education programs, particularly in distance learning settings. This study seeks to fill that gap by exploring how emotional regulation influences the ability of students in the Early Childhood Study Program to manage their time effectively while engaging in remote learning. Understanding this relationship can help educators and institutions design better support systems that address both the emotional and behavioral aspects of student success. The development of digital technology has significantly changed the way education is delivered, especially in higher education. Distance learning, or online learning, has become a common model, providing students with flexibility and access to learning from various locations (Anderson, 2011). However, this flexibility demands greater autonomy and self-regulation from students, especially in managing their academic responsibilities. Students are expected to plan, schedule, and complete learning activities without direct supervision from instructors or peers (Zimmerman, 2002). In distance learning settings, time management is widely recognized as one of the most critical success factors. Time management refers to the ability to allocate appropriate time to tasks, prioritize responsibilities, and avoid procrastination (Britton & Tesser, 1991). Students who manage their time effectively are more likely to perform well academically, experience less stress, and maintain a better balance between academic and personal life (Eilam & Aharon, 2003). On the contrary, students with poor time management often fall behind in their studies, miss deadlines, and experience higher levels of anxiety (Misra & McKean, 2000). Beyond cognitive skills, emotional factors play a significant role in determining students' academic behaviors and outcomes. Emotional regulation the ability to monitor, evaluate, and modulate emotional reactions is a key component of emotional intelligence that influences motivation, concentration, and perseverance in learning (Gross, 1998; Salovey & Mayer, 1990). Emotional regulation helps students remain calm under pressure, adapt to unexpected changes, and recover from academic setbacks (Burić & Frenzel, 2020). In distance learning environments, where external support and social interaction are limited, emotional regulation becomes even more crucial. Students who can effectively regulate their emotions are more likely to stay motivated, avoid procrastination, and maintain focus throughout their academic tasks (Artino & Stephens, 2009). These students tend to develop more structured learning routines and demonstrate stronger time management skills. In the context of early childhood education, the development of emotional skills is not only essential for academic success but also aligns with the professional competencies required in the field. Early childhood educators must be emotionally responsive and capable of managing their own emotional states to support the emotional and social development of young children (Denham, 2006; Jennings & Greenberg, 2009). Therefore, equipping students in early childhood education programs with emotional regulation skills during their training is a strategic investment in both their academic and professional readiness.

Despite the growing awareness of the importance of emotional regulation and time management, limited research has specifically explored the relationship between these two variables among early childhood education students in distance learning contexts. This study aims to investigate how emotional regulation influences the time management behaviors of students enrolled in the Early Childhood Study Program. The findings are expected to provide

insights for educators and institutions to design interventions that support both emotional and behavioral competencies necessary for success in online learning environments. Moreover, time management and emotional regulation are core components of self-regulated learning (SRL), a theoretical framework that emphasizes the role of metacognition, motivation, and behavior in learning processes (Zimmerman, 2000). According to SRL theory, successful learners actively plan, monitor, and evaluate their learning progress, and this self-directed behavior is often influenced by emotional states and motivational beliefs. Emotional regulation facilitates metacognitive processes by enabling students to remain calm and focused when encountering difficulties, thereby enhancing their ability to follow through on learning goals (Pintrich, 2000). Intrinsic motivation also plays a crucial role in this relationship. Students who are emotionally regulated are more likely to develop intrinsic motivation engaging in learning activities for personal satisfaction rather than external rewards (Ryan & Deci, 2000). Such motivation supports persistence and deep learning, which are especially important in asynchronous online environments where immediate feedback or guidance is limited. Emotional instability, on the other hand, can lead to decreased motivation, avoidance behavior, and ultimately poor time management (Pekrun et al., 2002). For students in Early Childhood Education (ECE) programs, these dynamics are particularly significant. The nature of ECE requires not only pedagogical knowledge but also the development of soft skills such as empathy, patience, and emotional responsiveness (Hyson, 2004). These competencies begin to form during the academic training period and are closely tied to students' emotional and behavioral regulation. Students who manage their emotions effectively are more likely to complete academic tasks on time, engage positively in online class discussions, and maintain balanced workloads, all of which are indicators of effective time management.

Given the layered complexity of learning in early childhood education where students are both acquiring academic content and developing professional identity it is essential to examine how their emotional skills support or hinder time management in distance learning. The growing demand for online and blended learning models in teacher education highlights the urgent need to understand these internal factors and their practical implications. Thus, this study seeks to investigate the extent to which emotional regulation predicts time management behavior among students of the Early Childhood Study Program, and how this interaction may inform institutional efforts to support student success.

2 METHODOLOGY

2.1 Research Design

This study uses a quantitative research approach with a correlational design. The purpose of this design is to examine the relationship between emotional regulation and time management among students of the Early Childhood Education Study Program in a distance learning environment. A correlational method is appropriate for identifying patterns and measuring the strength and direction of the association between two or more variables (Creswell, 2012).

2.2 Population and Sample

The population in this study consists of all students enrolled in the Early Childhood Education Study Program at Universitas Terbuka who are actively participating in distance learning. A purposive sampling technique was used to select respondents who met specific criteria: (1) currently enrolled in the program, (2) experienced online learning for at least one full semester, and (3) willing to participate voluntarily.

The final sample comprised 100 students, which meets the minimum requirement for correlation analysis based on guidelines for social science research (Gay, et al., 2012).

2.3 Variables

Independent Variable (X): Emotional Regulation, Dependent Variable (Y): Time Management

2.4 Data Collection Instruments

Two standardized instruments were used:

- a. Emotional Regulation Scale: Adapted from the Emotion Regulation Questionnaire (ERQ) by Gross & John (2003), consisting of items measuring two main dimensions: cognitive reappraisal and expressive suppression. The scale uses a 5-point Likert format (1 = strongly disagree to 5 = strongly agree).
- b. Time Management Questionnaire: Adapted from Britton and Tesser (1991), this instrument assesses students' ability to plan, prioritize, schedule, and complete tasks. It also uses a 5-point Likert scale.

Prior to full distribution, the instruments were tested for validity and reliability. Content validity was evaluated through expert judgment, while construct validity and internal consistency reliability were tested using Pearson product-moment correlation and Cronbach's Alpha, respectively. Both instruments showed good reliability ($\alpha > 0.70$).

2.5 Data Collection Procedure

The questionnaires were distributed online via Google Forms. Participants were provided with informed consent forms to ensure ethical participation. Responses were collected over a two week period. The anonymity and confidentiality of respondents were strictly maintained.

2.6 Data Analysis Techniques

Data were analyzed using descriptive and inferential statistics. Descriptive statistics (mean, standard deviation) were used to describe students' emotional regulation and time management levels. For inferential analysis, Pearson's correlation coefficient (r) was applied to determine the strength and significance of the relationship between the two variables. All statistical analyses were conducted using SPSS version 25.

The interpretation of the correlation coefficient follows Sugiyono's (2018) classification:

- a. 0.00-0.199 = Very low
- b. 0.20-0.399 = Low
- c. 0.40-0.599 = Moderate
- d. 0.60-0.799 = Strong
- e. 0.80-1.000 = Very strong

The level of significance was set at p < 0.05.

3 FINDINGS AND DISCUSSION

3.1 Findings

3.1.1 Descriptive Statistics

The study involved 100 students from the Early Childhood Education Study Program participating in distance learning. The descriptive statistics for Emotional Regulation (ER) and Time Management (TM) scores are summarized in Table 1.

Table 1. Descriptive statistics of Emotional Regulation and Time Management

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Emotional Regulation	100	3.85	0.52	2.10	4.90
Time Management	100	3.67	0.58	2.00	4.80

The average emotional regulation score was 3.85 (on a 5-point scale), indicating that students generally reported a moderate to high ability to regulate their emotions. Similarly, the mean

time management score was 3.67, suggesting moderate proficiency in managing their time during distance learning.

3.1.2 Correlation Analysis

To examine the relationship between emotional regulation and time management, Pearson's correlation coefficient was calculated. The results are shown in Table 2.

Table 2. Correlation between Emotional Regulation and Time Management

Variables	Emotional Regulation	Time Management
Emotional Regulation (ER)	1	0.63
Time Management (TM)	0.63**	1

Note: p < 0.01 (2-tailed)

The correlation coefficient of r = 0.63 (p < 0.01) indicates a strong positive relationship between emotional regulation and time management among the students. This means students with higher emotional regulation tend to demonstrate better time management skills.

3.1.3 Additional Analysis Regression

To further understand the predictive power of emotional regulation on time management, a simple linear regression analysis was conducted:

Table 3. Regression analysis summary

Model	R	R²	Adjusted R	² Std. Error of Estimate
Emotional Regulation	0.63	0.40	0.39	0.45

The coefficient of determination ($R^2 = 0.40$) indicates that 40% of the variance in time management can be explained by emotional regulation. This is a substantial proportion, highlighting the importance of emotional skills in managing time effectively during distance learning.

Here is a graph in Figure 1 showing the scatter plot between Emotional Regulation and Time Management scores. It is clear that there is a positive relationship pattern, where students with higher emotional regulation tend to have better time management in distance learning.

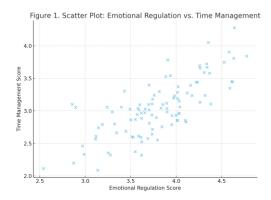


Figure 1 illustrates a scatter plot that displays the relationship between students' emotional regulation scores and their time management scores. Each point on the graph represents an individual student from the sample (N = 100), plotted based on their reported emotional regulation and time management levels on a scale of 1 to 5. The overall pattern in the scatter plot shows a positive linear trend, suggesting that as emotional regulation increases, time management tends to increase as well. This visual pattern supports the statistical finding of a strong positive correlation (r = 0.63) between the two variables. In practical terms, students who are more capable of regulating their emotions are also more likely to be effective in managing their time during distance learning. The data points are moderately clustered along an upward slope, indicating consistency in the relationship. However, there is some degree of variability, which is expected in social science data, reflecting individual differences in students' emotional and behavioral responses to learning. This visualization strengthens the argument that emotional self-regulation is a significant factor influencing time management behaviors, particularly in autonomous learning environments such as online or distance education. It suggests that enhancing emotional regulation skills may contribute to improved academic time management among students.

3.2 Discussion

3.2.1 Discussion Data

The findings reveal a significant and strong positive correlation between emotional regulation and time management among Early Childhood Education students engaged in distance learning. This supports previous research indicating that emotional regulation plays a crucial role in self-regulated learning and academic behaviors (Gross, 1998; Pekrun et al., 2002). The descriptive data indicate that students generally maintain moderate to high levels of emotional regulation and time management. This may be attributed to the demands of distance learning, which require students to independently manage their emotional responses and schedules. Students with

stronger emotional regulation are more capable of coping with challenges such as distractions, stress, and lack of direct supervision, which in turn facilitates better planning and organization of their academic tasks (Artino & Stephens, 2009). The strong correlation (r = 0.63) found aligns with the Social Cognitive Theory of self-regulated learning by Zimmerman (2002), emphasizing the interplay of cognitive and emotional factors in students' academic success. Students who effectively regulate their emotions can sustain motivation, reduce procrastination, and adhere to their planned schedules, leading to better time management outcomes.

3.2.2 Implications

These findings suggest that interventions aiming to improve students' time management should also focus on enhancing their emotional regulation skills. For Early Childhood Education programs, this dual approach could foster better academic outcomes and prepare students for the emotionally demanding professional roles ahead.

3.2.3 Limitations and Future Research

While the correlation and regression analyses provide valuable insights, this study's cross-sectional design limits the ability to infer causality. Future research could use longitudinal designs to examine how emotional regulation and time management develop over time. Moreover, qualitative studies may deepen understanding of the specific emotional challenges faced by students in distance learning.

4 **CONCLUSION**

This study aimed to investigate the relationship between emotional regulation and time management among students of the Early Childhood Education Study Program engaged in distance learning. The findings indicate that students generally possess moderate to high levels of both emotional regulation and time management, as reflected in the descriptive statistical data. The results of the correlation analysis revealed a strong positive relationship (r = 0.63, p < 0.01) between emotional regulation and time management. This suggests that students who are better able to manage and regulate their emotions tend to have better control over their time, are more organized, and more capable of completing academic tasks efficiently in an online learning environment. Furthermore, the regression analysis indicated that emotional regulation significantly predicts time management performance, accounting for 40% of the variance in time management scores. These findings highlight the importance of emotional competencies in supporting academic self-regulation, especially in independent

learning environments such as distance learning. For students in Early Childhood Education, where emotional intelligence is also a key component of future professional performance, the ability to regulate emotions plays a dual role enhancing both personal learning and future teaching readiness. In light of these results, educators and institutions are encouraged to integrate emotional regulation training or support into academic programs. This could take the form of counseling services, workshops, or curriculum components that address emotional awareness, stress management, and self regulation strategies. Strengthening these skills may not only improve students' academic outcomes but also prepare them to be more effective and emotionally responsive early childhood educators.

ACKNOWLEDGEMENTS

First of all, the researcher would like to express her deepest gratitude to Allah SWT for the strength, health, and guidance during the completion of this research. The researcher would also like to express her deepest gratitude to her fellow lecturers in the Early Childhood Education Study Program of Universitas Terbuka who have always provided support, guidance, and valuable input during the research process. Special appreciation is given to the students of the Early Childhood Education Study Program who have voluntarily participated in this research and provided honest responses. Their contributions are very important in making this research possible. Finally, her deepest gratitude goes to the researcher's family and friends for their endless encouragement, patience, and moral support during the writing and completion of this research. Hopefully this work will be beneficial for the development of education, especially in understanding the role of emotional regulation in improving students' academic behavior in distance learning.

REFERENCES

- Anderson, T. (2011). *The theory and practice of online learning* (2nd ed.). Athabasca University Press.
- Artino, A. R., & Stephens, J. M. (2009). Academic motivation and self-regulation: A comparative analysis of undergraduate and graduate students learning online. *The Internet and Higher Education*, 12(3–4), 146–151. https://doi.org/10.1016/j.iheduc.2009.02.001.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405–410. https://doi.org/10.1037/0022-0663.83.3.405.

- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1–13. https://doi.org/10.1016/j.iheduc.2015.04.007.
- Burić, I., & Frenzel, A. C. (2020). Teacher emotional labor, instructional strategies, and students' academic engagement: A multilevel analysis. *Teaching and Teacher Education*, 89, 102956. https://doi.org/10.1016/j.tate.2019.102956.
- Claessens, B. J. C., van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of the time management literature. *Personnel Review*, *36*(2), 255–276. https://doi.org/10.1108/00483480710726136.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Pearson.
- Denham, S. A. (2006). Social–emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, 17(1), 57–89. https://doi.org/10.1207/s15566935eed1701_4.
- Eilam, B., & Aharon, I. (2003). Student planning in the process of self-regulated learning. *Contemporary Educational Psychology*, 28(3), 304–334. https://doi.org/10.1016/S0361-476X(02)00042-5.
- Gay, L. R., Mills, G. E., & Airasian, P. (2012). Educational research: Competencies for analysis and applications (10th ed.). Pearson.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348.
- Hyson, M. (2004). The emotional development of young children: Building an emotion-centered curriculum (2nd ed.). Teachers College Press..
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525. https://doi.org/10.3102/0034654308325693.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41–51..
- Moore, M. G., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, 14(2), 129–135. https://doi.org/10.1016/j.iheduc.2010.10.001.

- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37(2), 91–105. https://doi.org/10.1207/S15326985EP3702_4.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451–502). Academic Press..
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. https://doi.org/10.1006/ceps.1999.1020.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. https://doi.org/10.2190/DUGG-P24E-52WK-6CDG.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65–94. https://doi.org/10.1037/0033-2909.133.1.65.
- Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.
- Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8(6), 454–458. https://doi.org/10.1111/j.1467-9280.1997.tb00460.x.
- 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.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2.