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Research Article

The Role of Emotional Intelligence in Increasing the Learning Independence of Elementary School Students

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Abstract

This research aims to provide a comprehensive overview of the emotional intelligence and self-directed learning levels among fourth-grade students at primary school and investigate the significant relationship between these two variables. The study utilized a descriptive correlational research design with a quantitative approach. The total population of the study consisted of 182 students, from which a sample of 34 fourth-grade students was selected using purposive sampling. Data collection methods included the distribution of questionnaires and documentation techniques. The analysis was conducted using descriptive techniques, presenting percentages, and inferential analyses involving prerequisite tests such as normality and linearity. Hypothesis testing was conducted using the Pearson correlation test. The findings indicated that the emotional intelligence level of fourth-grade students at primary school was rated reasonably good, with a descriptive percentage of 64.71%. The self-directed learning levels were also considered reasonably good, with a descriptive percentage of 44.12%. Furthermore, the study revealed a significant association between emotional intelligence and self-directed learning among fourth-grade students at primary school. This was supported by a probability value of 0.034, lower than the significance level of 0.05, and a Pearson correlation coefficient of 0.578, exceeding the tabulated value of 0.287. The findings of this study have several important implications for educators, parents, and policymakers. Enhancing emotional intelligence in students may lead to improved self-directed learning abilities, which are crucial for lifelong learning and academic success. Schools should consider incorporating emotional intelligence training into their curricula to foster better learning outcomes.

Keywords: academic performance; self-directed learning; emotional intelligence; learning outcomes.

1. INTRODUCTION

Education plays a critical role in shaping students' mindsets towards greater advancements (Idkhan & Idris, 2021; Reimers, 2020; Suarlin et al., 2021). Those with progressive mindsets are inclined to learn from their mistakes and possess the capacity to enhance their intelligence through diverse skills. In today's era of globalization, technological advancements present both challenges and opportunities in education. This dynamic is accentuated amid the COVID-19 pandemic, where students are compelled to adapt to independent learning from their homes (Bozkurt et al., 2020; Fitria et al., 2021). Schools that embrace models of independent learning underscore the pivotal role of parental support in facilitating the home-learning process, revealing significant impacts on students' educational journey.

Amidst the global landscape, the rapid evolution of technology provides students with unprecedented access to learning. Consequently, it becomes imperative for students to discern and select wisely from the plethora of educational resources available online. However, while technology offers unparalleled educational access, challenges persist (Brabazon, 2002). Notably, the pandemic has uncovered students' need to cultivate strong self-learning capabilities, a skill inadequately demonstrated by academic performance that falls below the desired standard (Mustari S Lamada et al., 2022; Queiroz et al., 2022).

Navigating the complexities of this globalized era, schools and educators face the dual challenge of harnessing technological advancements for educational enrichment while addressing the gaps in students' independent learning proficiencies (Díaz & Lim, 2022; M S Lamada et al., 2022). The ongoing shift towards independent learning models underpins the recognition of parents' instrumental role in nurturing academic growth at home. Despite the positive influence of parental involvement, issues such as students' limited self-directed learning abilities manifest through academic outcomes that do not meet expected benchmarks (Costa & Kallick, 2003). Enhancing students' autonomy and efficacy in independent learning remains a pertinent focus within the educational landscape.

Moreover, another critical aspect that warrants attention is the issue surrounding students' emotional intelligence, especially among those contending with emotional disruptions (Arfandi et al., 2021; Suarlin & Ali, 2020). These emotional obstacles pose challenges to students' psychological well-being and affect their emotional engagement and participation in the learning journey. In the context of the prevalent shift towards remote learning brought about by the enduring pandemic circumstances, learning independence emerges as a paramount consideration. The capacity of students to navigate self-directed learning and exhibit proactive initiative becomes increasingly vital in maximizing the efficacy and depth of the educational experience. By fostering a climate that nurtures students' emotional resilience and equips them with essential coping mechanisms, educators can help cultivate a conducive environment for enhanced emotional intelligence and effective self-directed learning practices (Harris & Brown, 2018; Idkhan & Idris, 2023; Natsir et al., 2023).

In emotional intelligence, the concept of learning independence, articulated by (Garrison & Baynton, 1987), embodies students' intrinsic drive to engage in autonomous learning without external influence. A strong sense of self-assurance, self-motivation, and proactive pursuit of educational goals characterizes a student's capacity for independent learning. Concurrently, children's emotional regulation skills are nurtured through observation and habitual practices, unfolding as they enter the elementary school phase. At this stage, children become cognizant of societal norms regarding emotional expression, prompting them to learn how to manage and control their emotions in socially appropriate ways.

Moreover, the impact of a child's emotional intelligence on their learning outcomes becomes apparent, underscoring the pivotal roles of parents and educators in instilling and modeling behaviors that foster emotional growth. By providing guidance and setting examples, parents and teachers play instrumental roles in cultivating children's emotional

(Goleman, 2021) highlights that intellectual intelligence (IQ) only contributes 20% to an individual's success, whereas 80% is attributed to other factors, including emotional intelligence or Emotional Quotient (EQ). Emotional intelligence plays a crucial role in molding students' personalities, equipping them with the ability to socialize effectively, engage with others, adapt to varying circumstances, and maintain self-awareness. Building on this, research by (Mayer & Salovey, 2007) reinforces the significance of emotional intelligence, indicating its correlation with improved interpersonal relationships, enhanced decision-making abilities, and overall psychological well-being.

Furthermore, a study by (Furnham & Petrides, 2003; Petrides & Furnham, 2003) underscores the importance of emotional intelligence in predicting academic achievement and success in various life domains. Their research demonstrates that individuals with higher emotional intelligence exhibit superior academic performance, enhanced leadership skills, and increased psychological resilience. This body of literature collectively emphasizes the critical role of emotional intelligence in fostering holistic personal development and underscores its far-reaching implications for academic, professional, and interpersonal success.

Based on initial studies conducted at the research site, it has been observed that students' learning independence remains low due to a lack of sufficient development of emotional intelligence. Therefore, research on the relationship between emotional intelligence and learning independence among 4th-grade elementary school students plays a crucial role in enhancing the effectiveness of education in the current era. The academic performance results obtained from students in elementary schools show an average exam score of 55, which falls below the standard threshold of 65. Reflecting on this, approximately 35% of students experience emotional disturbances, with many issues stemming from insufficient emotional intelligence development, as outlined previously, consequently influencing students' academic performance and report card grades.

Hence, the primary objective of this research endeavor is to explore and comprehensively understand the intricate dynamics between emotional intelligence and students' learning independence in the context of 4th-grade classrooms. This study aspires to shed light on crucial factors that impact academic development and personal growth by delving into how emotional intelligence influences students' ability to learn independently. Furthermore, the findings from this research endeavor are anticipated to offer new perspectives and propose practical and actionable solutions to enhance the educational landscape in this rapidly evolving digital age. This study aspires to pave the way for more effective pedagogical approaches that foster holistic student development and success in the contemporary educational milieu by bridging the gap between emotional intelligence and learning autonomy.

2. RESEARCH METHOD

2.1 Research Design

This study utilizes a descriptive correlational research design with a quantitative approach (Bernard & Bernard, 2013). This design was chosen to understand the relationship between the variables under investigation: emotional intelligence and learning independence among 4th-grade students at an elementary school in Gowa Regency, South Sulawesi.

- Descriptive: This research will systematically describe the main characteristics of students' emotional intelligence and learning independence without manipulating or altering the phenomena under study.
- Correlational: The primary focus of this research is to identify the relationship between emotional intelligence and learning independence among students. The correlational analysis will measure the strength of the relationship between these two variables.
- Quantitative Approach: This approach is applied as the study will use questionnaires to collect numerical data. This data will be analyzed using statistical techniques to examine the relationships between variables quantitatively.

This research is expected to contribute to a better understanding of the factors influencing students' learning independence through the lens of emotional intelligence. The findings of this study are anticipated to lay a solid foundation for the development of enhanced educational strategies and programs to promote learning independence among students at the elementary level.

2.2 Population & Sample

The population represents the comprehensive collection of elements that form the foundation for generalizations (Denzin & Lincoln, 2011). These population elements encompass all the objects slated for measurement, serving as the essential units under scrutiny. In the context of research conducted in primary schools within Gowa Regency, the population comprises the entirety of students spanning from the 1st grade to the 6th grade. The detailed breakdown of this population is outlined as follows:

Table 1. Research Population

Class	Man	Women	Total
Class I	13.00	16.00	29.00
Class II	14.00	19.00	33.00
Class III	12.00	16.00	28.00
Class IV	22.00	12.00	34.00
Class V	7.00	19.00	26.00
Class VI	21.00	11.00	32.00
Total	89.00	93.00	182.00

The sample constitutes a portion of the total and reflects the characteristics of the population. The data sampling technique utilized is purposive sampling (Merriam & Tisdell, 2015), defined as a methodical sampling technique based on specific considerations. In this context, the sample selection technique is grounded in initial observations identifying significant issues within the 4th-grade class, warranting further investigation. Consequently, the selected sample for this study comprises 34 individuals from the 4th-grade class.

2.3 Data Collection

In any research endeavor, the techniques employed for data collection stand as a crucial foundation for acquiring comprehensive and insightful information. Within the scope of this study, the meticulous selection and execution of data collection techniques are paramount for achieving the research objectives. The specific data collection methods utilized are detailed as follows:

Distribution of Questionnaires: Seminating structured questionnaires is a pivotal component of the research process. As elucidated by (Creswell & Poth, 2016), distributing questionnaires involves presenting a series of well-crafted written inquiries to respondents. Through this method, the researchers seek to elicit valuable insights and perceptions regarding the interconnected variables of emotional intelligence and student independence. By effectively administering questionnaires, a nuanced understanding of these crucial aspects can be gleaned, contributing significantly to the depth of the study's findings.

Documentation Technique: The documentation technique, as delineated by (Miller & Salkind, 2002), encompasses a systematic approach to sourcing and compiling data from diverse documentary sources. These sources may include records, transcripts, publications, and archival materials such as meeting minutes and agendas. In the context of this research, the documentation method serves as a vital tool for gathering comprehensive information concerning elementary school students in Gowa Regency, South Sulawesi. By delving into various documentary sources, researchers can access a wealth of data crucial for enriching the study's dataset and promoting a nuanced analysis of the factors influencing emotional intelligence and student independence within the elementary school setting.

2.4 Research Instrument

Research instruments are essential tools that researchers use to collect data, making their work more efficient, accurate, comprehensive, and systematic. This systematic approach ensures that the results are easier to process and analyze. The instruments utilized in this research include questionnaire statements and school documents. Before preparing the questionnaire, it is crucial to develop an instrument grid outlining the statement items to be included in the questionnaire. The instrument grid related to this research is described in the following table:

Table 2. Research Instrument

No	Variables	Indicators	Sub Indicators
1	Emotional Intelligence	Recognizing Self Emotions	Recognizing and feeling one's own emotions Understanding the cause of rising feelings

No	Variables	Indicators	Sub Indicators
			Recognizing the influence of feelings on actions
		Managing Emotions	Being tolerant Being able to control anger Reducing anxiety Having positive feelings
		Self-Motivation	Being able to motivate oneself Being optimistic Being able to focus on tasks
		Recognizing the Emotions of Others	Accepting other people's points of view Have empathy Accepting criticism from others
		Building Relationships with Others	Have the ability to communicate with others Easy to get along with Be happy to work together Able to solve problems in a group
2	Learning Independence	Confident	Have the confidence to learn independently Dare to ask questions Have an optimistic attitude
		Discipline	Punctuality in learning activities Obey school rules Timely collect tasks
		Responsibility	Take notes of the material explained by the teacher Doing the best possible task Trying to be independent of problems in learning
		Initiative	Actively study without waiting for the teacher's orders Trying to find Various reference sources independently Do tasks by maximizing your own abilities
		Motivation	Happy to learn independently Perseverance to complete tasks independently The desire to master the material

In preparing questionnaires, selecting scoring guidelines is crucial to ensure that respondents' answers are accurate. Respondents are expected to choose alternative answers on the questionnaire according to their actual conditions. The four alternative answers available to respondents are:

- Strongly Agree (SA)
- Agree (A)
- Undecided (U)
- Disagree (D)
- Strongly Disagree (SD)

These alternatives are designed to give respondents the flexibility to express their agreement or disagreement with the statements presented in the questionnaire. Using a Likert scale consisting of these five options, the research can obtain more accurate data that reflects respondents' perceptions and attitudes in greater detail. This is crucial to ensure that the data collected is relevant and reliable for analyzing the variables under study.

2.5 Data Analysis

Data analysis is a pivotal process within research endeavors, facilitating the transformation of raw data into meaningful insights and conclusive interpretations. In the context of this study, the

data obtained through questionnaire responses underwent a rigorous analytical process encompassing both descriptive and inferential statistical analyses. The nuanced details of these analytical procedures are elaborated below:

2.5.1. Descriptive Analysis

As expounded by (Hair et al., 2019), descriptive analysis serves as a statistical methodology aimed at elucidating and portraying collected data in its raw form, devoid of overarching generalizations. Within this study, descriptive analysis serves as a fundamental tool for delineating and characterizing the variables of emotional intelligence and independent learning among student participants. Through descriptive analysis, researchers strive to provide a detailed snapshot of the observed variables, enabling a comprehensive understanding of the dataset under examination.

2.5.2. Inferential Analysis

Inferential statistics represent diverse techniques used to extrapolate insights from sample data and infer broader implications for the target population (Creswell, 2021). Within this study, inferential analysis is pivotal in scrutinizing research hypotheses, commencing with critical assumption tests encompassing normality and linearity assessments. Following these preliminary tests, the inferential analysis proceeds to hypothesis testing using simple correlation analysis to ascertain the presence of significant relationships between emotional intelligence and independent learning among students.

Classic Assumption Tests:

- Normality Test: (Myers et al., 2010) outlined that the normality test assesses the normal distribution of residuals in regression models through methods such as the Kolmogorov-Smirnov test and P-plot analysis. A significance value exceeding 0.05 indicates the normality of data distribution.
- Linearity Test: (Hair et al., 2019; Miles & Huberman, 1994) elucidate that the linearity test evaluates the presence of linear relationships between independent and dependent variables, with a significance value below 0.05, denoting a linear association.

2.5.3. Simple Correlation

Simple correlation analysis quantifies the strength and nature of relationships between variables (Creswell, 2021; Hair et al., 2019). Employing Pearson correlation analysis, researchers probe for significant associations between emotional intelligence and independent learning among students. The interpretation of correlation coefficients follows a gradient ranging from very low to very strong, enabling a nuanced understanding of the relational dynamics between the variables.

2.5.4. Coefficient of Determination

The coefficient of determination (R^2) serves as a metric delineating the proportion of variance in the dependent variable elucidated by the independent variable. Spanning a range from 0 to 1, a value approaching 1 signifies a robust relationship, while values nearing 0 signal a weaker association, thereby providing crucial insights into the explanatory power of the independent variable on the dependent variable within the research framework.

3. RESULT AND DISCUSSION

3.1. Description

The data description in this study aims to provide an overview of the research conducted on fourth-grade students in elementary school. In order to obtain data on the variables of emotional intelligence and self-directed learning, the researcher used a questionnaire instrument with five alternative answers (scores 1-5). The data description of both variables can be outlined as follows:

3.1.1. Emotional Intelligence Description

This study's description of the emotional intelligence variable refers to several indicators, namely self-awareness, emotion management, self-motivation, recognizing others' emotions, and building relationships with others.

Table 3 shows the achievement of each indicator of the emotional intelligence variable, where the highest percentage value of 84.12% is found in the indicator of building relationships with others. In comparison, the lowest percentage value of 77.45% is found in the indicator of self-motivation. This description indicates that students' emotional intelligence in building relationships with others has been well achieved compared to self-motivation. This is evidenced by some students being easygoing with anyone and enjoying cooperating in completing tasks given by the teacher.

Table 3. Achievement of Emotional Intelligence Indicators

Indicator	Earning Score	Max. Score	Percentage (%)
Recognizing one's emotions	270	340	79.41
Managing emotions	403	510	79.02
Self-motivating alone	395	510	77.45
Recognizing emotions others	265	340	77.94
Building relationships with others	286	340	84.12
Total	1619	2040	79.36

3.1.2. Description of Self-Directed Learning

The indicators used to measure the self-directed learning variable, the dependent variable in this study, are self-confidence, discipline, responsibility, initiative, and motivation. The questionnaire instrument distributed to 34 students has been tabulated so that the achievement of each indicator and the frequency distribution of the self-directed learning variable can be described. The achievement of indicators in this variable can be outlined in the following table:

Table 4. Achievement of Learning Independence Indicators

Indicator	Earning Score	Max. Score	Percentage (%)
Self-confident	284	340	83.53
Discipline	290	340	85.29
Responsibility	276	340	81.18
Initiative	411	510	80.59
Motivation	287	340	84.41
Total	1548	1870	82.78

Table 4 shows the achievement of each indicator of the self-directed learning variable, with the highest percentage value of 85.29% in the discipline indicator. In comparison, the lowest percentage value of 80.59% is found in the initiative indicator. This indicates that students' self-directed learning in terms of discipline has been well established compared to the initiative aspect. This is evidenced by some students being able to follow school rules conscientiously and submit assignments given by the teacher on time. However, some students still lack initiative in seeking sources other than textbooks to complete the assignments given by the teacher.

3.2. Inferential Analysis

3.2.1. Normality Test

The data normality test in this study utilized the Kolmogorov-Smirnov approach and p-plot graph in the SPSS program. The results of the normality test obtained using the Kolmogorov-Smirnov approach can be outlined in the following Table 5.

Based on the results of the normality test, as seen in the table above, it can be concluded that the data of the research variable is normally distributed. This is evidenced by the Kolmogorov-Smirnov test result, where the Kolmogorov-Smirnov value is 0.986 and Sig. (p) value is 0.154, which is greater than 0.05. The P-P Plot residual graph generated from SPSS data processing can also verify the normality testing results (Figure 1).

Table 5. Normality Test

Parameter	Unstandardized Residual
Kolmogorov-Smirnov	0.986
Asymp. Sig. (2-tailed)	0.154

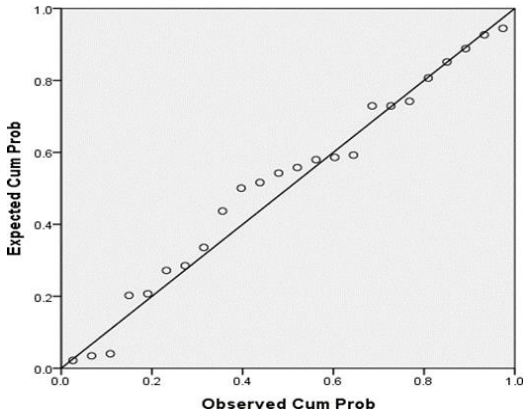

Figure 1. P-Plot Normality

Figure 1 above shows the output of the scatter plot with data points scattered around the diagonal line and the dispersion following the diagonal line. It can also be concluded that the data of this research variable meet the normality assumption.

3.2.2. Linearity Test

Testing for linearity is one of the classic assumptions' tests conducted to determine the linear nature of the data distribution between variables X and Y. In this study, it is essential to determine whether there is linearity in the relationship between emotional intelligence and self-directed learning. No matter how high the coefficient of determination R is generated, estimation errors may occur if the data does not exhibit linearity. Linearity testing will obtain results such as the probability value and the calculated F value. For a more straightforward explanation, it can be outlined in the following table:

Table 6. Linearity Test

Parameter		Sum of Squares	df	Mean Square	F	Sig.
	(Combined)	77.070	11	7.006	0.552	0.846
Between-group	Deviation from linearity	77.010	10	7.701	0.606	0.792
	Within group	279.40	22	12.700		
	Total	356.47	33			

Based on the values output from the table above, the calculated F and probability values in the "Deviation from Linearity" columns are obtained. Suppose the linearity test results show that the calculated F value < the tabulated F value and the significance value (p) > 0.05; it is concluded that there is a linear relationship between the independent and dependent variables. In this case, the calculated F value is 0.606 < the tabulated F value of 2.30, and the significance value (p) is 0.792 > 0.05. Therefore, it can be concluded that the relationship between emotional intelligence and self-directed learning is linear. This means that the linearity assumption is met before conducting the correlation test.

3.3. Hypothesis

The data analysis used to test the hypothesis in this study is the Pearson correlation analysis. The hypothesis proposed in this study is that there is a significant relationship between emotional intelligence and self-directed learning among fourth-grade students in elementary school. The results of the Pearson correlation analysis using SPSS data processing can be outlined in the table below:

Table 7. Pearson Correlation Test

Variables	Test result	Intelligence Emotional (X)	Learning Independence (Y)
Intelligence Emotional (X)	Pearson Correlation	1	0.578
	Sig (2-tailed)		0.034
	N	34	34
Learning Independence (Y)	Pearson Correlation	0.578	1
	Sig (2-tailed)	0.034	
	N	34	34

Table 7 shows the output of the Pearson correlation test, where the probability value obtained is 0.034, which is smaller than the 5% significance level. This indicates that the proposed hypothesis can be accepted (rejecting H0 and accepting H1), thus concluding that there is a significant relationship between emotional intelligence and self-directed learning among fourth-grade students in elementary school.

In addition to comparing the significance values, the correlation coefficient values can be analyzed to understand the relationship between the two variables in this study. If the calculated correlation coefficient (r) is smaller than the tabulated correlation coefficient (r-table), it is concluded that there is a relationship between the two variables and vice versa. The Pearson correlation coefficient obtained is 0.578, more significant than the tabulated r-value (0.287). Therefore, it can be concluded that there is a relationship between emotional intelligence and self-directed learning. The coefficient of 0.578 indicates a moderate level of correlation as it falls within the range of 0.40 – 0.599. The constant value 1 in SPSS output for both variables suggests a constant relationship.

3.4. Coefficient of Determination

In this study, the coefficient of determination is used to measure the level of relationship between the self-directed learning variable (Y) and emotional intelligence (X). The results of the coefficient of determination calculation can be outlined as follows:

$$Kd = R^2 + 100\ \%$$
$$= (0.578)^2 + 100\ \%$$
$$= 33.41\%$$

Based on the results above, it can be explained that the contribution of the relationship between variables X and Y is 33.41%, while other unexamined factors influence 66.59%. This

indicates that the emotional intelligence possessed by fourth-grade students can influence their self-directed learning. Therefore, students with good emotional intelligence will be able to cultivate self-awareness.

3.5. Discussion

Based on the research findings, the evaluation of emotional intelligence variables indicated a notable level of proficiency, scoring at 64.71%. This substantial score underscores the importance and effectiveness of emotional intelligence in the context of the study. The identified variables of emotional intelligence—such as the ability to recognize one's emotions, effectively manage emotions, maintain self-motivation, discern and understand the emotions of others, and establish harmonious relationships with others—highlight the multifaceted nature of emotional intelligence.

The correlation between these variables and emotional intelligence further accentuates the interconnectedness of emotional competencies in individuals. For instance, the capacity to recognize and regulate one's emotions can significantly impact one's self-motivation levels and interpersonal relationships. Moreover, empathizing with others and understanding their emotions is pivotal in establishing meaningful and constructive connections with peers and colleagues.

This alignment of emotional intelligence variables with these critical indicators suggests a comprehensive understanding and application of emotional competencies. By developing and honing these emotional skills, individuals can enhance their overall well-being, resilience, and effectiveness in both personal and professional spheres. Integrating these emotional intelligence elements can lead to improved communication, heightened empathy, and better conflict resolution, fostering a positive and conducive environment for growth and success.

Analyzing questionnaire data provided to 34 fourth-grade students at a primary school revealed varying achievement percentages for different indicators. The highest percentage was observed for building relationships with others, indicating that some students easily socialize with peers and collaborate well. On the other hand, the lowest percentage was for the indicator of self-motivation intensity, where students tend to struggle with motivating themselves independently when faced with challenges. The findings regarding emotional intelligence, as outlined in (Zulhelda et al., 2019) research, where emotional intelligence was categorized as reasonably good at 57.30%, resonate with the foundational understanding of emotional intelligence. This study identified self-awareness as the highest emotional intelligence indicator, while utilizing emotions productively was identified as needing improvement.

When comparing this research to previous studies, variations in sampling and data collection techniques are evident. Prior studies employed saturated sampling and direct observations, while (Zulhelda et al., 2019) research opted for purposive sampling and questionnaire surveys. Furthermore, the choice of indicators differed across studies, with each study emphasizing particular facets of emotional intelligence. Moreover, the insights provided by (Frey et al., 2019) regarding individuals with high emotional intelligence underscore the value of effective emotion management in assisting students in cultivating their learning independence. This high level of emotional intelligence can positively impact students' ability to navigate their emotions, make sound decisions, and engage in independent learning effectively.

(Goleman, 2021) defines emotional intelligence as the ability to recognize and manage emotions effectively, including self-motivation and emotional management within oneself and in relationships. This definition highlights the importance of understanding one's emotions and regulating them in a way that is beneficial both personally and interpersonally (Stein & Book, 2011). On the other hand, (Mashar, 2015) emphasizes that emotional intelligence in children entails being aware of their emotions and effectively managing them to take appropriate actions that lead to personal happiness. This perspective underscores the significance of emotional awareness and regulation in children's well-being and development. These insights from Goleman and Mashar portray emotional intelligence as a multifaceted skill set that involves recognizing emotions and utilizing them to foster personal growth, positive relationships, and overall emotional well-being. Recognizing and effectively managing emotions is vital in enhancing individuals' quality of life and interactions.

The research findings suggest that fourth-grade students demonstrate fairly good independent learning abilities, with a recorded percentage of 44.12%. This proficiency in independent learning is contingent upon various indicators such as confidence, discipline, responsibility, initiative, and motivation. Independent learning is pivotal in students' educational development, nurturing their self-confidence, aiding in emotional management, and sparking a genuine interest in autonomous learning. Students can significantly enhance their learning outcomes by honing their capacity to make independent decisions and responsibly execute tasks. This emphasis on independent learning cultivates valuable skills that contribute to academic success and foster personal growth and self-reliance.

The study also found a significant relationship between emotional intelligence and independent learning of fourth-grade students, with emotional intelligence positively impacting independent learning. The correlation between emotional intelligence and independent learning was moderate, indicating a meaningful connection between the two factors. The findings suggest that emotional intelligence plays a crucial role in students' independent learning and highlight the importance of considering emotional factors in educational settings. The research also underscores the influence of external factors, such as the school and family environment, on students' independent learning behaviors.

4. CONCLUSION

The research findings reveal that students at primary school demonstrate a commendable level of emotional intelligence and display a satisfactory level of independent learning. The study underlines a notable correlation between emotional intelligence and students' aptitude for self-guided learning. This correlation suggests that a heightened emotional intelligence level positively enhances students' capability to engage in independent learning, underscoring the significance of emotional competencies in fostering autonomous academic progress.

The implications of this correlation are substantial, indicating that students with well-developed emotional intelligence are better equipped to manage their emotions effectively, navigate challenges, and maintain a proactive approach to learning. Such students are more likely to exhibit resilience, motivation, and the ability to make informed decisions, which are crucial for successful independent learning. Educators and schools can empower students to become self-directed learners by emphasizing emotional skills development, leading to improved academic outcomes and overall personal growth.

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REFERENCES

Arfandi, A., Suryani, H., Nurhaedah, N., Panennungi, P., & Sampebua, O. (2021). The Ability of Vocational High School Teachers to Developing HOTS Question. *International Journal of Environment, Engineering and Education*, *3*(3), 83–88. https://doi.org/10.55151/ijeedu.v3i3.66

Bernard, H. R., & Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches*. Sage.

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S., Al-Freih, M., Pete, J., & Olcott Jr, D. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, *15*(1), 1–126.

Brabazon, T. (2002). *Digital hemlock: Internet education and the poisoning of teaching*. UNSW

Press.
Costa, A. L., & Kallick, B. (2003). *Assessment strategies for self-directed learning*. Corwin Press.
Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. Sage.
Díaz, M. M., & Lim, J. R. (2022). *The power of curriculum to transform education: How education systems incorporate 21st century skills to prepare students for today's challenges*.
Fitria, F., Ruslan, R., & Mappeasse, M. Y. (2021). Application of E-Learning Based on Enriched Virtual Model in the Subject Database. *International Journal of Environment, Engineering and Education*, *3*(1), 32–40. https://doi.org/10.55151/ijeedu.v3i1.47
Frey, N., Fisher, D., & Smith, D. (2019). *All learning is social and emotional: Helping students develop essential skills for the classroom and beyond*. Ascd.
Furnham, A., & Petrides, K. V. (2003). Trait emotional intelligence and happiness. *Social Behavior and Personality: An International Journal*, *31*(8), 815–823.
Garrison, D. R., & Baynton, M. (1987). Concepts: Beyond independence in distance education: The concept of control. *American Journal of Distance Education*, *1*(3), 3–15.
Goleman, D. (2021). *Leadership: The power of emotional intelligence*. More Than Sound LLC.
Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2019). *Multivariate Data Analysis*. Cengage Learning EMEA.
Harris, L. R., & Brown, G. T. L. (2018). *Using self-assessment to improve student learning*. Routledge.
Idkhan, A. M., & Idris, M. M. (2021). Dimensions of Students Learning Styles at The University with The Kolb Learning Model. *International Journal of Environment, Engineering and Education*, *3*(2), 75–82. https://doi.org/10.55151/ijeedu.v3i2.60
Idkhan, A. M., & Idris, M. M. (2023). The Impact of User Satisfaction in the Use of E-Learning Systems in Higher Education: A CB-SEM Approach. *International Journal of Environment, Engineering and Education*, *5*(3), 100–110. https://doi.org/10.55151/ijeedu.v5i3.91
Lamada, M S, Ifani, A. Z., Hidayat, D. H., Lamada, M. S., Zakilah Ifani, A., & Hastuti Hidayat, D. (2022). Evaluation in Assessment of Student Competence: Application of the Indonesian Student Competency Assessment (AKSI) in Elementary Schools Evaluation in Assessment of Student Competence: Application of the Indonesian Student Competency Assessment (AKSI) in. *International Journal of Environment, Engineering and Education*, *4*(2), 66–72. www.ijeedu.comM.S.Lamada
Lamada, Mustari S, Sanatang, S., Ifani, A. Z., & Hidayat, D. H. (2022). Evaluation in Assessment of Student Competence: Application of the Indonesian Student Competency Assessment (AKSI) in Elementary Schools. *International Journal of Environment, Engineering and Education*, *4*(2), 66–75. https://doi.org/10.55151/ijeedu.v4i2.81
Mashar, R. (2015). *Emosi anak usia dini dan strategi pengembangannya*. Kencana.
Mayer, J. D., & Salovey, P. (2007). *Mayer-Salovery-Caruso emotional intelligence test*. Multi-Health Systems Incorporated Toronto.
Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
Miller, D. C., & Salkind, N. J. (2002). *Handbook of research design and social measurement*. Sage.
Myers, J. L., Well, A., & Lorch, R. F. (2010). *Research design and statistical analysis*. Routledge.
Natsir, T., Rasyid, A. R., & Bassey, S. A. (2023). The SAVI Learning Model and the 21st Century Skills: Developing Critical Thinking, Collaboration, and Creativity in Students Vocational High School. *International Journal of Environment, Engineering and Education*, *5*(1), 27–34. https://doi.org/10.55151/ijeedu.v5i1.96
Petrides, K. V, & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, *17*(1), 39–57.
Queiroz, M. M., Ivanov, D., Dolgui, A., & Fosso Wamba, S. (2022). Impacts of epidemic outbreaks on supply chains: mapping a research agenda amid the COVID-19 pandemic through a structured literature review. *Annals of Operations Research*, *319*(1), 1159–1196.

Reimers, F. M. (2020). *Educating students to improve the world*. Springer Nature.

Stein, S. J., & Book, H. E. (2011). *The EQ edge: Emotional intelligence and your success*. John Wiley & Sons.

Suarlin, S., & Ali, M. I. (2020). The Effect of Environmental Education Learning on Students at University. *International Journal of Environment, Engineering and Education*, *2*(3), 49–56. https://doi.org/10.55151/ijeedu.v2i3.39

Suarlin, S., Negi, S., Ali, M. I., Bhat, B. A., & Elpisah, E. (2021). The Impact of Implication Problem Posing Learning Model on Students in High Schools. *International Journal of Environment, Engineering and Education*, *3*(2), 69–74. https://doi.org/10.55151/ijeedu.v3i2.61

Zulhelda, Z., Chairilsyah, D., & Puspitasari, E. (2019). Hubungan Kecerdasan Emosi Dengan Kemandirian Anak Usia 5-6 Tahun Di TK Negeri Pembina 3 Kecamatan Marpoyan Damai Kota Pekanbaru. *Jurnal Online Mahasiswa (JOM) Bidang Keguruan Dan Ilmu Pendidikan*, *6*(2), 294–304.