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**THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE  
AND ACADEMIC ACHIEVEMENT OF MIDWIFERY STUDENTS IN  
STIKES MEDIKA CIKARANG, INDONESIA**

**Ajeng Hayuning Tiyas<sup>1,2,\*</sup>, Dian Pratiwi<sup>2</sup>, Istichana Zuliyati<sup>2</sup>**

<sup>1</sup>STIKes Medika Cikarang, Indonesia

<sup>2</sup>Universitas Aisyiyah Yogyakarta, Jalan Ringroad Barat No. 63, Mlangi, Nogotirto, Gamping, Sleman,  
Yogyakarta Indonesia (55292)

\*Corresponding author's email: [ajeng.hayuningtyas@gmail.com](mailto:ajeng.hayuningtyas@gmail.com), [ajenght@stikesmedikacikarang.ac.id](mailto:ajenght@stikesmedikacikarang.ac.id)

**ABSTRACT**

**Background:** Educational success can be evaluated or viewed from students' academic achievement. Academic achievement is influenced by several factors, such as intelligence and emotional intelligence. Intelligence only contributes roughly 20% of the success, while emotional intelligence may influence the other 80%. Emotional intelligence comprised of 5 indicators including self-awareness, self-control, self-motivation, empathy, and social skill. Low emotional intelligence leads to undesirable student academic achievement.

**Aims:** This study aimed to determine the relation between emotional intelligence and academic achievement among DIII Midwifery Programme's student at third grade in College of Health Science Medika Cikarang 2014.

**Methods:** This research is a quantitative analytical research with cross sectional approach. A total of 83 students from DIII Midwifery Programme at third grade were selected randomly and be involved as participants. A questionnaire covered students' Grade Point Average (GPA) and their emotional intelligence scale was employed. The data was then analysed by statistical Chi-Square test.

**Results:** The result of the study indicates that there is a significant relation between emotional intelligence and academic achievement. Students who have high emotional intelligence tend to obtain higher academic achievement than students who have low emotional intelligence.

**Conclusion:** The findings of the study is carrying an expectation to an improvement in academic programme planning, materials or other activities to be designed as the consideration to emotional intelligence development in order to optimize academic achievement's students.

**Keywords:** Intelligence, emotional intelligence, academic achievement.

**INTRODUCTION**

One indicator of the level of human development in a country is the Human Development Index (HDI). HDI is the average achievement of a country in three basic dimensions of human development, namely in the fields of economy, health and education. According to The United Nations Development Programme (UNDP) in 2011 announced the HDI rank Indonesia is ranked 124 of 187 countries in the world [1]. This shows that education in Indonesia is still lagging behind other countries.

Education has an important role to ensure the development and continuity of a nation through human resource quality. Educational institutions as a means of formal institutions in order to achieve these objectives. The results of the learning process is reflected in academic

achievement. One benchmark is the value of learning achievements (Grade Point Average). Grade Point Average (GPA) is a picture of the success rate of students in a certain period of time prior to completing the entire program, derived from dividing the sum of the weighted value of the course multiplied course credit by the number of credit courses that have been taken [2].

In education, the learning process is a process that is complex and comprehensive, there are many factors that influence it. Intelligence Quotient (IQ) and Emotional Quotient (EQ) are the two things that are needed in the learning process. According to Binet cited Winkel essence of intelligence is the ability to establish and maintain a goal to make adjustments in order to achieve that, and to assess the state of self-critically and objektif [3]. Emotional intelligence by Goleman (2010) is the ability to regulate emotional life with keep the harmony of emotions and disclosure through the skills of self-awareness, self-control, self-motivation, empathy and skills social [4]. According to Goleman, intelligence quotient (IQ) only contribute for 20% of our success, while 80% is the contribution of other factors, one of which emotional intelligence (EQ) [4]. IQ can not function properly without the participation of the emotional appreciation of the lessons delivered in schools. Both intelligence it should complement each other in order to create a balance between IQ and EQ is the key to success for students at school [4].

Education in Indonesia is still emphasize on academic values and sheer intelligence [5]. Education that teaches emotional intelligence include learning about integrity, honesty, commitment, vision, creativity, mental endurance, the ability to empathize, to control one's emotions, ability to cooperate, and other still rare [5]. Intellectual ability is more considered to answer the problem of education more than the emotional ability. Learning paradigm is expected to be changed, because intelligence is not enough for students but also should consider the emotional quotient (EQ), which is basically owned by every human being [5].

Similarly with education midwife, midwife education geared to prepare specialists or professional midwives needed by the people who are able to develop the knowledge, skills and attitudes needed in carrying out the duties of a midwife. It is apparent that not only knowledge and skills, but also the attitude of professionalism midwife is indispensable in carrying out its duties. The attitude of professionalism shown by the attitude of midwives capable of empathy, self-control, open and midwives the ability of self-awareness so that it can take the right decision is a reflection of a midwife who have emotional intelligence.

A previous study by Qurniyawati (2009) show the positive influence between emotional intelligence with DIV student learning achievement in Obstetrics Faculty of Medicine, State University Surakarta [6]. The research was also supported by research Wahyuningsih (2004), which prove the existence of a relationship between emotional intelligence and learning achievement in class II SMU Lab School, East Jakarta [7]. From the results of a preliminary survey conducted in College of Health Science Medika Cikarang, the average GPA of third level students were below the standard limit set graduating institution ( $> 2.75$ ) is 2.69. Students with GPA below standar (2.75) by 57.8% while the student with a GPA above 2.75 at 42.2%.

The purpose of this study was to determine a relationship between emotional intelligence and academic achievement DIII Midwifery Programme Student in College of Health Science Medika Cikarang in 2014.

## **METHODS**

This study uses a quantitative analytical research design with cross sectional approach. The research was conducted on College of Health Science Medika Cikarang on October 2014 to December 2014. The population in this research is all student Grade III Diploma III Midwifery

Programe College of Health Science Medika Cikarang academic year 2013/2014 which amounted to 83 people. Sampling technique used in this study is total population.

Data collection techniques in this study using primary and secondary data, to measure variables emotional intelligence using primary data, while for variable learning achievement using secondary data.

Instruments for measuring emotional intelligence questionnaire enclosed form of Likert scale with five alternative answers (Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree). The questionnaire is a developing of 5 indicators emotional intelligence from Daniel Goleman, self-awareness, self-control, self-motivation, empathy and social skills.

In order to validate the instrument is used validity and reliability test. Validity test is done to measure whether the instrument being used is valid or not. Test is based on the construct validity, the instruments are made in non test form, based on the theory that are relevant to what will be measured. Data analysis using univariate and bivariate analysis. Univariate analysis is used to see the description of the frequency distribution of each variable in the study. Bivariate analysis is used to see the relationship between two variables, variables emotional intelligence and academic achievement [8]. In this study to prove a correlation between the variables used Chi Square test with Confident Interval 95%.

## RESULTS

Based on the table 1, students with high GPA are more on students who have a good self-awareness than students who are less identify themselves ie 68.2%. From the analysis of statistical using Chi Square test obtained P value  $<P$  table ( $0.031 < 0.05$ ), it can be concluded that there is a relationship between self-knowledge and academic achievement. Value of OR (odds ratio) 3.061, it can be assumed that the students who has high self-awareness are three times more likely to obtain high GPA compared to students who has low self-awareness.

Table 1. Relationship Between Emotional Intelligence and Academic Achievement DIII Midwifery Programme Student in College of Health Science Medika Cikarang 2014

| Variable                      | Low GPA |      | High GPA |      | $\Sigma$<br>F | P Value | OR    | CI 95%          |
|-------------------------------|---------|------|----------|------|---------------|---------|-------|-----------------|
|                               | F       | %    | F        | %    |               |         |       |                 |
| <b>Self-awareness</b>         |         |      |          |      |               |         |       |                 |
| Low                           | 20      | 58,8 | 14       | 31,8 | 34            | 0,031   | 3,061 | 1,205 - 7,775   |
| High                          | 14      | 41,2 | 30       | 68,2 | 44            |         |       |                 |
| <b>Self-control</b>           |         |      |          |      |               |         |       |                 |
| Low                           | 22      | 64,7 | 14       | 31,8 | 36            | 0,008   | 3,929 | 1,524 - 10,130  |
| High                          | 12      | 35,3 | 30       | 68,2 | 42            |         |       |                 |
| <b>Self-motivation</b>        |         |      |          |      |               |         |       |                 |
| Low                           | 22      | 64,7 | 11       | 25,0 | 33            | 0,001   | 5,500 | 2,064 - 14, 654 |
| High                          | 11      | 35,3 | 33       | 75,0 | 45            |         |       |                 |
| <b>Emphaty</b>                |         |      |          |      |               |         |       |                 |
| Low                           | 24      | 70,6 | 15       | 34,1 | 39            | 0,003   | 4,640 | 1,766 - 12,189  |
| High                          | 17      | 29,4 | 22       | 65,9 | 39            |         |       |                 |
| <b>Social skills</b>          |         |      |          |      |               |         |       |                 |
| Low                           | 20      | 58,8 | 13       | 29,5 | 33            | 0,018   | 3,407 | 1,329 - 8,731   |
| High                          | 14      | 41,2 | 31       | 70,5 | 45            |         |       |                 |
| <b>Emotional Intelligence</b> |         |      |          |      |               |         |       |                 |
| Low                           | 26      | 76,5 | 11       | 25,0 | 37            | 0,000   | 9,750 | 3,426-27,744    |
| High                          | 8       | 23,5 | 33       | 75,0 | 41            |         |       |                 |

Students with high GPA are more on students who can control themselves than students who are less able to control themselves, ie 68.2%. Results of statistical Chi Square test analysis obtained P value  $<P$  table (0.008  $<0.05$ ), it can be concluded that there is a relationship between self-control and academic achievement. Value of OR 3.929, it can be assumed that the student who has high self-control are three times more likely to obtain high GPA compared to students who has low self-control.

Students with a high GPA as much on students who have high motivation to learn than students who lack motivation, which is 75%. Results of statistical Chi Square test analysis obtained P value  $<P$  table (0.001  $<0.05$ ), it can be concluded that there is a relationship between self-motivation and academic achievement. Values of OR 5,500, it can be assumed that the student who has high motivation to learning are five times more likely to obtain high GPA compared to students who has low motivation.

Students with a high GPA as much on students who have empathy better than students who lack empathy, ie 65.9%. Results of statistical Chi Square test analysis obtained P value  $<P$  table (0.003  $<0.05$ ), it can be concluded that there is a relationship between empathy and academic achievement. Value of OR of 4.640, it can be assumed that the student who has high empathy are four times more likely to obtain high GPA compared to students who has low self-control.

Students with a high GPA as much on students who have good social skills than students who are less able to socialize, ie 70.5%. Results of statistical test Chi Square analysis obtained P value  $<P$  table (0.018  $<0.05$ ), it can be concluded that there is a relationship between social skills and academic achievement. Value of OR 3.407, it can be assumed that the student who has high social skill are three times more likely to obtain high GPA compared to students who has low social skill.

Overall by accumulating each indicator of emotional intelligence can be concluded that students who has a high GPA also has a high level of emotional intelligence, based on the results of the statistical test obtained by value P value  $<P$  table, 0.000  $<0.05$ , there is a correlation between the level emotional intelligence and academic achievement. Value of OR obtained for 9,750, it can be assumed that students who has a high level of emotional intelligence has a tendency of 9,750 times to obtain a GPA (grade point average) higher compared with students who has a low level of emotional intelligence.

## **DISCUSSION**

### ***Self-awareness***

From the result research there is a relationship between self-knowledge and academic achievement. The results of this study are similar to studies Qurniyawati (2009) stating that the student is able to recognize her own emotions has the sensitivity over the decision-making personal issues. The ability of the students will be able to decide which right decision will be taken [6]. Sensitivity is explained by Goleman (2010) as knowing what is perceived at a time and use them to guide decision-making itself, have benchmarks that the reality on the ability and confidence strong that encourages students to optimize itself so as to be able to obtain the learning achievement which [4]. Students that have the ability to be able to recognize themselves, will know the boundaries of their ability, to the extent he have, so they would feel more confident with their abilities. With good self confidence will automatically push the students to actualize themselves so as to obtain a good learning performance.

### ***Self-control***

From the result research there is a relationship between self-control and academic achievement. Someone who can manage emotions well will be able to conduct stress management, cheerful, optimistic, calm in the face of any problem, and smart in determining the problem-solving strategies, so as to achieve optimal learning results, as presented in a study conducted by Trihandini (2005) [9].

This was confirmed by the statement of Daniel Goleman (2010) argue that students ability to manage their emotions in such a way would have a positive impact on the execution of duties, sensitive heart and could delay the pleasure before the achievement of a goal [4]. Agreed with the statement Goleman, midwifery student who is able to control herself will be consistent with the positive values he believed. She will not do things outside of the positive values espoused. She was able to manage her emotions appropriately included in negative feeling [4]. Students with good self-control to be able to prioritize which things are more important to do, especially in the field of education. As a student she knows that her main task is to learn as well as possible, and she would put it compared with other things even though it is personal enjoyment. Besides the student who can control herself, will be able to quickly get up when experiencing adversity or disappointment. She would not dissolved or washed feelings. When you fail in the exam, she will quickly rise and not long dissolve in disappointment.

### ***Self-motivation***

From the research there is a relationship between self-motivation and academic achievement. Purwanto (2006) in a statement states that motivation contributes to a person's success in achieving good learning performance, the motivation to encourage someone to do or act in achieving a goal or aspiration, then there will be a drive that provides energy to the students to perform tasks optimal [10]. This was confirmed by the opinion of Goleman (2010) that the achievement must be passed with its motivation in the individual, which means it has the perseverance to resist the gratification and control impulses, and to have a feeling of motivation is positive, that enthusiasm, positivism, optimism, passion, and self confidence [4]. The students of midwifery have high self-motivation, will have a desire to continue more advanced and better. This is clearly going to improve the achievement of learning outcomes. The will continue to try to improve the quality of self by continuing to upgrade knowledge with learning, to follow the activities or training support for it.

### ***Empathy***

From the research there is a relationship between empathy and academic achievement. According Wangmuba (2009) a person who is able to empathize will be able to think positively of others and encourage to study well and get results learning optimal [11]. Empathy affects the success in learning supported the suggestion Goleman (2010) that empathy is being able to feel what others feel, appreciate diversity, able to understand their perspective, foster a trusting relationship, do not try to make up others based on her own image, unwillingness to manipulate or manipulate others and able to harmonize difference [4]. Midwifery students who able to empathize, they will appreciate the difference, more tolerant, will not force other people's opinions and thoughts should be in accordance with the opinions and thoughts. This will directly influence social life. People who are better able to empathize with other people would be appreciated, so there is mutual trust and positivism in social life. Of course it will give their energy and positive emotions, so that it can optimize their ability to achieve good learning outcomes.

### ***Social skills***

From the research there is a relationship between social skills and academic achievement. Ability in fostering social relationships with other people in it requires skill to manage the emotions of others, it is necessary to support the popularity, leadership, and success is included in the academic field (achievement) of a student [12]. Midwifery students who have good social skills will easily adapt to the new environment and socialize with people from different backgrounds. Social skills is capital in developing leadership. People who have the leadership skills will make it easier in the learning process and achieve good results in the confronted face serious obstacles.

### ***Emotional intelligence***

Overall the results of research there is a relationship between emotional intelligence with academic achievement. Relationship emotional intelligence and the learning achievement are supported by research Wahyuningsih (2004) in grade II SMU Lab School Jakarta which showed correlation ( $r_{xy}$ ) of 0.248 with  $p = 0.002 < 0:05$ . This suggests a correlation between emotional intelligence and academic achievement with the direction of the positive relationship [7].

Enforcement hypothesis is also supported by research Qurniyawati (2009) and Nuryanti (2010) of the student program of study DIV Midwifery Programme in Obstetrics Faculty of Medicine, University of Surakarta, which showed significant relationship between emotional intelligence and learning achievement. The results were obtained  $r = 0.494$ , and after being tested significance gained thitung price greater than  $t$  table namely  $4.177 > 2.000$  [13].

According to Hartini (2004) an expert in psychology states that emotional intelligence can describe an individual's ability to manage the impetus that was in themselves. Besides the emotional intelligence is also associated with individual achievement. So someone who have a high emotional intelligence will be able to manage their inner urge both positive and negative manner appropriate to achieve the expected success or achievement in various field [14].

Emotional intelligence provides advantages in generating creativity, be honest about themselves, trusting relationships, provide guidance to those who have conscience. Besides that, it can effectively have the advantage in every area of life one push productivity itself so it will be able to do any work to achieve optimal results [4].

According to Ahmadi and Supriyono (2008) success in learning can be seen through the results of academic achievement. One's learning achievement can be related to psychological factors one of them by a factor of emotional intelligence [15]. According to Goleman who argued that the concept of intelligence associated with individual achievement one of them is emotional intelligence. Emotional intelligence refers to the ability to recognize their own feelings and the feelings of others, to motivate ourselves and the ability to manage emotions well in ourselves and in relation to others [4]. Each of the indicators of emotional intelligence are interrelated and inseparable, fifth synergize to optimize the positive forces within him to achieve success, both in the field of career, academic and social [4].

A person's life can not be separated from the emotional relationship, whether it is emotion that is positive and which is negative. It required their emotional intelligence in order to identify and manage emotions well.

Students who are able to direct the mind and effort to learn with the best will be able to achieve success or high academic achievement. Students who have high intelligence quotient is expected to have a better learning achievement than those who have a low intelligence quotient, if

it also has another supporting factor is emotional intelligence. In accordance with the statement Goleman which states that emotional intelligence includes the ability of different, but complementary to academic intelligence or intellect [4].

## **CONCLUSION**

Based on the research results through the statistical test each indicators of emotional intelligence includes self-knowledge, self-control, self-motivation, empathy and social skills, then accumulated into variables emotional intelligence, it can be concluded that emotional intelligence has a relationship significantly with academic achievement. Students who has good emotional intelligence, will know the boundaries of her abilities, easier in making the right decision, also able to manage her emotions. She would pour her emotions in an appropriate manner so as not explosive or exaggerated, she will easily rise when experiencing adversity, not dissolved so long in the emotions. In terms of motivation, there is a strong urge in her to strive more advanced and better in improving herself. In social relationships with others, it will have a high tolerance, respect for differences, and able to socialize well including teamwork can work. These abilities are interrelated and work together to optimize her ability to achieve good learning performance. Based on the result of this study is expected in academic programme planning, can be developed into materials or activities programme related to emotional intelligence that can be improved in order to optimize academic achievement's students.

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