The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

Muhammad Sukma Indrawan¹, Ahmad Suriansyah², Eko Suhartono³ ¹,²,³Master in Educational Administration, Lambung Mangkurat University, Banjarmasin, Indonesia

ABSTRACT: After students have completed the learning process, several aspects such as cognitive, emotional, and psychomotor characteristics are measured using test instruments or related instruments to determine learning accomplishment in the field of education. The goal of this study was to see how emotional intelligence, learning environments, and stress levels affected student success. The population of this study was 76 students of class X-XII Telecommunication Access Network Engineering Department in Banjarbaru in 2021-2022 academic year. Data collection was carried out using instruments consisting of emotional intelligence (30 items), learning facilities (10 items), academic stress level (60 items), and learning achievement (average grade point). The method in this study uses a descriptive correlational method using a quantitative approach. Analysis of the data used was path analysis. Based on the results obtained, it is stated that (1) there is a direct insignificant effect of students' emotional intelligence on student learning achievement, (2) there is a direct insignificant effect of academic stress levels on student achievement, (3) there is a significant direct influence on facilities. student learning on student achievement, (4) there is a direct insignificant effect of emotional intelligence on the level of academic stress, (5) there is a direct influence that is not significant the influence of learning facilities on the level of academic stress. (6) there is an indirect influence that is not significant the influence of emotional intelligence through the level of academic stress on student learning achievement, (7) there is an indirect and insignificant effect of learning facilities through the level of academic stress on student achievement.

KEYWORDS: Emotional intelligence, learning facilities, academic stress level, learning achievement

INTRODUCTION

During the COVID-19 outbreak in Indonesia, several government regulations were issued to prevent the spread of the outbreak. Large-scale social limitations, such as vacations from schools and workplaces, limits on religious activities, and/or restrictions on activities in public places or facilities, are defined under Article 59 paragraph 3 of the Health Quarantine Law of 2020. In addition, the Secretary General of the Ministry of Education and Culture released Circular Letter No. 15 of 2020 with rules for organizing learning from home during an emergency time caused by the corona virus sickness (Covid-19). The whole teaching and learning process is carried out indirectly or through electronic devices using an internet connection, according to the circular. This new educational order has an influence on students' drive to learn, which leads to student accomplishment. According to the findings of Yunitasari and Hanifah's (2020) qualitative study, online learning during the COVID-19 epidemic had a significant impact on students' enthusiasm in learning. Students are bored since they do not have direct contact with their peers and professors. Junaidi et al. (2021) found that online learning showed a moderate connection (r=0.517) with the success of 8th graders at State Junior High School 1 Kepanjen Malang. Another study found a moderate link (r=0.5) between online learning and student success at Junior High School Al Falah Bekasi.

After students have completed the learning process, several aspects such as cognitive, emotional, and psychomotor characteristics are measured using test instruments or related instruments to determine learning accomplishment in the field of education. Learning accomplishment is an educational evaluation of a student's development in all elements of school learning, including knowledge and skills that are reported following the study's findings. Teachers might gain insight into student learning performance by assessing or measuring evaluation activities. A well-structured exam whose findings can truly evaluate pupils' skills is a learning performance evaluation instrument. The expected learning accomplishment is the result (mastery) that a student achieves after engaging in the teaching and learning process at school in a certain study subject.
The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

The learning process at school is a complex and comprehensive process. Many factors affect student achievement in the online learning period. Sari et al's (2017) reveals that emotional intelligence has a positive relationship with self-regulated learning or awareness to learn. High emotional intelligence results in high self-regulated learning in students, and vice versa. Thus, understanding one's emotions will produce a positive impact in the learning process which leads to increased learning achievement. (Sari et al, 2017) The results of the research study by Leoh et al. (2019) also revealed that the mathematics learning achievement of 8th graders at SMPN Kupang was influenced by emotional intelligence by 48.6%.

Emotional intelligence is the link between feelings, character, and moral instincts, such as self-control, excitement, and perseverance, as well as the capacity to adapt, solve issues, regulate anger, and motivate oneself. The capacity to regulate, comprehend, and successfully employ the strength and sharpness of emotions as a source of energy, knowledge, and influence is referred to as emotional intelligence. The capacity to detect one's own emotions, the ability to regulate emotions, the ability to inspire oneself, the ability to understand the feelings of others, and the ability to form connections are the five aspects of emotional intelligence (Leoh et al, 2019).

In addition to emotional intelligence, the level of academic stress also affects student achievement. General academic stress is experienced by students because they feel unable to deal with pressures and demands in their academic environment to get grades according to the Minimum Completeness Score (SKM) standard that has been set in each subject in their respective schools. Academic stress is defined as a condition experienced by individuals as a result of pressure or demands from academic conditions in the form of physical reactions, thought behaviors, and negative emotions that arise (Barseli et al, 2017). This is evidenced by the research study of Barseli et al (2018), which states that there is a significant relationship between the stress level of SMA 10 Padang students and learning achievement. The level of academic stress is moderate and learning achievement is quite adequate. Indriani's research study (2021) states that academic stress during distance learning for students of SMK Negeri 1 Godean 2020/2021 is in the high category. This indicates that most students experience academic stress caused by a mismatch between student abilities and academic demands at school with the current situation which requires students to study at home using online media, such as google classroom and whatsapp group.

Learning facilities, particularly the availability of learning facilities and quotas (credit) for using the internet while learning, have an impact on student success. Some remarked that participating in online learning was tough since not every location had a reliable internet connection (Hasanah et al, 2020). This makes it tough to engage in class, especially if you're learning through video conference, which uses a lot of internet bandwidth (using the zoom application with 720P video quality for one hour consumes 540 MB of data).

Dewi (2021) states that student learning facilities have a positive effect on student achievement during the Covid-19 pandemic. In relation to the online learning process which is commonly referred to as online (in the network), the learning facilities referred to in this case are facilities that support teaching and learning activities that are not carried out at school, but at home due to something like at this time it is still in its infancy, pandemic. The learning facilities used are mobile phones, laptops, wifi/internet quota and applications (whasapp, zoom, google classroom).

Vocational High School (SMK) is a form of formal education unit that organizes vocational education at the secondary education level as a continuation of SMP/MTs or other equivalent forms or continuation of learning outcomes that are recognized as equal to SMP/MTs (Law Number 20 of 2013, Article 18 paragraph [3]). Vocational education is secondary education that prepares students specially to work in certain fields (Law Number 20 of 2013, Elucidation of Article 15). Because they are prepared to work in certain fields, the curriculum designed is based on 70% skill and 30% knowledge. However, the Covid-19 pandemic is suspected to cause a decline in emotional intelligence, high levels of academic stress, and inadequate learning facilities which will impact student achievement. Therefore, it is necessary to do research study on the learning achievement of SMK students which is associated with emotional intelligence, academic stress, and learning facilities have not been widely studied.

METHOD

The method used in this research study is correlational descriptive method using a quantitative approach, which describes the influence of students' emotional intelligence, stress levels and learning facilities on student achievement in private vocational high school students majoring in access network engineering in Banjarbaru. The population of this research study is SMK students majoring in Telecommunication Access Network Engineering in Banjarbaru, totaling 76 people. The research study samples were 76 students (total sampling). The data of this study were collected using a linkert scale model questionnaire that had been tested for validity and reliability by selecting one to 5 answers that best matched the actual conditions. There were three questionnaires used in this study, namely students' emotional intelligence questionnaire (self-awareness, self-knowledge, motivation, empathy, social skills), learning facilities questionnaire (school facilities and home facilities), and academic stress level questionnaire (emotional reactions, physical reactions, and behavioral reactions), while for student learning achievement is taken from the final exam scores of students (productive subject test scores). The instrument was analyzed by correlation of reliability and validity.

IJSSHR, Volume 05 Issue 06 June 2022 www.ijsshr.in Page 2251
The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

The collected data is processed by path analysis to see the direct or indirect effect by first conducting the normality test and linearity test. In accordance with the conceptual relationship model between variables as shown in Figure 1.

![Figure 1 Relationship among variables](image)

Information:
- : Direct relationship
- - - - - - - - - - : Indirect relationship

In accordance with the conceptual model, the analysis uses path analysis to answer seven research study hypotheses, namely: H₁: there is a direct influence between emotional intelligence on student achievement; H₂: there is a direct influence between learning facilities on student achievement; H₃: there is a direct influence between the level of academic stress on student achievement; H₄: there is a direct influence between learning facilities on the level of academic stress; H₅: there is a direct influence between emotional intelligence on the level of academic stress; H₆: there is no influence of emotional intelligence through the level of academic stress on student achievement; and H₇: there is a direct influence of learning facilities through the level of academic stress on learning achievement.

RESULTS
Based on the findings of data assisted by SPSS, found direct and indirect correlation coefficients as described in Table 1.

Table 1. Summary of path analysis results

<table>
<thead>
<tr>
<th>Structural 1</th>
<th>Emotional intelligence, learning facilities, academic stress level on learning achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Path Coefficient</td>
</tr>
<tr>
<td>Student emotional intelligence</td>
<td>-0.042</td>
</tr>
<tr>
<td>Study facilities</td>
<td>0.117</td>
</tr>
<tr>
<td>Academic stress level</td>
<td>-0.070</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structural 2</th>
<th>Emotional intelligence, learning facilities against academic stress levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Path Coefficient</td>
</tr>
<tr>
<td>Student emotional intelligence</td>
<td>0.125</td>
</tr>
<tr>
<td>Study facilities</td>
<td>-0.013</td>
</tr>
</tbody>
</table>
The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

Based on Table 1 and Figure 2, the rejection and acceptance of the hypothesis in this study can be seen in Table 2.

Table 2. Summary of Hypothesis Testing Decisions H1, H2, H3, H4, H5

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>p</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1  There is an insignificant positive effect of students' emotional intelligence on student achievement</td>
<td>0.718</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2  There is an insignificant positive effect of learning facilities on student achievement</td>
<td>0.316</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3  There is an insignificant positive effect on the level of academic stress on student achievement</td>
<td>0.549</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4  There is no significant positive effect of emotional intelligence on the level of academic stress</td>
<td>0.281</td>
<td>Rejected</td>
</tr>
<tr>
<td>H5  There is an insignificant positive effect of learning facilities on the level of academic stress</td>
<td>0.912</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table 3. Summary of Hypothesis Testing Decisions H6 and H7

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct</th>
<th>Indirect</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6  There is no influence of students' emotional intelligence with student achievement through academic stress levels</td>
<td>0.718</td>
<td>-0.031</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7  There is no influence of learning facilities on student achievement through academic stress levels</td>
<td>0.316</td>
<td>0.107</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

The results of the path analysis as can be seen in Table 1 are used to answer the seven research study hypotheses that have been formulated whose decisions are given in Table 2 and Table 3. Table 2 is a summary of decisions H1, H2, H3, H4, and H5 with a significance value criterion of more than 0.05, then the hypothesis is rejected. Table 4 is a summary of the decisions for testing the H6 and H7 hypotheses provided that if the direct correlation coefficient is greater than the indirect relationship coefficient, then the hypothesis is rejected.

**DISCUSSION**

**A. The Direct Effect of Student Emotional Intelligence on Student Achievement**

The capacity to regulate, comprehend, and successfully employ the strength and sharpness of emotions as a source of energy, knowledge, and influence is referred to as emotional intelligence. The capacity to detect one's own emotions, the ability to
The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

regulate emotions, the ability to inspire oneself, the ability to understand the feelings of others, and the ability to form connections are the five aspects of emotional intelligence (Leoh et al., 2019).
The emotional intelligence of Private Vocational High School students in Banjarbaru majoring in telecommunication access network engineering is categorized as medium. According to the findings of statistical analysis, the impact of students' emotional intelligence on their learning accomplishment was minor in Banjarbaru private vocational high school students majoring in telecommunications access network engineering. This sampling was done during the Covid-19 epidemic, which necessitated some internet study. Furthermore, the Minimum Completeness Criteria established by the government and schools contributes to the problem. The results of this study are in accordance with research study conducted by Firmansyah (2010) which states that there is no influence of the level of emotional intelligence on student achievement at Triguna Utama Ciputat High School.

Determination of learning outcomes based on the Minimum Completeness Criteria (Kriteria Ketuntasan Minimum or KKM) carried out by the teacher by first determining the KKM KD based on each indicator. Furthermore, if students achieve indicators in the learning process by taking exams or tests. So if there are students who have not succeeded in achieving the expected results, a teaching called remedial is needed to help achieve the expected results.

B. Direct Effect of Academic Stress Level on Student Achievement
Stress is a phenomenon of the body's response that occurs in everyday life that can have a positive (eustress) or negative (distress) impact. Stress can be one of the factors that affect a person's academic achievement. Desmita (2010) states that stress on students occurs because of the many expectations and demands in the academic field which is often referred to as academic stress. In addition, it was also explained that students experience academic stress in each semester with high sources of academic stress due to studying before exams, grade competence, and from so many materials that must be mastered in a short time. Students feel burdened with demands for high achievement that come from themselves and their environment.

Based on the results of the questionnaire test, it was concluded that as many as 76 students or 100% were included in the high category. Based on these results, it can be inferred that the stress level of private vocational high school students majoring in telecommunications access network engineering throughout Banjarbaru is in the high classification. This sampling was carried out during the Covid-19 pandemic which required students to study online and was limited.

Based on the results of statistical test analysis shows that there is a direct and insignificant effect between stress levels on learning achievement of private vocational high school students majoring in telecommunications access network engineering throughout Banjarbaru. This research study is also supported by the results of research study conducted by Andriliana and Enny (2019) which stated that there was no relationship between stress levels and learning outcomes (p value > 0.05). Many medical students experience stress, but it is not related to learning outcomes, regardless of the level of stress they experience.

The stress level in this study was not statistically related to learning achievement, this was caused by the strategy Coping carried out by private vocational high school students majoring in telecommunications access network engineering throughout Banjarbaru. Through active coping, students plan and make positive decisions to relieve stressors, in this case students study harder, do good study time management, discuss with friends or ask the teacher at school if there is learning material that students do not understand. No matter how big the stress level experienced by students, if they make good learning achievements it will not affect their learning outcomes.

C. There is a Direct Effect of Student Learning Facilities on Student Achievement
Learning facilities are a tool used in the teaching and learning process to achieve teaching goals set by teachers and students which are complementary, if deemed necessary to enhance the quality of the teaching and learning process (Dewi, 2021). A total of 76 people or 100% are in the low category. Based on these results it can be stated that the learning facilities are in the low classification. This shows that the existing facilities for private vocational schools majoring in telecommunications access network engineering throughout Banjarbaru are incomplete or low. The variables of learning facilities and learning achievement of 0.316 have a low and insignificant effect, meaning that complete learning facilities do not fully affect learning achievement. This statement is in line with the theory presented by Dulyono (2012) and Shah (2012) in Islamiyah (2019) that learning facilities are facilities and infrastructure that support learning activities such as rooms, books, media, materials and other facilities. And learning achievement is a measure of the success of students during the learning process in the form of a number scale and a letter scale.

Dewi's research study (2021) states that student learning facilities have a positive effect on student achievement during the Covid-19 pandemic. In relation to the online learning process which is commonly referred to as online (in the network), the learning facilities referred to in this case are facilities that support teaching and learning activities that are not carried out at school, but at home due to something like at this time it is still in its infancy, pandemic. The learning facilities used are mobile phones, laptops, wifi/internet quota and applications (whatsapp, zoom, or google classrooms).
The Influence of Students’ Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

D. The Direct Effect of Emotional Intelligence on Academic Stress Levels

The results of statistical analysis shows that emotional intelligence directly does not have a significant effect on stress levels. This means that private vocational high school students majoring in telecommunications access network engineering throughout Banjarbaru are able to minimize stress so that the results obtained are not significant. This is in accordance with what was stated by Sarafino (2002) that one of the factors that can minimize stress is the ability to manage emotions or emotional intelligence. Emotional intelligence according to Goleman et al. (2002) is a person's ability to regulate his emotions with his intelligence, maintain emotional harmony and expression, through self-awareness skills, self-control, self-motivation, empathy and social skills. Students who have high emotional intelligence will be able to regulate their emotions with intelligence, be able to maintain emotional harmony, be able to control themselves, be able to motivate themselves, be able to empathize and be socially skilled. So that when they encounter obstacles they are sure they can find a solution and do not cause prolonged stress. Someone who has good emotional intelligence will have a nature that likes himself as he is, knows very well his strengths, does not doubt his abilities, has the power to get what he wants, is responsible for completing work, is not worried about the future, is not easily angry for no reason, is able to do something, and dare to be different.

E. The Direct Effect of Learning Facilities on Academic Stress Levels

The many demands that must be met by students in online learning activities make students vulnerable to experiencing academic stress. (Muslim. 2020). Eryanti (2012) that academic stress is caused by several factors, namely internal factors which include: mindset, personality, beliefs, and gender. External factors consist of pressure for high achievement, encouragement of social status, denser lessons, and parents competing with each other. Academic stress is stress that arises due to pressures to show achievement and excellence in conditions of increasing academic competition so that they are increasingly burdened by various pressures and demands. Academic stress experienced by students is the result of subjective perceptions of the discrepancy between environmental demands and the students’ actual resources (Agista, 2011).

Based on the results obtained, it is stated that there is an insignificant direct effect between learning facilities on the academic stress level of private vocational high school students majoring in telecommunications access network engineering in Banjarbaru. This means that although the facilities owned by private vocational students majoring in telecommunications access network engineering throughout Banjarbaru are inadequate, they are able to control and utilize these facilities properly so that they do not increase the stressful behavior of vocational students.

F. Indirect Effect of Emotional Intelligence on Student Achievement

According to the findings, there is no substantial direct influence of emotional intelligence on student success via the amount of academic stress. Due to the availability of emotional intelligence, kids are better able to control their emotional states while studying or engaging in their surroundings. So that pupils do not readily complain, despair, or become influenced by negative emotions, and have confidence in their ability to overcome those feelings. In this example, emotional intelligence has a very minor impact on student accomplishment through the amount of academic stress, thus the statistical analysis findings are not significant or surpass the 0.05 probability level.

G. Indirect Effect of Learning Facilities on Student Achievement

The results obtained in this study indicate that there is no significant direct effect of learning facilities through the level of academic stress on student achievement. One way to reduce stress is to start talking about your feelings with the closest person or person you can trust to help. Due to the very small influence given by learning facilities through the level of academic stress on student achievement, this means that private vocational high school students majoring in telecommunications access network engineering throughout Banjarbaru are able to reduce their academic stress so that it does not have a very large effect on their learning achievement at school.

CONCLUSIONS

Thus, this study concludes several points. First, emotional intelligence has a direct and minor impact on student accomplishment. As a result, whereas the variable of students’ emotional intelligence has no significant influence on student accomplishment, the amount of academic stress has a direct and small effect on student achievement. Second, there is a direct and negligible influence on student accomplishment at private vocational schools specializing in telecommunications access network engineering in Banjarbaru, therefore it can be claimed that the variable amount of student academic stress has no meaningful effect on student achievement. As a result, the student learning facilities variable does not have a significant effect on student achievement in private vocational schools majoring in telecommunications access network engineering in Banjarbaru. Third, there is a direct and insignificant effect of emotional intelligence on academic stress levels. The emotional intelligence variable of academic students does not have a significant influence on the stress level of students in private vocational schools majoring in telecommunications access network engineering in Banjarbaru. Fourth, there is a direct and insignificant effect of the influence of learning facilities on academic stress levels. The learning facilities variable does not have a significant effect on the level of academic stress of students.
The Influence of Students' Emotional Intelligence, Learning Facilities and Academic Stress Levels on Student Achievement in Private Vocational High Schools, Department of Telecommunication Access Network Engineering in Banjarbaru

in private vocational schools majoring in telecommunications access network engineering in Banjarbaru. Fifth, there is an indirect and insignificant effect on the influence of emotional intelligence through the level of academic stress on student achievement. This shows that the value of both is not significant. The last is that there is an indirect influence that is not significant learning facilities through the level of academic stress on student achievement. It emphasizes that both values are not significant.

REFERENCES

12) Indriani, T. (2021). An Overview of Academic Stress During Distance Learning (Pji) on Students at Smk Negeri 1 Godean for the 2020/2021 Academic Year. research study and Technology: Journal of Guidance and Counseling, 6(1), 1.
14) Junaidi, AZ, Mansur, R., & Setiawan, E. (2021). The Effect of Online Learning on Student Achievement in Grade 8 of SMPN 1 Kepanjen. Vicratine: Journal of Islamic Education.
18) Regulation of the Minister of Education and Culture Number 109 of 2013 concerning the Implementation of Distance Education in Higher Education.

There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.

IJSSHR, Volume 05 Issue 06 June 2022 www.ijsshr.in Page 2256