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Emotional Intelligence as a Predictor of Clinical Decision-Making Ability among Nursing Students in Aceh, Indonesia



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Abstract

In nursing practice, clinical decision-making is a critical competency that students must possess to ensure patient safety and the quality of nursing care. This process is influenced not only by cognitive abilities but also by emotional intelligence, which helps students remain objective when facing complex and high-pressure clinical situations. Although various studies have examined the relationship between the two, the results obtained remain inconsistent. Therefore, this study aims to analyze the relationship between emotional intelligence and clinical decision-making among students in the Professional Nursing Program using a descriptive correlational design and a cross-sectional approach. A total of 107 students from three nursing education institutions in Banda Aceh were selected as participants using consecutive sampling. Emotional intelligence was measured using the Schutte Self-Report Emotional Intelligence Test, while clinical decision-making ability was measured using the Clinical Decision-Making in Nursing Scale. Data analysis was performed using Spearman's correlation test. The results of the study indicate a positive and significant relationship between emotional intelligence and clinical decision-making ($r=0.259$; $p=0.007$). Among all dimensions of emotional intelligence, Understanding of Emotion showed the strongest and most significant relationship with all components of clinical decision-making ($p=0.001$), whereas the dimensions of Utilisation of Emotion and Regulation of Emotion did not show a significant relationship. Emotional intelligence plays a role in supporting clinical decision-making abilities among students in the Professional Nursing Program. Therefore, the development of emotional intelligence needs to be integrated into nursing education to support the improvement of students' clinical decision-making abilities.

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INTRODUCTION

Nursing students are future professional nurses who will play an important part in providing nursing care. When dealing with them, they need adequate clinical competencies to ensure the quality of patient care. Clinical competency is the combination of knowledge, skills, attitudes, and professional qualities, including technical capabilities, therapeutic communication, and sound clinical reasoning, to provide safe, effective, and high-quality nursing care. ([Nabizadeh-Gharghozar et al., 2021](#); [Notarnicola et al., 2016](#)). The nursing practice environment is complex and emotionally charged, requiring nurses to exercise strong clinical judgment to ensure patient safety and effective care. ([Jeppesen et al., 2017](#); [Kozlowski et al., 2017](#)). Clinical decision-making is a complex process that involves evaluating and analysing patient data, deciding on appropriate actions, and reflecting on the results. This process evolves through theoretical study and clinical encounters, forming students' critical thinking abilities and professionalism. ([Benner, 2015](#); [Tanner, 2006](#); [Thompson, 2025](#)).

However, several studies have found that nursing students and newly graduated nurses are often ill-prepared to handle the complexities of the clinical environment due to deficiencies in advanced reasoning and decision-making skills ([Kavanagh & Sharpnack, 2021](#)). These findings suggest that mastery of information and technical skills alone is insufficient for developing superior clinical decision-making abilities. Consequently, additional non-cognitive support factors are required, particularly emotional management and responses to clinical stress. One non-cognitive factor considered crucial in this context is emotional intelligence. Emotional intelligence is the ability to effectively identify, understand, and manage one's own emotions as well as those of others. These findings suggest that mastery of information and technical skills alone is insufficient for developing superior clinical decision-making abilities. Consequently, additional non-cognitive support factors are required, particularly emotional management and responses to clinical stress. One non-cognitive factor considered crucial in this

context is emotional intelligence. Emotional intelligence is the ability to effectively identify, understand, and manage one's own emotions as well as those of others ([Salovey et al., 1995](#)). Emotional intelligence in nursing education is developed through experience, reflection, and active student participation, rather than solely through classroom instruction ([Dogham et al., 2025](#)). Nursing students with high emotional intelligence are generally better able to manage stress during both their academic studies and clinical practice. They also tend to demonstrate greater empathy, establish effective communication, and collaborate effectively with healthcare teams. These qualities help students remain emotionally stable and think clearly when facing complex and challenging clinical situations ([Haver et al., 2025](#); [McCloughen & Foster, 2018](#); [Nightingale et al., 2018](#); [Xu et al., 2023](#)).

The interaction between cognitive and emotional factors influences decision-making in the field of health care. Therefore, the ability to manage emotions appropriately is a key component in supporting accurate clinical decisions, thereby improving the quality of care and ensuring patient safety ([Ali & Nageeb, 2020](#); [Meyer, 2023](#)). Emotional intelligence is essential for nursing students to make sound, ethical, and effective clinical decisions, especially when dealing with complex and dynamic patient circumstances. Students with strong emotional intelligence are more contemplative, consider both their patients' and their own emotional well-being, and maintain their cool under pressure ([Beauvais et al., 2017](#); [Cleary et al., 2018](#); [Dugué et al., 2021](#)). Several studies have shown that emotional intelligence is associated with clinical reasoning and decision-making abilities among nursing students. Students with higher emotional intelligence tend to demonstrate better clinical decision-making abilities.

On the other hand, an inadequate level of emotional intelligence can limit students' ability to assess clinical situations objectively, resulting in suboptimal decisions that may affect the quality of nursing care. This condition may also reduce students' readiness to fulfill their professional

responsibilities in clinical practice settings ([Black, 2019](#); [Foster & McCloughen, 2020](#); [Meyer, 2023](#); [Rahkar Farshi et al., 2015](#)). Therefore, research on the relationship between emotional intelligence and clinical decision-making is necessary to inform the development of learning strategies that can foster both the academic competencies and emotional maturity of nursing students.

METHODS

This study employed a descriptive correlational design with a cross-sectional approach. Data collection took place from October to December 2025 at three nursing education institutions located in Banda Aceh, Aceh, Indonesia. The study population comprised all students in the Professional Nursing Program, with a sample size of 107 students selected using the consecutive sampling technique in accordance with the established inclusion and exclusion criteria. Students eligible to participate as respondents were active participants in the Professional Nursing Program who had completed at least one clinical rotation, had experience providing direct nursing care to patients, and were willing to participate in the study by providing informed consent after receiving an explanation of the study's objectives and procedures. Meanwhile, students who were on academic leave, were not actively participating in

professional practice during the study period, or returned questionnaires with incomplete data (more than 10% of items left blank) were excluded from the analysis. The respondents' emotional intelligence levels were assessed using the Schutte Self -Report Emotional Intelligence Test (SSEIT), which consists of 33 items and covers four main dimensions: perception of emotion, utilization of emotion, understanding of emotion, and regulation of emotion. Clinical decision-making ability was assessed using the Clinical Decision-Making in Nursing Scale (CDMNS), consisting of 40 items across four domains. Both instruments use a five-point Likert scale and demonstrated strong internal reliability in this study (Cronbach's alpha = 0.88 for SSEIT; 0.92 for CDMNS) ([Musonda et al., 2019](#); [Pisnar et al., 2022](#); [Schutte et al., 1998](#)). Data were analysed using bivariate analysis. Because the normality test indicated a non-normal distribution, Spearman's rho was used to examine the correlation between emotional intelligence and clinical decision-making, both overall and by dimension. Statistical significance was set at $p < 0.05$. This study has received ethical approval from the Health Research Ethics Committee of Muhammadiyah University of Purwokerto, with Registration Number KEPK/UMP/93/X/2025, issued on October 14, 2025.

RESULTS

The results of this study are summarised and presented in the following tables.

Table 1. Demographic Characteristics of the Participants (N = 107)

Characteristics	N	(%)
Age Group (years)		
21 – 23	64	59.8
24 – 26	43	40.2
Gender		
Man	32	29.9
Woman	75	70.1
Received Training		
No	63	58.9
Yes	44	41.1
Institution of Origin		
Nurul Islam Medical College	5	4.7
Abul Yatama University	47	43.9

Characteristics	N	(%)
Syiah Kuala University	55	51.4
Training that has been attended		
BHD	4	3.7
BTCLS	31	29.0
Disaster nursing	1	0,9
K3 Training	2	1.9
Wound care training	6	5.6
Never	63	58.9

Based on the table of respondent characteristics, the majority of respondents were in the 21–23 age group, totalling 64 people (59.8%), while 43 respondents (40.2%) were in the 24–26 age group. By gender, the majority of respondents were female, totalling 75 people (70.1%), while males numbered 32 people (29.9%). A total of 107 students participated in this study. Based on institutional affiliation, more than half of the respondents were from Syiah Kuala University (55 students; 51.4%), followed by Abulyatama University (47 students; 43.9%) and Nurul Islam College of Health Sciences (5 students; 4.7%). This distribution indicates that the respondents were predominantly students from the two largest nursing education institutions in Banda Aceh.

In terms of training history, the majority of respondents—63 students (58.9%)—had never participated in additional training outside of

academic activities, while 44 students (41.1%) reported having participated in at least one type of training. Among the various training programs attended, Basic Trauma Cardiac Life Support (BTCLS) was the most common, with 31 participants (29.0%). Other training programs were attended by a much smaller proportion of participants, including wound care training (6 participants, 5.6%), Basic Life Support (BLS) (4 participants, 3.7%), occupational safety and health (OSH) training (2 participants, 1.9%), and disaster nursing training, which was attended by only 1 participant (0.9%). Overall, these findings indicate that students' exposure to professional training outside the formal curriculum remains relatively limited, suggesting that there is still ample opportunity to enhance their competencies through additional training activities.

Table 2. Descriptive Statistics for Emotional Intelligence and Clinical Decision-Making (N = 107).

Variable	M	Elementary School
Total emotional intelligence	128.63	18,488
Perception of Emotion	33.26	4,737
Utilisation of Emotion	20.39	3,542
Understanding of Emotion	27.74	4,142
Regulation of Emotion	47.23	7,645
Clinical decision making	151.79	23,604
Search for alternatives or options	38.53	5,937
Review and consideration of goals and values	38.37	6,424
Evaluation and reevaluation of the consequences or impact of decisions	37.16	5,921
Objective search and assimilation of new information	37.73	6,772

The results of a descriptive analysis of 107 respondents indicate that students in the Professional Nursing Program have relatively good levels of emotional intelligence and clinical decision-making skills. Regarding the emotional intelligence variable, the Regulation of Emotion dimension received the highest mean score (47.23 ± 7.645), indicating that students possess strong abilities to control and manage their emotions when facing clinical situations. Conversely, the Utilisation of Emotion dimension showed the lowest mean score (20.39 ± 3.542), suggesting that the ability to use emotions adaptively to support thinking, reasoning, and clinical problem-solving still needs to be strengthened.

Regarding the clinical decision-making variable, all dimensions had relatively similar mean scores, reflecting fairly consistent abilities across each aspect. The search for alternatives or options dimension received the highest mean score (38.53 ± 5.937), while the Evaluation and reevaluation of the consequences or impact of decisions dimension had the lowest mean score (37.16 ± 5.921). Nevertheless, the differences in scores across dimensions were relatively small, indicating that the students already possess fairly good skills in the clinical decision-making process, though there is still room to improve their ability to re-evaluate the consequences of decisions that have been made.

Table 3. Relationship between Emotional Intelligence Dimensions and Clinical Decision Making

Variables	Alternative/Optional Search	Review & Consideration of Goals and Values	Evaluation & Reevaluation of Decision Consequences	Searching & Assimilating New Information	Total Clinical Decision Making
	r(p.value)	r(p.value)	r(p.value)	r(p.value)	r(p.value)
Perception of Emotion	0.203 (0.036*)	0.191 (0.049*)	0.208 (0.032*)	0.129 (0.185)	0.209 (0.031*)
Utilisation of Emotion	0.115 (0.240)	0.114 (0.244)	0.093 (0.343)	0.047 (0.633)	0.114 (0.242)
Understanding of Emotion	0.428 (<0.001**)	0.445 (<0.001**)	0.416 (<0.001**)	0.352 (<0.001**)	0.451 (<0.001**)
Regulation of Emotion	0.141 (0.147)	0.168 (0.083)	0.118 (0.226)	0.044 (0.655)	0.142 (0.143)
Total Emotional Intelligence	0.246 (0.011)*	0.260 (0.007)**	0.233 (0.016)*	0.163 (0.093)	0.259 (0.007)**

Information:

= significant at $p < 0.05$

** = significant at $p < 0.01$

The results of the study showed that each dimension of emotional intelligence had varying degrees of correlation with clinical decision-making components in nursing students. Based on the Spearman correlation test, the Emotional Understanding dimension showed the strongest correlation, while the Emotional Utilization and Emotional Regulation dimensions did not show significant relationships. The Perception of Emotion

dimension was positively and significantly related to the search for alternatives or choices ($r = 0.203$; $p = 0.036$), the review and consideration of goals and values ($r = 0.191$; $p = 0.049$), the evaluation and reevaluation of decision consequences ($r = 0.208$; $p = 0.032$), and total clinical decision-making ($r = 0.209$; $p = 0.031$). However, the association between searching for and assimilating new

knowledge was not statistically significant ($p = 0.185$).

The Utilisation of Emotion dimension has no significant association with any aspect of clinical decision-making ($p > 0.05$). This finding suggests that the ability to use emotions to help with thinking is not currently a significant factor influencing the quality of clinical decision-making among nursing students. In contrast, the Understanding of Emotion dimension showed the strongest and most significant positive relationship with all components of clinical decision-making, including the search for alternatives or options ($r = 0.428$; $p = 0.001$), review of goals and values ($r = 0.445$; $p = 0.001$), evaluation and reevaluation of the impact of decisions ($r = 0.416$; $p = 0.001$), search and assimilation of new information ($r = 0.352$; $p = 0.001$), and total clinical decision-making ($r = 0.416$; $p = 0.001$). These findings suggest that the ability to understand emotions is the most essential component of emotional intelligence for students' clinical decision-making.

Meanwhile, the Regulation of Emotion dimension showed no significant association with any component of clinical decision-making ($p > 0.05$), suggesting that students' emotional regulation abilities did not directly contribute to the quality of clinical decisions. Overall, emotional intelligence showed a positive and statistically significant correlation with clinical decision-making ($r = 0.259$, $p = 0.007$). Although the relationship is statistically significant, the strength of the correlation is relatively weak. These findings suggest that emotional intelligence contributes only to a limited extent to nursing students' clinical decision-making abilities, indicating that there may be other factors that also influence these abilities.

DISCUSSION

The analysis of the study shows that emotional intelligence is positively and significantly correlated with clinical decision-making ability among nursing students ($r = 0.259$; $p = 0.007$). Although the correlation coefficient falls into the weak category, these results suggest that an increase in emotional intelligence tends to be

accompanied by an improvement in students' ability to engage in clinical reasoning, evaluate various course-of-action options, and make appropriate decisions in nursing practice situations. The results of this study also indicate that clinical decision-making ability is influenced not only by emotional intelligence but also by other factors, such as clinical experience, critical thinking skills, knowledge, and the learning environment. Based on an analysis of each dimension of emotional intelligence, the Emotional Understanding dimension showed the strongest and most significant relationship with all components of clinical decision-making ($p = 0.000$). These findings suggest that students' ability to understand emotions—both their own and those of others—plays a role in helping them remain calm, think rationally, analyze clinical situations more effectively, and determine appropriate actions when facing complex clinical conditions.

Conversely, the Emotional Utilization dimension did not show a significant relationship with any component of clinical decision-making. These results indicate that nursing students still rely more on cognitive abilities and emotional understanding than on actively utilizing emotions in the clinical decision-making process. This situation is likely related to the students' still-limited clinical practice experience, meaning their ability to utilize emotions in real clinical situations has not yet developed optimally. Overall, the results of this study indicate that emotional intelligence is one of the factors that plays a role in supporting clinical decision-making abilities among nursing students. Therefore, developing emotional intelligence can be an aspect that needs to be addressed in nursing education to support students' readiness to face various clinical situations.

Meanwhile, the Perception of Emotion dimension showed a significant relationship with several aspects of clinical decision-making, particularly in exploring alternative courses of action and evaluating the impact of decisions. These findings suggest that the ability to recognize one's own emotions as well as those of others can help students better understand clinical situations and

consider the consequences of every action taken. However, this dimension did not show a significant relationship with the ability to seek new information. This indicates that this ability is more influenced by knowledge, academic skills, and analytical thinking abilities than by emotional factors.

The results of this study are consistent with previous research showing that emotional intelligence plays a role in helping students adapt to the clinical practice environment, manage stress, and support decision-making abilities in nursing practice ([Bulmer Smith et al., 2009](#)). Research by Codier et al. (2009) also indicates that nurses with higher emotional intelligence demonstrate better work performance, more effective communication, and more optimal caring behaviour ([Codier et al., 2009](#)). In the context of nursing education, the ability to understand and manage emotions can help students cope with pressure during clinical practice, thereby enabling more effective decision-making.

Additionally, several studies report that emotional intelligence is associated with critical thinking and clinical judgment in nursing practice ([Alsufyani et al., 2024](#); [Ayed, 2025](#); [Mayer & Salovey, 1997](#)). Emotional awareness and emotional regulation skills are also reported to be associated with decision-making quality and styles in healthcare ([Aghabarary & Khedmatizare, 2025](#); [Haag et al., 2025](#); [Sambol et al., 2025](#); [Sedlár & Gurňáková, 2025](#)). These findings suggest that emotional intelligence can help individuals respond to stress and process information when facing clinical situations.

Other studies have also shown that emotional intelligence is positively associated with nurses' self-efficacy and clinical performance ([AL Btoush et al., 2025](#); [Shubayr & Dailah, 2025](#)). This suggests that clinical decision-making is influenced by factors such as emotional competence, self-confidence, clinical experience, and students' cognitive abilities. In contrast to the findings of this study, Kaya et al. (2018) reported that emotional intelligence was not significantly associated with critical thinking skills among nursing students. Variations likely influence differences in research

instruments, respondent characteristics, and the cultural and educational contexts used in each study ([Kaya et al., 2018](#)).

In general, the findings of this study indicate that emotional intelligence is one of the factors that support nursing students' clinical decision-making, particularly in terms of emotional understanding and awareness. Nevertheless, the relationship identified in this study is relatively weak; therefore, emotional intelligence cannot be considered the sole factor influencing clinical decision-making. Based on this study's findings, the development of emotional intelligence can be considered part of the nursing education process through reflective learning, clinical simulations, case discussions, and structured clinical guidance. The program is expected to improve students' readiness to handle clinical situations. Further research is recommended using a longitudinal or intervention design to examine the relationship between emotional intelligence and clinical decision-making, taking into account other factors that may influence it.

CONCLUSION

This study shows that emotional intelligence is significantly associated with clinical decision-making ability among nursing students. Students with higher emotional intelligence tend to be better at assessing clinical situations, managing emotions, demonstrating empathy, and making appropriate decisions in complex situations. These results underscore the importance of developing emotional intelligence as part of nursing education. Future research should evaluate various learning strategies focused on enhancing emotional intelligence to support students' clinical decision-making abilities.

SUGGESTION

Based on the study's results, nursing education institutions in Aceh are advised to enhance the development of emotional intelligence in the learning process, particularly in clinical practice, to support students' clinical decision-making. Further research is expected to involve a broader sample or a different research design to strengthen the results.

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CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

AUTHOR CONTRIBUTIONS

Irfanita Nurhidayah was responsible for conceptualizing the study, designing the research, analyzing the data, and writing the manuscript, including drafting, reviewing, and editing. Yullyzar contributed to the research implementation and assisted with data collection. Rahmawati also contributed to the research implementation and data collection process. Nani Safuni was responsible for proofreading and contributed to manuscript writing and final editing.

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