A Model Analysis of the Effect of Self-Efficacy, Authoritative Parenting, and Peer Social Support on Academic Stress in Full-Day Senior High School Students

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Abstract
This study investigated the influence of self-efficacy, authoritative parenting, and peer social support on academic stress in full-day senior high school students. The population of this study were all twelfth-grade students from Senior High School X in Lampung, with a total of 330 students. This study involved 140 twelfth-grade students as the participants were selected using a cluster random sampling technique. This study employed an academic stress scale, self-efficacy scale, authoritative parenting scale, and peer social support scale. The data was analyzed by evaluating the outer and inner models. The study employed the Structural Equation Model (SEM) for data analysis using
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the Smart Partial Least Square 3.3.0 application. The findings of this study include the development of a model of the influence of self-efficacy, authoritative parenting, and peer social support on academic stress that is consistent with empirical data, the absence of an effect of self-efficacy on academic stress, a very significant negative influence between authoritative parenting and academic stress, and a very significant negative influence between peer social support and academic stress. The theoretical model developed in this study is a fit model, which can be used as a valid model reference when addressing academic stress.

Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis model pengaruh efikasi diri, pola asuh otoritatif dan dukungan sosial teman sebaya terhadap stres akademik pada siswa SMA Full Day School. Populasi dalam penelitian ini adalah seluruh siswa kelas XII pada SMA X di Lampung yang berjumlah 330 siswa. Partisipan dalam penelitian ini berjumlah 140 siswa kelas XII. Teknik sampling yang digunakan dalam penelitian ini adalah cluster random sampling. Metode penelitian ini menggunakan skala stres akademik, skala efikasi diri, skala pola asuh otoritatif dan skala dukungan sosial teman sebaya. Analisis data dilakukan dengan pengujian outer model dan inner model. Teknik analisis data menggunakan Structural Equation Model (SEM) melalui program Smart Partial Least Square 3.3.0. Hasil penelitian ini adalah terbentuknya model pengaruh efikasi diri, pola asuh otoritatif dan dukungan sosial teman sebaya terhadap stres akademik yang fit dengan data empirik, tidak ada pengaruh efikasi diri terhadap stres akademik, adanya pengaruh negatif yang sangat signifikan antara pola asuh otoritatif terhadap stres akademik, adanya pengaruh negatif yang sangat signifikan antara dukungan sosial teman sebaya terhadap stres akademik pada siswa SMA Full Day School. Model teoritik yang terbentuk dalam penelitian ini merupakan model yang fit, sehingga dapat dijadikan acuan model yang valid dalam menggembangkan stres akademik.

Keywords: Academic stress, self-efficacy, authoritative parenting, peer social support.

Introduction

Indonesian education is divided into two systems due to differences in curriculum and backgrounds (Khalik, Meutia & Elihami, 2020). Regular education is another type of education. It is an educational effort that is deliberate, planned, directed, and systematic through an educational institution known as a school. According to the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), the curriculum in Indonesia is changing to one that focuses on essential and lighter material, with another change coming in 2023/2024 to a Merdeka curriculum.
However, several schools have continued to implement the 2013 curriculum or the regular curriculum. Takwin (2021) contends that a full-day learning process based on an integrated curriculum and integrated activity, implying that almost all children's activities at school, like learning, eating, playing, and worship, are contained in the world of education.

The positive impact is that students have more time to learn (Sebrina & Sukirman, 2018). The negative impact of implementing a full-day school system is that the tight schedule of educational activities and constant implementation of sanctions within limits will cause students to become disinterested. They tend to have the potential to experience psychological pressure. Their social development is poor because they are at school all day. The system will also cause the lack of parental role in the children's lives because the children are at school all day. This condition can promote stress in children (Ningsih & Hidayat, 2022). Research by Sudiyanto & Ristriyanti (2011) on differences in student stress levels between full-day and half-day school systems in Mojokerto City shows that students with full-day systems have higher stress levels than those with half-day school systems. This difference is due to students in full-day schools getting a heavier workload and longer learning time than students in half-day schools (Bawazi et al., 2020). Sari and Falah (2018) found that there were differences in the level of stress experienced by students. Students with a full-day school system have higher stress levels compared to students who attend school in a half-day school system. Based on the above research results, students with a full-day system have higher stress levels than students with a half-day school system.

Students may experience stress when they are required to follow rigid and strict school rules (Baharuddin, 2010). According to Desmita (2011), schools are similar to organizations in that their members must adhere to various norms, values, rules, and demands. School norms, values, and regulations significantly influence students' academic and social development. Students' inability to adjust to the various demands of the school will cause stress. According to Desmita (2011) and Greenberg (2002), academic stress is one of the stressors associated with school. According to Govaerst and Gregoire (2004), academic stress is a depressive condition caused by adolescents' perception and assessment of academic stressors associated with science. Academic stress occurs when students' expectations for academic achievement do not match their abilities,
whether from parents, teachers, or peers. According to Sarafino and Smith (2014), academic stress is a feeling of tension and discomfort caused by an individual's inability to meet demands in the school environment. According to research by Reddy, Menon, and Thattil (2018), academic stress remains a devastating problem that can have an impact on students' mental health and well-being.

Academic stress is a common topic in Indonesia, as is news about stress-related cases in the media. Many news reports about the effects of stress on students. One of them is that high school students are suspected of being stressed due to the number of school assignments assigned by the teacher that exceed their capacity (https://www.tribunnews.com/regional/2020/10/17/siswa-sma-bunuh-diri-diduga-stres-akibat-tugas-belajar-online).

Namira and Widiasmara (2018) interviewed with the SMA Negeri 1 Playen principal on March 20, 2018. They discovered that adolescents experience stress due to the school's busy teaching and learning activities. Furthermore, parental expectations of good grades, the large number of subjects, and the applicable curriculum put adolescents under pressure. Yuliani's research (2023) at SMKN 3 Kota Magelang found that 78 students (43.4%) experienced moderate stress, 34.3% experienced severe stress, and 19.2% experienced panic anxiety when facing examinations.

Adolescence is commonly known as the storm and stress period. According to Santrock (2011), the storm and stress period is a period of adolescent conflict and mood swings. Academic problems are one type of conflict that many high school students face during their adolescence.

Several factors influence academic stress in children. According to Taylor (2003), external and internal factors influence the onset of academic stress. External factors that influence the onset of academic stress include time and money, educational background, social support, and parental involvement. Internal factors include mindset, personality, and self-belief. Internal factors that can influence stress in students include self-belief or self-efficacy.

Self-efficacy regulates whether or not behaviour is formed, such as academic stress. Individuals must believe in the benefits and drawbacks but also consider their ability to regulate their behaviour and self-efficacy (Schunk & Meece 2005). When a person believes they have control over their behaviour, it significantly impacts how they respond to stressful situations. People will have different beliefs about their ability to complete a task. Their beliefs will be limited to
the task level when presented with easy, moderate, or difficult tasks. As a result, they tend to complete tasks at a level appropriate for their abilities. People who believe in their ability to overcome the difficulty of the tasks or challenges they face, including those in the academic environment, are better at coping with academic stress. Watson and Watson (2016) explained how confidence in one's abilities can help overcome academic stress.

According to Hidayati, Febriana, and Setyowati (2023), the relationship between parents and children can influence how the children deal with various challenges and problems, including academic challenges that can lead to academic stress, as well as the relationship between parenting and children's stress levels. Parents strive to shape their children into the best versions of themselves through the care they provide. The term discipline or punishment refers to training in controlling and self-control. Authoritarian parenting is a style in which parents balance demands and acceptance. Authoritarian parenting values children but expects them to meet high responsibility standards to family, peers, and society. Children who receive authoritative parenting as a form of nurturing and education are more confident, independent, imaginative, adaptable, and capable of overcoming problems. Authoritarian parents set reasonable expectations and consistently encourage and explain to their children. Authoritarian parents expect mature behaviour, justify their exceptions, and use discipline to help their children self-regulate. Parents who make reasonable demands on their children will help them avoid academic stress because they do not expect them to always study and perform well. Children are also accustomed to expressing their feelings and thoughts, which reduces the burden on their minds, particularly in academic matters, allowing them to avoid academic stress. This parenting style causes students to avoid problems, such as psychological, emotional, social, personality development (aggression), and cognitive development issues that can impair their academic performance.

Another factor influencing academic stress is social support. According to Safiany and Maryatmi's (2018) research findings, a negative relationship exists between peer social support and academic stress in high school students. This finding demonstrates that students' academic stress decreases as peer social support increases. Peer support is a means of improving student well-being, specifically reducing students' stress levels. Social support hurts psychological processes because providing social support to an individual
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experiencing stress. At the same time, learning can help mitigate the negative impact of academic stress. Students dealing with academic stress require social support. Their closest friends can console and assist them with their problems. When children receive support through empathy, care, concern, motivation, and encouragement from peers, they will feel loved in difficult situations. They can exhibit positive reactions in the form of self-preservation when in a threatening condition or situation. They can also concentrate, not forget, and improve school performance.

The novelty of this research lies in the first step of designing and testing an academic stress model to produce a fit academic stress model. The independent variables of this research are self-efficacy, authoritative parenting, and peer social support. The data analysis technique employed was the Structural Equation Model (SEM) via Partial Least Squares.

Based on the description of the importance of understanding academic stress in students, the objectives of this research are 1) designing and testing theoretical models that describe self-efficacy, authoritative parenting, and peer social support on academic stress that are consistent (fit) with empirical data; 2) Determining the effect of self-efficacy on academic stress in students; 3) Investigating the impact of authoritative parenting on academic stress in students; 4) Assessing the impact of peer social support on academic stress in students.

Methods

This study involved 140 SMA X twelfth-grade students as the subjects, determined using the cluster random sampling technique. The instrument employed in this study was a psychological scale comprised of four scales: academic stress, self-efficacy, authoritative parenting, and social support. This study includes two scaling models: the Likert scale model and the semantic differential model. The researchers developed the academic stress scale based on Sarafino and Smith's (2014) biological and psychosocial stress components (cognitive, emotional, and social conduct).

The data for this study were analyzed using the Smart PLS 3.3.0 program with reflective constructs via 2nd Order CFA. Hartono and Abdillah (2015) define PLS as a variant-based structural equation analysis (SEM) that can simultaneously test measurement models for validity and reliability.
Results and Discussion

The outer model test analysis results are divided into two parts: the outer model test results and the inner model test results. Outer model testing aims to test the measurement model, and inner model testing aims to test the structural model. This model defines how each indicator relates to other variables. The results of testing the outer model can be seen in the figure below:

Figure 1.
Overall Model Output PLS Algorithm

This study uses an inner model to test the structural model and ensure that the model is robust and accurate. Table 1 displays the inner model's results, while Figure X displays the PLS output results.
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Table 1
The Results of the Inner Model

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rule of Thumb</th>
<th>Obtained Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koefisien Determinasi ($R^2$)</td>
<td>0.67 (strong), 0.33 (moderate), and 0.19 (weak) (Ghozali &amp; Latan, 2015)</td>
<td>0.076</td>
<td>The effect of exogenous variables on endogenous is weak</td>
</tr>
<tr>
<td>Predictive Relevance ($Q^2$)</td>
<td>Nilai $Q^2 &gt; 0$ (good predictive model relevance) $Q^2 &lt; 0$ (the model lacks predictive relevance)</td>
<td>0.028</td>
<td>Good predictive relevance</td>
</tr>
<tr>
<td>Goodness of Fit (GoF)</td>
<td>GoF criteria: 0.1 (weak GoF), 0.25 (Moderate GoF), and 0.36 (strong GoF) (Ghozali &amp; Latan, 2015)</td>
<td>0.198</td>
<td>Weak GoF</td>
</tr>
</tbody>
</table>

Hypothesis testing examines the t-statistic value with a 5% alpha. The hypothesis is accepted if the t-statistic is greater than 1.96 and the probability value (p) is less than 0.05. The researcher then examines the original sample value; if it is (+), this indicates that exogenous variables have a positive effect on endogenous variables. In contrast, if the value is (-), it indicates that exogenous variables hurt endogenous variables. The table below displays the p-value, t-statistics, and the original sample.
Table 2

<table>
<thead>
<tr>
<th>Variable’s Influence</th>
<th>Original Sample</th>
<th>t-Statistic</th>
<th>p-Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy on academic stress</td>
<td>-0.060</td>
<td>0.654</td>
<td>0.510</td>
<td>No influence</td>
</tr>
<tr>
<td>Authoritative parenting on academic stress</td>
<td>-0.236</td>
<td>2.592</td>
<td>0.006</td>
<td>Negative and highly significant influence</td>
</tr>
<tr>
<td>Peer social support on academic stress</td>
<td>-0.170</td>
<td>2.142</td>
<td>0.037</td>
<td>Negative and highly significant influence</td>
</tr>
</tbody>
</table>

Table 2 shows that the first hypothesis test outcomes are known based on the R2 value of 0.076, Q2 of 0.028, and GoF of 0.198, indicating that the hypothesis is accepted. This way, the model can describe the effect of self-efficacy, authoritative parenting, and peer social support on academic stress in students while also matching (fitting) empirical data. The second hypothesis test outcomes are not significant, according to the p-value (0.325), t-statistics value (0.695), and original sample value (-0.060). As a result, the hypothesis is rejected, indicating that self-efficacy does not affect academic stress among students.

The third hypothesis test yields significant results (p-value = 0.006, t-statistics = 2.738, original sample = -0.236). Therefore, the hypothesis is accepted, indicating a relationship between authoritative parenting and academic stress in students. Students' stress levels decrease as authoritative parenting increases. The fourth hypothesis test result is significant, and thus, the hypothesis is accepted. Based on the p-value of 0.037, the t-statistics value of 2.087, and the original sample value of -0.170, there is a negative relationship between peer social support and academic stress in students. The higher the social support of peers, the lower the academic stress; conversely, the lower the social support of peers, the higher the stress students feel.

This study aims to investigate the dynamics and factors that can improve teacher performance. The first hypothesis is accepted because the R-square value, predictive relevance (Q2), and goodness
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of fit index (GOF) meet the expected criteria. As a result, the proposed reflective model can describe the impact of self-efficacy, authoritative parenting, and peer social support because it matches the empirical data. The model used in this data is novel and has not been used in previous studies. Previous studies' models differ from those in this study, such as Hamrat, Hidayat, and Sumatri's (2019) model of the impact of academic stress and cyberloafing on smartphone addiction.

This study is also unique in its analysis, which employs the Partial Least Squares program. Previous research on academic stress by Lee and Sung (2019) was analyzed using Structural Equation Modeling with the Partial Least Squares program and SPSS. Yang, Han, Bae, and Yang (2014) used the SPSS program to test the Pearson correlation coefficient in their study of social support, academic stress, and clinical practice stress among nursing students. Khan, Hamdan, Ahmad, and Mustafa (2016) used the SPSS and AMOS programs to analyze their research on academic stress. Choi and Lee (2012) analyzed academic stress using descriptive statistics, Pearson correlation, and structural equation models (SEM) with the AMOS program.

The study's second hypothesis was rejected, indicating that self-efficacy did not affect academic stress in full-day school students. The findings of this study are consistent with previous research. The findings of Nuraini's (2018) study, "The Effect of Emotional Intelligence and Self-efficacy on Academic Stress in Full-Day School Junior High School Students," show that self-efficacy does not affect academic stress. Self-efficacy is a person's perception of how effective he can be in any situation. Self-efficacy or a person's beliefs can change at any time, and a person's low self-efficacy may be due to a lack of previous experience or information sources so that a person does not have a way to overcome a lack of self-confidence to deal with the problem (Alwisol, 2004). Other studies found no interaction effect between self-efficacy and academic stress (Pinugu, 2013). Jácquez (2016) found no relationship between self-efficacy and academic stress.

Although, theoretically, self-efficacy is one of the internal factors that can reduce academic stress, this study found different results. According to Bandura (1997), a person can develop or increase his sense of self-efficacy through four sources of information: success experience, experience with others, verbal persuasion, and physiological and emotional conditions. When
someone has high self-efficacy, they have had previous experiences that led them to success after many failures. If you have another failure, this will act as an amplifier. The experience of others is seeing or observing the success of others about one's abilities to boost self-efficacy or become more enthusiastic because they want to achieve the same success as others. Verbal persuasion occurs when someone with high self-efficacy receives a lot of direction through advice, suggestions, and guidance, resulting in increased confidence in his abilities and effort. Finally, physiological and emotional conditions are extreme emotions that can impair a person's performance if they do not believe in their beliefs. Emotions have an impact on the body and can impair performance. As a result, physical and emotional conditions must be considered to avoid negatively impacting one's ability to complete their tasks. The findings of multiple student interviews support this theory. Most students lack confidence for a variety of reasons.

One of them is that students feel embarrassed and inferior because they must attend a private school and cannot compete for admission to their preferred public school. It is also caused by teachers' lack of motivation and support, which reduces students' motivation to perform well. The lack of strong motivation from teachers is due to the small number of teachers and teachers' duties other than teaching, which cause teachers to not provide as much support or motivation as possible, as well as some teachers who believe their job is only to teach and explain the material, so they do not encourage students.

The third hypothesis in this study was accepted, demonstrating the effect of authoritative parenting on academic stress in full-day school students. The total effect value is -0.236, indicating that authoritative parenting contributes to academic stress by 23.6%. The existence of the influence of authoritative parenting on academic stress demonstrates that the family plays an important role in children's growth and development, including the development of their personality, social development, and socio-cultural environment. Parenting is one of the roles performed by both parents in the family. According to Muallifah (2009), good parenting quality is when parents can monitor their children's activities and always support them in any situation. One example of good parenting is the authoritative parenting style, which is warm, responsive, attentive, patient, and sensitive to the needs of children. Authoritarian parents cultivate a pleasant and satisfying relationship with their children,
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causing them to feel strongly attached. This parenting style makes students feel at home because they are close to their parents. Whatever problems arise at school, whether academic or social, can be communicated to parents. Baumrind's statement that the ideal parenting method is authoritative backs up this finding. Authoritarian parenting promotes the best developmental outcomes for children, including the ability of children to overcome pressures and problems (Milevsky, Schlechter, Netter, & Keehn, 2006; Russell, Crockett, & Chao, 2010). Authoritarian parenting styles produce happy, capable, and successful children in academic learning patterns, resulting in low stress levels (Collins, Marcoboy, Steinberg, Hetherington, & Bornstein, 2000).

Authoritarian parents set reasonable expectations and consistently encourage and explain to their children. Authoritarian parents expect mature behaviour from their children, justify their exceptions, and use discipline to help them regulate themselves. Parents who make reasonable demands on their children will help them avoid academic stress because they do not expect them to always study and perform well. Parents will also allow their children to have fun so they do not spend all their time studying. Children in this parenting style will be free to choose what they want, including school and study matters. This pattern helps to reduce academic stress in children by allowing them to do things they enjoy. Children are also accustomed to expressing their feelings and thoughts, which reduces their mental burden in academic matters and thus helps them avoid academic stress.

This parenting style causes students to avoid problems such as psychological, emotional, social, and personality development (aggression) and cognitive development issues that can impair academic performance (Asiamah, 2013). This is supported by research conducted by Ondongo, Aloka, and Rabaru (2016), who found that authoritative parents make their children more responsible and reliable because they are concerned about their children's academic performance. This has an impact on children's academic and social development. According to Woolfolk's (2012) research, parents with authoritative parenting styles will respect, understand, and monitor their children's welfare and spend warm and intimate time with them, resulting in happier and less stressed children.

The fourth hypothesis in this study was accepted, demonstrating the effect of peer social support on academic stress in full-day school students, with a total effect value of -0.170. This
means that authoritative parenting accounts for 17.0% of academic stress. The findings of this study are consistent with those of previous studies, such as the findings of Chambel and Curral (2005), who state that current research encourages peer support to improve well-being and reduce stress in students. According to research, social support hurts psychological processes. If an individual is experiencing stress while learning, social support can help to mitigate the negative effects of academic stress. Students dealing with academic stress require social support. Close friends can provide emotional support and assistance in problem-solving. Knowing and feeling that others care enables a person to face challenges more confidently (King, 2017).

When a child receives empathy, care, concern, motivation, and encouragement from their peers, they will feel loved in times of trouble. This can cause a child to have a positive physical or psychological reaction to defend themselves when faced with a threatening situation. Furthermore, a child will be able to concentrate better, be less likely to forget and perform better in school. Furthermore, when a child receives financial or educational assistance from a friend, he experiences a positive psychological, social, and physical response. He will easily remember the answers to previously learned tasks. It can also help a child remember, feel cared for, and think positively. This finding is supported by Glozah (2013), who found that peer social support can reduce academic stress and improve students' psychological well-being. However, contrary to the findings of previous research by Yunita (2014), which show that peer support has no effect on academic stress, high self-efficacy and belief in one's abilities internally help when dealing with academic stress, so external help is not required. Other research by Wilks and Spivey (2010) demonstrates that peer social support does not mitigate the negative effects of stress. Peer social support influences the relationship between stress and academic resilience.

**Conclusion**

Based on the analysis, the reflective model of academic stress fits empirical data. The study developed a theoretical model that describes the impact of self-efficacy, authoritative parenting, and peer social support on academic stress among full-day school students. Self-efficacy has no effect on academic stress among full-day school students. High or low self-efficacy will not reduce academic stress in full-day school students.
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There is a very strong relationship between authoritative parenting and academic stress, with higher levels resulting in lower academic stress. Academic stress increases as authoritative parenting decreases.

Peer social support significantly impacts academic stress among full-day school students. High and low peer social support will impact academic stress in full-day school students. Academic stress decreases as peer social support increases. In contrast, the lower the social support of peers, the higher the level of academic stress.

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