The Influence of Teacher Competence on Student Academic Stress

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ABSTRACT

This study aims to determine the effect of teacher competence on student academic stress. This research approach is quantitative research. The sample of this study was 140 students. The data collection method is a questionnaire. The data analysis technique is multiple regression analysis. The results of this study indicate that 1) there is a negative effect of teacher pedagogical competence on student academic stress (sig. 0.00); 2) there is a negative effect of teacher professional competence on student academic stress (sig. 0.02); 3) there is a negative effect of teacher personality competence on student academic stress (sig. 0.01); and 4) there is a negative effect of teacher pedagogical competence on student academic stress (sig. 0.01). The implication of this study is that teachers need to continue to improve competencies in pedagogical, professional, personality and social aspects. This is intended to make the school/classroom environment (teacher-student relationship) better so that it allows students to develop themselves, both in terms of character and academic results.

Keywords: Personality competence, social competence, student academic stress, teacher pedagogical competence, teacher professional competence.

I. INTRODUCTION

Every student has a subjective perception of the perceived learning conditions while at school. Students' subjective perceptions can be positive and negative. A student's subjective perception will be positive if the reality he/she perceives at school/class is in line with his/her conditions. In many schools they generally hold several lessons a day. The implementation of learning in schools does not always go as expected. It is not too difficult to find teachers who are unprepared, teachers are not able to explain the subject matter well, teachers give a lot of individual or group assignments, teachers hold unscheduled quizzes or daily tests, midterm and final exams, the relationship between teachers and students or between students is not pleasant, the physical condition of the classroom is not comfortable, and so on. Such things will clearly cause students to feel stressed. Students feel a tense and uncomfortable atmosphere in these conditions as a result of a mismatch between environmental demands and the biological/psychological conditions they feel (Sarafino & Smith, 2010). The condition of students' academic stress is a serious problem that needs to be handled properly by the school. Because academic stress is a significant contributor to various mental and behavioral disorders, such as depression, anxiety, and suicidal behavior (Ang & Huan, 2006; Bjorkman, 2007).

Students' responses to stress experienced can take various forms, including physical, behavioral, negative thoughts and emotions (Barseli et al., 2017). In general, there are four kinds of stress reactions, namely subjective, physiological, cognitive, and behavioral reactions (Gibson et al., 1990, p. 207). Subjective reactions, which are personally felt consequences related to emotional aspects, such as irritability, sadness, irritability, loss of sense of humor, anxiety, fatigue, easily disappointed, anxiety when facing exams or tests, fear of facing unfriendly teachers, and panic when facing many tasks. Physiological reactions are related to the function of the body's organs that appear in various forms, such as physical complaints such as headaches, stomachaches, hypertension, heart pain or palpitations, insomnia, fatigue, skin itching, hair loss, cold sweats, lack of appetite, and frequent urination. Reactions to thought processes (cognitive) relate to visible thought processes such as difficulty concentrating, forgetfulness, confusion, negative thinking, decreased performance, loss of hope, feeling useless, not enjoying life or difficulty making decisions. Behavioral reactions related to visible behavior, such as nervousness, lying, often skipping class, undisciplined (violating school rules), not caring about the subject matter, grumbling, difficulty concentrating, lazy learning, often not doing assignments, cheating, being alone, fear of meeting teachers, can even be seen in deviant behavior, such as smoking and drinking.

There are various factors that can affect academic stress, generally grouped into two, namely internal and external factors (Barseli et al., 2017). Wilks (2008) and Liu and Lu (2012) showed that students' perceptions of school climate are related to students' academic stress and depressive
symptoms. Students' perceptions are related to many things, one of which is the relationship between teachers and students. Teachers are the main actors of learning in schools. What teachers do in the school/classroom determines how students feel. If teachers' academic demands exceed each individual's adaptive resources, it can cause academic stress for them (Wilks, 2008).

The main task of teachers is to educate, teach, guide, give direction, provide training, provide assessment, and evaluate students who take early education through formal government education channels such as elementary schools to senior high schools (Law of the Republic of Indonesia No. 14 of 2005). In order to carry out their duties properly, teachers must have reliable competencies in their field of work. The intended teacher competence is the totality of knowledge, skills, and behaviors that must be owned, lived, and mastered by teachers (Law of the Republic of Indonesia No. 14 of 2005).

In general, teacher competencies include pedagogical aspects, personality aspects, social aspects, and professional aspects obtained through vocational education (Law of the Republic of Indonesia No. 14 of 2005). Teacher pedagogical competence is the ability to manage student learning. In the pedagogical aspect, teachers must have the following abilities: 1) mastering student characteristics from moral, spiritual, emotional, physical, and intellectual aspects; 2) mastering learning theory and learning principles; 3) developing curriculum in accordance with the subjects taught; 4) organizing educational learning; 5) utilizing information and communication technology for learning; 6) facilitating the development of students' potential; 7) communicating effectively, empathetically and politely to students; 8) carrying out final assessment and evaluation of learning outcomes; 9) utilizing the results of assessment and evaluation for the benefit of learning; and 10) taking reflective action to improve the quality of learning (Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007).

Professional competence is the ability to master learning materials broadly and deeply (Law of the Republic of Indonesia No. 14 of 2005). In the professional aspect, teachers must have the following abilities: 1) the ability to master the material, learning structure, concepts, and scientific mindset that support the subjects taught; 2) master the competency standards and basic competencies of the subjects taught; 3) develop the material taught creatively; 4) develop professionalism on an ongoing basis by reflecting; and 5) utilize information and communication technology to develop themselves (Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007).

Personality competence is the ability of a strong personality, noble, wise, and authoritative and a role model for students. In the personality aspect, teachers must have the following abilities: 1) act in accordance with religious, legal, social, and cultural norms of the Indonesian nation; 2) present themselves as honest, noble, and role models for students and the community; 3) present themselves as stable, mature, wise and authoritative; and 4) show work ethic, high responsibility, proud to be a teacher, and confidence; uphold the code of ethics of the teaching profession. (Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007).

Social competence is the teacher's ability to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians, and the surrounding community. In the social aspect, teachers must have the following abilities:

1) being inclusive, acting objectively, and not discriminating due to considerations of gender, religion, race, physical condition, family background, and socio-economic status;
2) communicating effectively, empathetically and politely with fellow educators, education personnel, parents and the community;
3) adapting to duty places throughout the territory of the Unitary State of the Republic of Indonesia which has socio-cultural diversity; and
4) communicating with the professional community itself and other professions orally and in writing or other forms (Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007).

Teacher competence in various aspects is reflected in the ability of teachers to act actually based on their knowledge and skills. The actualization of teacher competence in practice can be seen from the extent to which what teachers do is beneficial for themselves and especially for others. Good teacher pedagogical competence is strongly suspected of making students' academic stress levels lower. This research is expected to provide benefits for efforts to improve teacher competence as a way to minimize student academic stress.

II. METHODS

A. Research Design

This research design is quantitative research. This study aims to determine the effect of teacher competence on student academic stress. The sample in this study were students of SMK Negeri 1 Depok, Depok District, Sleman Regency, Yogyakarta Special Region Province. The sample of this study consisted of 140 students.

B. Method of Collecting Data

The data collection method is a questionnaire. Data collection on teacher competency variables includes pedagogical, professional, personality, and social competencies. Teacher pedagogical competence is the students' view of the teacher's ability to manage student learning. Indicators of teacher pedagogical competence adjust the Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007 concerning standards of academic qualifications and teacher competence. There are 10 items in this research instrument. Each question item is expressed on a five-point scale (1 = strongly disagree to 5 = strongly agree). Teacher professional competence is the students' view of the teacher's ability to master learning materials broadly and deeply. Indicators of teacher professional competence adjust the Regulation of the...
Minister of National Education of the Republic of Indonesia No. 16 of 2007 concerning standards of academic qualifications and teacher competencies. There are 10 items in this research instrument. Each question item is expressed on a five-point scale (1 = strongly disagree to 5 = strongly agree). Teacher social competence is the students' view of the teacher’s ability to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians, and the surrounding community. Indicators of teacher social competence adjust the Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007 concerning standards for academic qualifications and teacher competencies. There are 10 items in this research instrument. Each question item is expressed on a five-point scale (1 = strongly disagree to 5 = strongly agree). Teacher personality competence is the students' view of the ability of the teacher's personality to be strong, noble, wise, and authoritative and to be a role model for students. Indicators of teacher personality competence adapt the Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007 concerning standards for academic qualifications and teacher competencies. There are 10 items in this research instrument. Each question item is expressed on a scale of five (1 = strongly disagree to 5 = strongly agree). Academic stress is a condition in which a student is unable to carry out academic demands and views academic demands as a disturbance in his life. The measurement of this variable adapts the Questionnaire of Academic Stress in Secondary Education (QASE) instrument (Garcia-Ros et al., 2018). Indicators of this variable include pressure arising from students due to schoolwork; students' conflicts with school/lack of free time for students; students' concerns about their learning performance at school; difficulties relating to peers at school; students' conflicts with teachers and parents; students' concerns about their future and its impact on their personal well-being. There are 30 items in this research instrument. Each question item is expressed on a scale of five (1 = strongly disagree to 5 = strongly agree).

Before being used to collect data, this research instrument has been tested for validity and reliability. The validity test was conducted on 35 students outside the respondents of this study. The corrected item-total correlation value for each item of pedagogical competence, professional competence, personality competence, and social competence is less than 0.282 (df at 35-2 = 33 at a significance level of 0.05). The reliability test results show that the Cronbach's Alpha value for the teacher pedagogical competence variable is 0.888, the teacher professional competence is 0.843, the teacher personality competence variable is 0.936, the Cronbach's Alpha value for the teacher social competence variable is 0.780; and the Cronbach's Alpha value for the student academic stress variable is 0.893.

C. Data Analysis Techniques

The data analysis technique of this research is multiple linear regression. Before the data is analyzed, classical assumption testing is carried out, which includes testing the normality of data distribution, multicollinearity testing, and heteroscedasticity testing. Classical assumption testing and multiple regression testing were carried out with the IBM SPSS 25 Statistics for Windows program application.

III. RESULTS

A. Description of Research Data

The data description of teachers' competencies and students' academic stress is presented in Table I. Teacher pedagogical competence is generally categorized as good, teacher professional competence is generally categorized as sufficient, personality competence is generally categorized as good, social competence is generally categorized as good, and student academic stress is generally categorized as sufficient.

<table>
<thead>
<tr>
<th>Research Variables</th>
<th>N</th>
<th>Theoretical Range</th>
<th>Range Actual</th>
<th>Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher pedagogical competence</td>
<td>140</td>
<td>10-50</td>
<td>16-50</td>
<td>35.643</td>
<td>6.534</td>
</tr>
<tr>
<td>Teacher professional competence</td>
<td>140</td>
<td>10-50</td>
<td>17-45</td>
<td>32.857</td>
<td>5.927</td>
</tr>
<tr>
<td>Teacher personality competence</td>
<td>140</td>
<td>10-50</td>
<td>13-50</td>
<td>37.329</td>
<td>8.432</td>
</tr>
<tr>
<td>Teacher social competence</td>
<td>140</td>
<td>10-50</td>
<td>16-45</td>
<td>33.207</td>
<td>5.557</td>
</tr>
<tr>
<td>Student academic stress</td>
<td>140</td>
<td>30-150</td>
<td>50-121</td>
<td>84.743</td>
<td>13.586</td>
</tr>
</tbody>
</table>

B. Assumption Checks

Testing the normality of data distribution is done with the multivariate normality test. The results of the normality test are shown in Table II. The value of significance (2-tailed) indicates that the data distribution of the research variables is normal.

<table>
<thead>
<tr>
<th>N</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Normal Parameters</td>
<td>Mean</td>
</tr>
<tr>
<td>Most Extreme</td>
<td>Absolute</td>
</tr>
<tr>
<td>Differences</td>
<td>Positive</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>0.070</td>
</tr>
</tbody>
</table>

The results of heteroscedasticity testing are shown in Table III. The variables of teacher pedagogical competence, teacher professional competence, teacher personality competence, and teacher social competence are significant (significance value above α 0.05). That is, there are no symptoms of heteroscedasticity (the variance of the residual value of one observation to another observation remains).

The results of multicollinearity testing are shown in Table IV. The tolerance value of teacher pedagogical competence, teacher professional competence, teacher personality competence, and teacher social competence shows more than 0.10, and the VIF value of the four variables is less than 10. It is concluded that there is no high or perfect correlation between the independent variables in the regression model.

Table V shows that the significance value (sig.) is smaller than α, 0.05. This means that the regression model can be used to predict students' academic stress.
regression testing is as follows: \[ Y = 106.057 + (-2.729 \times X_2 + 0.292 \times X_3 - 1.364 \times X_4 - 1.632 \times X_5 - 1.468) \].

### IV. DISCUSSION

Teachers' pedagogical competence negatively affects students' academic stress. The findings of this study are in line with the initial assumptions of the research. Schools are places where formal education activities are organized. In order for activities to take place effectively, schools need teachers who have adequate pedagogical competence. Pedagogical competence is a skill or ability that must be mastered by teachers to understand the different characteristics of students in various aspects of life, both physical, moral, emotional, and intellectual (Law of the Republic of Indonesia No. 14 of 2005). Teachers' pedagogical abilities will encourage better teaching to students (Franklin & Harrington, 2019). Therefore, teachers need to have a way of thinking and acting in dealing with various situations in managing their learning activities (Spencer & Spencer, 2007).

Classroom education is the process of transferring information from teachers to students. Teachers need to modify information in such a way, present information by choosing the right learning strategy, create a pleasant learning atmosphere, and involve students actively so that information is easily accepted by students. Thus, teachers need to interpret, organize, and describe learning experiences for student progress (Feurstein et al., 2010). The teacher's task of helping students is sometimes not easy because there are targets that students must achieve at the end of their learning period. learning (Ball, 2003; Day & Gu, 2007; Edmondson et al., 2016). In practice, the mismatch between students' conditions (biological and psychological conditions) and learning demands will cause feelings of tension and discomfort for students (Sarafino & Smith, 2010). In this context, the teacher's ability to manage learning can have an impact on various things that students are likely to experience, one of which is students experiencing academic stress (Willis et al., 2020). Therefore, the better the teacher manages learning will have a negative impact on the academic stress that students will experience. The results of this study are in line with previous research findings showing that teachers' pedagogical competence (e.g., in media literacy) affects teachers' teaching effectiveness (Saptono, 2022) and students' learning motivation (Saptono & Aylina, 2022).

Teachers' professional competence negatively affects students' academic stress. Teacher professional competence is the teacher's ability to master learning materials broadly and deeply (Law of the Republic of Indonesia No. 14 of 2005). Learning objectives can be classified into three domains, cognitive, affective, and psychomotor (Blomm, 1956). Teachers are mediators of learning activities (Darling-Hammond et al., 2017). As a mediator, teachers need to keep up with the times in various aspects and adjust to their life needs (Gümüş, 2022). The teacher's job is to master the subject matter he teaches well. Teachers need to continue to develop their knowledge and insights so that teaching students becomes more meaningful. This task is sometimes considered more important than other tasks.
As an educator, teachers need to organize an active and fun learning process. The main key to realizing the learning process is that the teacher must master the learning material. The benefits for teachers when mastering learning materials, for example; 1) it makes it easier for teachers to convey learning material well so that it can increase students’ understanding of the material taught by the teacher; 2) teachers can carry out the process of learning activities systematically so that learning activities become more favored by students; 3) learning can take place systematically to stimulate students' intelligence so that students can develop well; 4) the process of learning activities in the classroom can be more efficient (does not waste a lot of time) and learning outcomes are more optimal; 4) teachers can understand and know the patterns in managing learning tasks that will be given to students so that the learning process can provide maximum results; 5) teachers can save time so that the remaining time can be allocated for other learning materials (Meilina, 2021). Of course, these things directly/indirectly have an impact on reducing academic stress for students.

Teacher personality competence negatively affects student academic stress. Teachers are people who are role models for their students. In various aspects, the teacher is a figure who is nurtured by students while at school. On various occasions, students often trust their teachers more than their parents. Emotions displayed by teachers in the classroom have functions that are interpersonal (affecting social interaction partners) and intra-personal (affecting the individual experiencing the emotion itself, especially cognition, memory, perception, and behavior (Barrett et al., 2016). Teachers’ outwardly expressed emotions, when known by students, will have an effect on students. Therefore, in practice, often, what the teacher displays is imitated by students. The results of this study are in line with previous research findings showing that teachers' professional competence (e.g., in media literacy) affects teachers' teaching effectiveness (Saptono, 2022) and students' learning motivation (Saptono & Aylina, 2022).

Teachers' instructional behavior is influenced by attitudes, self-characteristics such as emotion regulation, and attitude toward work (Capra et al., 2006; Frenzel et al., 2009; Kunter et al., 2013). What teachers display in the classroom is related to their relationship with students (Frenzel et al., 2021). Teachers who show joy while teaching and other positive personality aspects will encourage their teaching activities (Kim, 2020). After all, students learn to achieve learning outcomes (Klusmann et al., 2016). Therefore, a positive relationship between teachers and students will also have a positive impact on student learning outcomes. Conversely, teachers with negative attitudes will tend to be less engaged, less tolerant, and less attentive, and worsen the teacher-student relationship and so on. The students will feel psychologically distressed. Therefore, teachers need to continue to improve their personality competence so that students' academic stress levels decrease.

Teachers' social competence negatively affects students’ academic stress. Social competence is the ability of teachers to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians, and the surrounding community. Ontologically, humans (including humans who become teachers) are social entities (Baker, 2015). Humans need other humans. He cannot manage his own life. He needs communication, socialization, and also interaction with others.

Effective communication between individuals in schools is very important. Communication can be direct and indirect, involving expressions, physical behavior, and speech patterns (Bender, 2005). Non-verbal communication, such as attentive listening to students in large groups or individually, is effective communication between teachers and students (Petrie, 2011). Communication effectiveness requires that the communicant can receive and understand the message as intended by the communicator (Fashiku, 2017). In most schools, communication between teachers and students, communication between school staff, and schools and parents are important (Wieczorek & Manard, 2018). Effective communication between teachers and students will help students learn comfortably, strengthen the relationship between teachers and students, and create a positive atmosphere in the learning environment. In other words, effective communication between various parties is needed to ensure the success of student learning at school. Therefore, the better the teacher's social competence, the lower the students' academic stress.

V. CONCLUSION AND RECOMMENDATION

This study shows that teachers’ pedagogical competence, teachers' professional competence, teachers' personality competence, and teachers' social competence negatively affect students' academic stress. In line with these findings, teachers need to continue to improve competence in all four competencies. Efforts to improve competence can be made in various ways. In the pedagogical aspect, teachers need to continue to evaluate and reflect on their experiences about their ability to manage learning, always be open to various developments in learning technology, and apply innovative learning models to improve the quality of learning. In the professional aspect, students need to keep up with developments in the scientific field and develop learning materials creatively. In the personality aspect, teachers are able to manage and develop themselves so that they become individuals who can be good role models for students. In the social aspect, teachers need to continue to improve communication in order to interact with colleagues, parents, and students.

CONFLICT OF INTEREST

The authors declare that we have no conflicts of interest.

REFERENCES


