The Correlation Between Emotional Maturity and Problem-Solving Ability in Yogyakarta Students

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Students are people who attend school, and from the perspective of society, students are the vanguard of the modern era. However, being a student also comes with several challenges and tasks that occasionally conflict with those encountered outside the academic area. These challenges frequently cause problems. The need for decision-making abilities or the appropriate action to solve the issue will follow. The study aims to identify the correlation between emotional maturity and problem-solving among students in Yogyakarta. This study employed a quantitative research method with a correlational approach and used two variable scales. The data analysis used Pearson Correlation Product Moment. The results showed that emotional maturity and problem-solving among students in Yogyakarta correlated with a significant value of 0.003 and a Pearson correlation of 0.085, so it can be concluded that these two variables correlated. Students are expected to be able to control their emotions and solve problems more effectively to make life simpler for themselves and others.

Keywords
College Student
Emotional Maturity
Problem-Solving Skills

Introduction

In society, students are always considered people with high intellectual abilities (1). Students are often referred to as agents of change. This means that by becoming a student, a person is deemed to have high academic skills and is expected to be able to provide solutions...
to problems faced by himself or faced by society [1],[2]. Meanwhile, according to Ref. [2], students in the campus environment behave as campus people whose primary roles are studying, reading lecture material books, making papers and presentations, discussing, debating, attending seminars and other campus activities, and having behaviors that reflect their intellectual intelligence [3].

According to Ref. [1], an indicator of intelligent behavior is the ability to solve problems. Therefore, students must have the right problem-solving skills to help solve academic and non-academic issues. In addition, the right problem-solving skills will make it easier for students to deal with situations full of problems that need to be solved. In general, what is meant by problem-solving arises when there is problem-solving in one situation and another to achieve a goal [3]. Problem-solving is also interpreted as a mental and intellectual process of finding and solving problems based on accurate data and information so that appropriate and careful conclusions in decision-making [4]-[6].

Problem-solving is often equated with decision-making, even though there are some differences. Decision-making is closely related to the authority of a manager, leader, or superior with subordinates. Problem-solving is more specific to solving problems with a psychological approach by a counselor for his client [7],[8]. Problem-solving is a process of transformation from one situation to another to achieve goals. Individuals try to achieve goals starting from the initial state [9].

Some research says that the impact of a lack of problem-solving skills, especially in the academic field, is that a lack of emotional maturity characterizes someone who analyzes and designs problem-solving in an apperception given by others [10]. According to Ref. [11], students have problem-solving abilities in the low category. Even though the research conducted is limited to the field of mathematics, this can still be used as a basis for the fact that the problem-solving competence possessed by students in Indonesia is still relatively low. Therefore, based on the explanation above, researchers need to deepen the study of problem-solving.

Understanding problem-solving is fundamental to anyone, which a student must understand. Without understanding and qualified problem-solving skills, a person will experience difficulties when faced with problems in everyday life. Thus, students are expected to have adequate problem-solving abilities [12]. Through researcher observations and brief interviews with around ten students, it turns out that many still have not mastered it and cannot find a solution or solve a problem. This case shows that students lack problem-solving abilities and require good problem-solving skills.
Based on the results of the observations and interviews above, this shows that there is harmony with the opinion of Ref. [13]; there are still many students who have not been able to adjust their learning patterns to the demands of lecture conditions, are surprised by the long and different study time spans, and cannot change the time between learning, playing, organizing and studying.

A college student is usually aged 18 to 25 years, and at that age is the end of adolescence and the beginning of the adult phase, so it can be said that the student age is the phase in which individuals can establish their lives [14]. The early adult stage begins at about 18 years and lasts until about 40. When the physical and psychological changes accompany reduced reproductive abilities [15],[16], this is in line with Ref. [16], who said that students who experience the transition from adolescence to early adulthood are also included in the population at risk related to their emotional maturity.

This has something to do with problem-solving, whereas emotional maturity is another development experienced by students. It is said to be emotionally mature if students can show emotions properly, control themselves properly, and be accepted by the surrounding environment [17]. Thus, students generally have sufficient maturity regarding their feelings when solving problems to make the right decisions or problem-solving. According to Ref. [15], factors influencing emotional maturity are gender, age, environment, and parenting style. Ref. [18] states several characteristics of emotional maturity, namely, being able to stand alone where the individual does not constantly need support from the family, does not depend on the advice and protection of his parents, and can make his own decisions.

Then, he can accept other people's attitudes and behavior where their way of thinking, behaving, and dressing is similar to their peers. He has a social channel for his energy; he can accept those differences if he is with others. Able to respond sensitively to other people's circumstances and can be emotionally balanced [19]. From all the explanations above regarding the two variables, there is a relationship that influences each other. The emotional maturity variable shows that when someone's emotional maturity is stable, they can make decisions and have good problem-solving.

Then, in the problem-solving variable, a person can solve a problem or find a solution with a calm and unhurried mind by involving his emotions. In other words, the two variables show a relationship with each other. So, from these two variables, there is a relationship or correlation in which both are related to an action, such as rethinking to make the right decision. From the problems stated above, the formulation of the problem in this study is a relationship between emotional maturity and problem-solving abilities in students in Yogyakarta. This study aimed to determine the relationship between emotional maturity and problem-solving skills in students in Yogyakarta.
Methods

On this occasion, the researcher used a quantitative research approach. According to Ref. [20], quantitative research is a study that emphasizes the analysis of numerical data (numbers) processed using statistical methods to obtain the significance of the relationship between the variables studied. Based on the research objectives to be carried out, the technique used is a correlational approach. Correlational quantitative research is a study that examines the extent to which variations in one variable are related to variations in one or more other variables based on the correlation coefficient [21].

This study uses a quantitative approach. Quantitative research is a study that emphasizes its analysis of numerical data processed using statistical analysis methods [22]. Furthermore, the research design used in this study is correlational. Correlation research aims to investigate the extent to which variations in one variable are related to variations in one or more other variables. So, quantitative research is research that examines the extent to which the variation of the dependent variable and the independent variable emphasizes the analysis of numerical data (numbers) that are processed using statistics [23].

The process in this study is supported by using the SPPS application and statistical methods in the form of normality, linearity, and hypothesis tests. Then, data analysis will be carried out after the necessary data has been collected. This data analysis is a review or excavation of previously collected data, which is a form of effort to process data into useful information in the form of informing a conclusion and supporting it when researchers are making decisions related to the results of their research. The research course plan includes three phases.

1. Preparation Phase

At this stage, the researcher prepares a preliminary study or searches for and identifies the problems that have been raised in his research to serve as a reference or material for determining the title and prioritizing the title and discussion that will be raised on the problem. Then the researcher consults and guides with the supervisor, followed by preparing a thesis proposal.

2. Implementation Stage

After preparing everything such as an agreement sheet, the researcher then distributed the scale or questionnaire via Google form media which had been created in the form of statements that needed to be filled in by the respondent or research target, also using the help of the kudata.id website. If it has been filled in by respondents and is satisfactory and complete, then the next stage is carried out by the researcher, namely managing data from the scale or questionnaire.
3. Final Stage

Then, after the data was collected from the respondents, the researcher checked again and carried out the scoring, which was continued by analyzing the data and then concluding and producing research results. Next, carry out consultations and guidance again with the supervisor regarding the research results report.

Results

Some research says that the impact of a lack of problem-solving skills, especially in the academic field, is someone who is characterized by a lack of emotional maturity in analyzing and designing problem-solving in an apperception given by others [18]. This research uses quantitative methods with a correlational approach to determine the relationship between the two variables, namely the emotional maturity variable and the problem-solving variable, in testing the data using the Pearson product-moment correlation test. However, the researchers previously carried out several steps, such as categorizing variables by testing the normality and linearity tests using the SPSS 26 program.

![Fig. 1. Number of Males and Females by Age](image)

The respondents in this study are characterized as active students in Yogyakarta, with 130 male respondents and as many as 65 and 65 women. Twelve people consisting of 5 men and seven women aged 18 years, ten people consisting of 6 men and four women aged 19 years, 30 people consisting of 13 men and 17 women aged 20 years, 38 people consisting of 18 men and 20 women aged 21 years, 16 people consisting of 9 men and seven women aged 22 years, ten people consisting of 7 men and three women aged 23 years, six people consisting of 2 men and four women aged 24 years, and eight people consisting of 5 men and three women aged 25 years.
Based on the results of calculating hypothetical and empirical data in Table 1, the obtained theoretical data on the problem-solving variable has a min score of 41, a max score of 164, a mean score of 102.5, and a standard deviation score of 20.54. Meanwhile, empirical data shows a min score of 86, a max score of 164, a mean score of 121.85, and a standard deviation score of 14.42.

**Table 1. Calculating Hypothetical**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothetical Data</th>
<th>Empirical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Problem-Solving Skills</td>
<td>41</td>
<td>164</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td>32</td>
<td>128</td>
</tr>
</tbody>
</table>

Moreover, on the hypothetical data (Table 2) on the emotional maturity variable, there is a min score of 32, a max score of 128, a mean score of 80, and a standard deviation score of 16.03. Meanwhile, in empirical data, there is a min score of 67, a max score of 128, a mean score of 95.57, and a standard deviation score of 10.52.

**Table 2. Calculating Empirical**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Empirical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
</tr>
<tr>
<td>Problem-Solving Skills</td>
<td>86</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td>67</td>
</tr>
</tbody>
</table>

Based on the categorization of the problem-solving variable, it has the highest frequency of 93 and a percentage of 71.53%, so the categorization of the problem-solving variable is moderate. See Table 3.

**Table 3. Categorization problem-solving**

<table>
<thead>
<tr>
<th>No</th>
<th>Problem-Solving Skills</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High</td>
<td>19</td>
<td>14.61%</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>93</td>
<td>71.53%</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>22</td>
<td>16.92%</td>
</tr>
</tbody>
</table>

Moreover, from the results of the categorization of the emotional maturity variable, it has the highest frequency of 79 and a percentage of 60.76%. See Table 4. Hence, the categorization of the emotional maturity variable is medium.

**Table 4. Categorization Emotional Maturity**

<table>
<thead>
<tr>
<th>No</th>
<th>Emotional Maturity</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High</td>
<td>21</td>
<td>16.15%</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>79</td>
<td>60.76%</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>18</td>
<td>13.84%</td>
</tr>
</tbody>
</table>
Based on the results of the normality test (Table 5), it can be seen that the problem-solving variable is 0.045 and the emotional maturity variable is 0.022, so it can be concluded that these two variables have a sig. (2-tailed) > 0.05 indicates that the data obtained from these two variables are normally distributed.

**Table 5. Normality Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig. (2-tailed)</th>
<th>α</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving Skills</td>
<td>0.045</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td>0.022</td>
<td>0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Based on the results of the linearity test (Table 6), it can be seen that the problem-solving variable and the emotional maturity variable have the same value of 0.316, so it can be concluded that these two variables have a Deviation from the Linearity value of > 0.05, this shows the data obtained from these two variables linear.

**Table 6. Linearity Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Deviation from Linearity</th>
<th>α</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving Skills</td>
<td>0.316</td>
<td>0.05</td>
<td>Linear</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the correlation test results for problem-solving skills and emotional maturity variable (Table 7), the significant value is 0.003. The Pearson correlation is 0.085, so it can be concluded that these two variables have a relationship or correlation with a strong correlation level, so they are acceptable.

**Table 7. Correlation**

<table>
<thead>
<tr>
<th>Emotional Maturity</th>
<th>Pearson Correlation</th>
<th>.085</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td>130</td>
</tr>
<tr>
<td>Problem-solving Skills</td>
<td>Pearson Correlation</td>
<td>.085</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td>130</td>
</tr>
</tbody>
</table>

Emotional maturity and problem-solving skills are closely intertwined aspects of human development, crucial in shaping an individual's well-being [21]. Emotional maturity is understanding, managing, and expressing emotions constructively [22]. On the other hand, problem-solving skills involve the capacity to analyze situations, identify challenges, and generate effective solutions [3].

The socioemotional selectivity theory is one relevant psychological theory that supports the connection between emotional maturity and problem-solving [23]. According to
this theory, individuals become more focused on emotional fulfillment and meaningful experiences as they age. This shift in priorities is linked to an increased ability to regulate emotions, leading to greater emotional maturity. Emotional regulation, a key component of emotional maturity, enables individuals to approach problem-solving tasks with a calmer and more composed mindset [24].

Emotionally mature individuals often exhibit higher self-awareness, empathy, and social skills [25]. These qualities contribute to effective communication and collaboration, which are essential to successful problem-solving. Daniel Goleman's theory of emotional intelligence further supports the idea that emotional awareness and interpersonal skills are integral to navigating complex problem-solving situations.

Furthermore, Erik Erikson’s psychosocial development theory emphasizes resolving emotional conflicts at different life stages [26]. Successfully resolving these conflicts contributes to emotional maturity, influencing how individuals approach and handle challenges. In practical terms, emotional maturity can enhance problem-solving abilities by promoting a balanced and rational approach to difficulties. Individuals with higher emotional maturity are better equipped to manage stress, maintain focus, and make decisions based on careful consideration rather than impulsive reactions. This ability to remain composed under pressure contributes significantly to practical problem-solving.

**Conclusion**

Emotional maturity and problem-solving skills are interconnected aspects of psychological development. Understanding and regulating emotions positively influences an individual’s approach to solving problems. Integrating socioemotional selectivity, emotional intelligence, and psychosocial development provides a comprehensive understanding of how emotional maturity and problem-solving capabilities are intertwined in psychology. This quantitative study successfully establishes and validates a significant relationship between emotional maturity and problem-solving ability. The findings demonstrate emotional maturity's positive and substantial influence on problem-solving skills. This research contributes to the existing body of knowledge and emphasizes the practical implications for educational and developmental strategies to enhance problem-solving skills in young adults.

**Conflict of Interest**

The authors declare that there is no conflict of interest.
References

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