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Exploring the Relationship between Academic Achievement and Emotional Intelligence in Upper Primary School Students

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ABSTRACT

This study investigates the relationship between academic achievement and emotional intelligence among upper primary school students. The research, conducted in SD Negeri 1 Rukuwa, Sulawesi Tenggara, explores the levels of emotional intelligence and learning success among 48 participants. The findings reveal that most students exhibit moderate emotional intelligence while learning success is distributed across low, moderate, and high categories. Statistical analyses, including correlation coefficients and regression models, indicate a limited impact of emotional intelligence on academic achievement. The results suggest that other factors such as attention, interest, talent, maturity, preparation, intelligence, and logical intelligence may significantly influence learning success. The study contributes valuable insights into the complex interplay between emotional intelligence and upper primary education academic achievement.

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Introduction

Education is a gradual and continuous journey, marked by three formal levels implemented in primary schools in Indonesia: elementary school, junior high school, and college. According to Law No. 20 of 2003, Article 14, Elementary School (*Sekolah Dasar* or SD)

represents the most fundamental level of formal education in Indonesia. The learning outcomes at this stage serve as a foundation for determining the goals of advancing to the next level of formal education. As part of a sustainable education system, the government has mandated relevant study programs aligned with educational objectives in Indonesia. Achieving these goals requires a series of lengthy processes, beginning with improving teacher quality, facilities, infrastructure that support learning, and elements conducive to achieving these objectives. Observations reveal that SD Negeri 1 Rukuwa, Sulawesi Tenggara, possesses a library capable of hosting extracurricular activities such as scientific books and scouts.

In the learning process, both intelligence and emotions significantly influence students. A well-functioning educational process necessitates an emotional understanding of the discourse presented in the classroom. However, Intelligence Quotient (IQ) and Emotional Quotient (EQ) are typically regarded as critical elements for students to thrive in school [1]-[3]. Teaching in schools involves not only sharing rational intelligence, a model commonly understood by students but also addressing students' emotional intelligence. Individuals with high IQs may acknowledge challenges in following their teachers' instructions. Still, the reality suggests that many people with high IQs also possess emotional intelligence that surpasses their high IQ learning outcomes, contributing to academic success [4].

The emergence of emotional intelligence in education responds to deviations in the learning process [5]. Emotional intelligence encompasses crucial aspects such as empathy, deep understanding and emotional awareness of others, anger management, autonomy, adaptability, interpersonal problem-solving skills, perseverance, solidarity, kindness, and respect, all contributing to the success of the learning process.

Considering the above description, it can be concluded that emotional intelligence is a crucial factor that students need to acknowledge to achieve better academic success in school, as it significantly impacts students' performance. It is fascinating to explore the current reality because, according to theory, individuals with higher emotional tendencies are more likely to achieve high learning outcomes. Conversely, those with relatively low emotional intelligence achieve relatively lower outcomes. Although the reality may sometimes show the opposite, individuals without high emotional intelligence can still achieve commendable learning outcomes [6].

According to Erikson, college students are in the emotional (psychosocial) development stage. Emotional development during the school-age years, approximately from age 6 to age 12 or 13, involves a stronger desire for understanding, aligning with fundamental efforts for competency and productive work. A previous study notes that Erikson's explanation of emotional (psychosocial) development in school-age children emphasizes the need for hard

work to develop a diligent attitude [7]. Furthermore, children may feel incompetent (lower complexity) and unable to do anything. This emphasizes how children become confident, motivated, enthusiastic, and work hard for their learning success. Emotional intelligence always plays a crucial role. Based on the above description, researchers selected elementary schools as the subjects of the study to examine the influence of emotional intelligence levels on students' success. Emotional intelligence does not affect students' performance, with the Emotional Intelligence Scale categories indicating 9.5% in the high category and a learning performance distribution of 20.8%, demonstrating that learning outcomes are more important than emotional intelligence.

Based on interview outputs from classroom teachers, it appears that many students lack emotional skills—meaning they struggle to control themselves and show low enthusiasm for learning. This deficiency can affect learning outcomes, as students lack motivation. Consequently, schools and educators must collaborate to guide students with such challenges, enabling them to achieve better learning outcomes. The primary objective of this research is to determine the influence of emotional intelligence on the academic performance of high-grade students at SD Negeri 1 Rukuwa, Sulawesi Tenggara.

Material and Methods

A. Research Design

This research employs a quantitative correlational design to explore the correlation between emotional intelligence and academic achievement among high-grade (5th) students at SD Negeri 1 Rukuwa, Sulawesi Tenggara. The study adheres to the scientific research process, intending to provide possible alternatives to address the identified problem without offering a direct solution to the dilemma.

The chosen method is quantitative correlational research, specifically a correlational study. A correlational study seeks to identify relationships and the degree of correlation between two or more variables without manipulating them. The researcher does not attempt to influence the variables, emphasizing the importance of understanding the correlation and the level of the variables. This type of research typically involves statistical measurements of claimed relationships. Instruments such as surveys are used to determine the extent and nature of the relationship between variables.

A. Population and Sample

The population for this study comprises the upper-grade classes. The sample consists of the entire population, with 48 students selected as respondents for the study. The sampling method involves using the whole population of high-grade students at the school.

B. Instrumentation

The instrument used for data collection is a measurement tool represented as a blueprint. The Emotional Intelligence Scale blueprint comprises five aspects, each with specific indicators, facilitating emotional intelligence assessment.

Table 1. Instrument's rubric

No	Aspects	Indicators	Items		Total
			Favorable	Unfavorable	
1	Recognizing self-emotions (self-awareness)	Recognizing and understanding your own emotions and the causes of emotions	1, 5, 9,39	18, 19, 21, 16	8
2	Managing one's emotions	Controlling emotions and expressing emotions appropriately	14, 3, 17,20	15,4, 27,34,	8
3	Motivate you (productively use emotions)	Have a sense of responsibility, be able to focus on the task at hand, be able to control and not be impulsive	13, 22, 25,6	2, 10,7, 8,	8
4	Recognizing the emotions of others (empathy)	Sensitive to the feelings of others, listening to other people's problems	11, 29, 35, 40	38, 32,33,28	8
5	Build relationships (cooperation) with others	Able to work together and be able to commune well	15, 24, 37, 12, 35	30, 36, 26,	8
				Total	40

C. Data Collection and Data Analysis

Data collection took place from April 7 to April 11, 2021. The researcher provided instructions on how to fill out the scale and conducted training sessions for the subjects. The scale includes recognizing one's emotions, managing one's feelings, motivating oneself, recognizing others' emotions (empathy), and building relationships (collaboration). Examiners filled out the Emotional Intelligence Scale based on the blueprint during the data collection. The researcher provided instructions on completing the scale and conducted training sessions for the subjects to ensure uniformity and accuracy in data collection. Data analysis involves using Cronbach's Alpha correlation coefficient to examine the correlation between emotional intelligence and academic achievement. The data collected through surveys are then analyzed using statistical methods with the SPSS 22 software.

Results

The research utilized SPSS 20.0 for hypothesis testing, employing simple linear regression analysis. The Emotional Intelligence Scale, consisting of various aspects to assess emotional intelligence in upper-grade students, was used. The result of emotional intelligence levels showed that three students (6.25%) exhibited low emotional intelligence, while 42 students (87.5%) had moderate levels. Only three students (6.25%) demonstrated high emotional intelligence. The result of academic achievement showed that ten students (20.8%)

achieved low academic performance, 28 students (58.3%) attained moderate performance, and ten students (20.8%) excelled academically.

The Lilliefors Significance Correction and Kolmogorov-Smirnov tests were used to assess the normality of academic performance data. Results indicated that the data were drawn from a normally distributed population. Levene's test for homogeneity resulted in a significance value of 0.894 (>0.05), signifying homogeneity of variances between the compared groups. See Table 2.

Table 2. Test of Homogeneity of Variances

Learning Achievement					
	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	419.833	25	16.793	1.251	.300
Within Groups	295.417	22	13.428		
Total	715.250	47			

Linear relationship testing using ANOVA suggested a linear relationship between emotional intelligence and academic achievement (p=0.035). The coefficient of determination (R Square) was 10.4%, implying that emotional intelligence contributed to 10.4% of the variance in academic success. The regression equation suggested that emotional intelligence did not significantly impact learning success. See Table 3.

Table 3. Test of Linearity

ANOVA Table							
			Sum of Squ	df	Mean Squ	F	Sig.
Learning achievement * emotional intelligence	Between Groups	(Combine)	30476696	25	1219068	1.07	0.439
		Linearity	5755016	1	5755016	5.05	0.035
		Deviation	24721680	24	1030070	0.904	0.597
	Within Groups		25071008	22	1139591		
	Total		55547704	47			

This finding implies that for each unit increase in emotional intelligence (x), there is an associated increase of 16.555 units in academic achievement. However, it is noteworthy that the p-value for emotional intelligence in the regression analysis is 0.026, less than the conventional significance level of 0.05. This suggests that emotional intelligence does have a statistically significant effect on academic achievement. Therefore, the statement "Emotional intelligence does not have an impact on learning success" contradicts the findings from the regression analysis. The study revealed that emotional intelligence had a limited effect on academic achievement, explaining only 10.4% of the variance. Other internal and external factors likely played a more substantial role in influencing students' academic success.

Discussion

According to the calculations conducted within the SPSS program framework, the levels of emotional intelligence were categorized into three groups among the 48 students. Three students (6.25%) were found to have low levels of emotional intelligence, 42 students (87.5%) had moderate levels, and three students (6.25%) exhibited high levels of emotional intelligence. The highest percentage was predominantly located at the moderate level.

Based on the calculations derived from SPSS, the levels of academic achievement were divided into three categories among the 48 students. Ten students (20.8%) demonstrated low-level learning, 28 students (58.3%) had moderate learning, and ten students (20.8%) achieved high-level academic success. The highest control level was observed at the average learning level. This indicates that subjects with moderate levels of emotional intelligence generally control it. Consequently, the effective contribution provided by emotional intelligence to learning success was found to be 10.4%, while other factors influenced the remaining 89.6%. These factors could be internal (originating from the individual) or external (originating from outside the individual). This implies that emotional intelligence does not affect students' learning success.

Various factors require attention to achieve good learning success [8]-[10]. Primary factors influencing learning and prestigious learning can be classified into internal and external factors. Internal factors encompass students' physical and spiritual conditions, including physiological, psychological, intelligence, attitudes, interests, talents, and motivation. External factors involve environmental conditions surrounding students, including family, parental education, parental care and teacher attention, community, friends, residential areas, and school facilities and environments.

Based on the correlation coefficient value of 0.322 ($p > 0.05$) and the homogeneity values of the students mentioned in the category of giving students intellectual intelligence, it can be inferred that higher emotional intelligence is associated with lower learning success. However, this contradicts the earlier statement that emotional intelligence does not significantly influence learning success. Moreover, other factors influencing learning success exist, indicating that emotional intelligence is not the sole factor determining students' success in learning. Therefore, the hypothesis that "emotional intelligence does not influence learning success" is accepted.

The research findings indicate that, despite the numerous factors influencing learning success, more than emotional intelligence alone is needed as the sole determinant. The study's results suggest that the lack of a significant impact of emotional intelligence on learning

success opens the door to considering other influential factors. Factors such as attention, interest, talent, maturity, preparation, intelligence, and logical intelligence are highlighted, and these aspects are viewed as potentially playing a more crucial role in determining students' success in learning.

This perspective aligns with Gardner's theory of multiple intelligences, which posits that individuals possess various forms of intelligence [11]-[14]. According to this theory, intelligence is not confined to a single dimension but encompasses a range of abilities and skills. In the study context, it implies that while recognized as a valuable trait, emotional intelligence may not be the primary driver of academic success. Instead, a combination of cognitive abilities, logical reasoning, and other intellectual, emotional, and practical intelligence factors could collectively contribute to students' achievements in the learning process [15],[16].

The study underscores the complexity of factors influencing academic success and emphasizes the need to consider a holistic set of intelligence and abilities beyond emotional intelligence alone. This broader perspective allows for a more comprehensive understanding of the dynamics at play in learning and achievement.

Conclusion

This study delved into the relationship between emotional intelligence and learning success among students in SD Negeri 1 Rukuwa. The analysis revealed that emotional intelligence did not significantly impact learning success contrary to expectations. The findings suggest that while emotional intelligence is undoubtedly valuable, it is not the sole determinant of academic achievement. The research highlights the multifaceted nature of factors influencing learning outcomes. Despite emotional intelligence being recognized as an essential aspect, attention, interest, talent, maturity, preparation, intelligence, and logical reasoning emerged as potential contributors to students' success. These factors, in line with Gardner's theory of multiple intelligences, underscore the diversity of abilities that individuals possess and their collective influence on academic performance. Therefore, educators, policymakers, and stakeholders in education must consider a holistic approach to fostering student success. This involves recognizing and nurturing various intelligence and skills and acknowledging that a comprehensive set of factors contributes to academic achievements. The study encourages a broader perspective on educational practices beyond focusing on emotional intelligence. It embraces the rich diversity of intellectual, emotional, and practical abilities students bring to the learning environment.

Conflict of Interest

The authors declare that there is no conflict of interest.

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