

Examining the influence of perceived teaching style on academic burnout

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Abstract: This research aimed to determine the effect of perceived teaching style on academic burnout in vocational high school students. This research was quantitative research with 50 students who were recruited by a non-probability sampling sample technique. The data were collected using a perceived teaching style questionnaire (Alpha Cronbach=0.817) and an academic burnout instrument (Alpha Cronbach=0.804). The data analysis was simple linear regression. The results of the research showed that the significance value was 0.00 (<0.05), and the t value was 12.971; therefore, it was concluded that the hypothesis was accepted. This also meant that that perceived teaching style had a significant effect on academic burnout at vocational high school. Perceived teaching style consisting of voice intonation, material emphasis, pause timing, eye contact, body movements, and changes in position influenced fatigue, cynicism, and decreased professional efficacy. The R square value of 0.778 shows that perceived teaching style influences 77.8% of academic burnout and the remaining 22.2% are influenced by other factors. Eventually, teachers should have variations in teaching styles such as emphasizing voice to convey important material, providing pause time for students to understand the material, and using body movements. Further research could explore more on how to develop expected teaching style that matched with student needs.

Keywords: Perceived Teaching Style, Academic Burnout, Learning Process, Teaching Methods, Vocational High School

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INTRODUCTION

The educational process faces various challenges and problems that affect the quality and effectiveness of learning. Academic burnout is one issue that frequently arises in education. Students who experience academic burnout is predicted to experience depersonalization, emotional exhaustion, and a decline in their academic performance (Maslach & Leiter, 2016). Academic burnout is a negative and long-term affective reaction to the pressures associated with the school environment. This is characterized by emotional fatigue arising from the study load, a cynical attitude towards the academic task load, and feelings of incompetence in the academic field (Ying et al., 2016).

Around 1,081 junior high school students in the Guangdong, Jiangxi, and Shaanxi (China) also suffer from the related phenomenon of academic burnout. Students who lack self-control are more likely to experience academic burnout, particularly if they feel that their families are

far away from them (Luo et al., 2020). Additionally, 1,234 high school students in 16 schools throughout seven Chinese provinces have been the subject of academic burnout research. According to the study's findings, students who experience high levels of learning stress and little learning assistance are more likely to experience academic burnout (Wu et al., 2024). Study also found that transition period such as online learning during COVID-19 could lead to some academic stress which might influence student performance and academic burnout (Kurniawan et al., 2024). Therefore, informed policy decision that included curriculum and teaching style would have to develop.

Another study involving 524 elementary school students in grades 4–6 in Tangshan City, China showed that 21% felt academic burnout which was higher than the expected median score. This could have a negative effect on their learning process because the students felt overburdened or exhausted by their social responsibilities or demands to assist their peers (Yang et al., 2013). According to a different study, 380 primary school pupils in grades five and six had middle-grade levels of academic burnout (Gan, 2021). Research related to academic burnout has also been conducted in Indonesia. Putri et al., (2023) found that students experienced burnout at a moderate level and had a decrease in academic achievement.

Research from higher education has shown that academic burnout is common among students including nursing students (Wang et al., 2019). Furthermore, according to the study's findings, inappropriate behavior is the most serious factor among the other elements, including decline and decreased personal success. It can be concluded that nursing students are significantly impacted by the issues of academic burnout and improper behavior.

Academic burnout can be caused by a variety of circumstances, including perceived teaching methods used by teachers in schools, lack of social support, learning stress, learning load, and lack of desire. According to Fischer and Fischer in Rong-Da Liang (2021) arguing that perceived teaching style is the behavior shown by the teacher during interaction with students in the classroom. According to Geijo in Díaz-Arroyo et al., (2023), perceived teaching style is a pattern of behavior shown by a teacher that is based on personal attitudes. Those have been accumulated from academic and professional experience, and have the potential to affect the harmony between teaching and learning.

Hanifah et al., (2024) stated in their research that perceived teaching styles that were monotonous and boring could reduce students' learning motivation. Conversely, variation can increase students' learning motivation. Other research found that perceived teaching style affected senior high school students interest in learning (Maknunin & Fitrayati, 2024). Good perceived teaching styles and understanding of students' conditions could increase students' interest in learning. The conclusion of the study showed that learning saturation was caused by the use of monotonous teaching methods and lack of innovation in teaching (Maknunin & Fitrayati, 2024).

According to research conducted by Martínez et al., (2019) in the Centro Internacional de Estudios Superiores del Español (CIESE-Comillas) in Spain, generally, teachers did not fully support methodological strategies to students. There was a misalignment between the way teachers teach and students' preferences in learning. Students tended to prefer a reflective learning style, which involved deep thinking and evaluation of the material. Furthermore, the teaching style of professors tended to support students who had theoretical learning styles. This indicated a difference between teaching methods and student learning preferences, which could be an important consideration in designing more effective learning strategies.

Another study involving students majoring in health services administration at Universidad De La Costa showed that the most common teaching styles among teachers was functional

and formal. Regarding the correspondence between learning styles and teaching styles, there was a strong relationship between the two (Díaz-Arroyo et al., 2023). The other opinion stated that there was no relationship between perceptions of teaching styles and exam anxiety in students majoring in education at the Faculty of Psychology and Education, Babes-Bolyai University (Crişan et al., 2014). Based on research from Indonesia and abroad, there were several common ideas in teaching style mainly in the object which was students and the independent factors such as learning motivation, learning interest, student anxiety and teacher teaching styles.

A good perceived teaching style will basically help students reduce academic burnout. There was only several literature that discusses the relationship between perceived teaching style and academic burnout. Generally, research had been conducted on the relationship of mindfulness with academic burnout (Wen et al., 2023), academic efficacy with academic burnout (Vizoso et al., 2019), and achievement goals with academic burnout (H. Liu et al., 2020). Another research focused on academic burnout which occurred in post-disaster children and adolescents in China (Ying et al., 2023), and student academic burnout in Italy and Russia (Cabras et al., 2023), as well as students in Taiwan (Lin & Huang, 2014).

Academic burnout had generally been studied in groups of children and students. Research conducted by Wu et al., (2024) and Kaggwa et al., (2021) indicated that academic burnout was a common phenomenon among children and students, with significant prevalence in both groups. Academic burnout could also occur in students at the secondary education level, including students at vocational high school. Efforts to understand the phenomenon of academic burnout among students had been carried out through preliminary studies with observation and interviews.

Literature studies showed that academic burnout could potentially cause a decrease in students' quality of life and had a long-term impact on academic achievement (Tung et al., 2024). Other studies found that less positive interactions between teachers and students could be a variable that affects the most important academic burnout (Chacón-Cuberos et al., 2019). According to Khandaghi and Farasat (2011), teaching methods that focused on students make students more adaptable in three ways: feelings, getting along with friends, and learning at school. Therefore, it was important to utilize a new way of teaching, analyze about students preference, and understand the differences between students. Therefore, this study focuses on investigating the effect of perceived teaching styles on academic burnout in vocational high school students.

METHOD

The study applied quantitative research methods with a descriptive approach. The sample were 50 students from accounting and hospitality majors at a vocational high school in Yogyakarta. The sampling technique was non-probability sampling in which was not all members of the population had an equal chance of being selected as a sample (Sugiyono, 2019). The data were collected by closed questionnaires in Google Form of a perceived teaching style questionnaire (Alpha Cronbach=0.817) and an academic burnout instrument (Alpha Cronbach=0.804). Data were analysed by using simple linear regression. Simple linear regression depended on the functional or causal relationship between one independent variable and one dependent variable (Sugiyono, 2019). The simple linear regression test discussed two things including the coefficient of determination and partial test. The coefficient of determination was an indicator of how much influence the independent variable had on the dependent variable in the regression model (Ghozali, 2018). Partial testing (t-test) aimed to

evaluate the significance of the effect of each independent variable separately on the dependent variable (Sugiyono, 2019).

RESULTS AND DISCUSSION

Results

Instrument Validity Test

The construct validity was conducted by an expert judgement to evaluate the construct of the perceived teaching style and academic burnout instrument. Meanwhile, product moment Pearson correlation was also conducted by involving 30 respondents. The results of the test were that there were invalid questions in numbers 14 and 20. This was considering the r count value that was smaller than the r table (0.361) and the probability value was greater than 0.05. Therefore, the question number 14 and 20 was excluded. Meanwhile, the other instrument was found exceed the standard r table. Likewise, in the academic burnout variable, all question items were included in the data collection.

Instrument Reliability Test

The reliability of the two instruments were examined by Alpha Cronbach test. The data were from the 30 respondents. The result showed that perceived teaching style instrument achieved a high Alpha Cronbach score (0.817) and considered as a reliable instrument. This result was followed by the academic burnout instrument that obtained a good Alpha Cronbach (0.804). The standard value that was used in this study was if the Cronbach Alpha score of higher than 0.60, the instruments were reliable. Therefore, it could be concluded that the reliability test of these variables shows an adequate level of reliability.

Normality Test

In this study, the normality test aimed to determine whether the variables of perceived teaching style and academic burnout follow the normal distribution in a regression model which this definition was in accordance with Ghozali (2016). If one of the variables did not have a normal distribution, then the results of the statistical test could be negatively affected. The following were the results of the normality test conducted.

Table 1. Normality Test Results

Variable	Shapiro-Wilk		
	Statistics	Df	Sig.
Perceived teaching style	0.970	50	0.234
Academic burnout	0.992	50	0.980

Table 1 could explain that the perceived teaching style and academic burnout variables based on the normality test produce a significant value (sig.) of more than 0.05. That meant that the data had a normal distribution which the value of perceived teaching style instrument was 0.970 ($p > 0.05$) while the value of academic burnout was 0.992 ($p > 0.05$).

Linearity Test

The linearity test was intended to determine whether the relationship between the two variables was significantly straight or not (Ghozali, 2018). This test was performed before conducting correlation analysis or linear regression. The following was the results of the linearity test obtained in this study.

Table 2. Linearity Test Results

	Sum of Squares	df	Mean Square	F	Sig.
(Combined)	1746.353	28	62.370	1.742	0.097
Linearity	897.553	1	897.553	25.076	0.000
Deviation from Linearity	848.801	27	31.437	0.878	0.629
Within Groups	751.667	21	35.794		
Total	2498.020	49			

Table 2 explained that the probability value (sign.) in the deviation form linearity was 0.629 or greater than 0.05. Therefore, this meant that there was a linear relationship between the perceived teaching style variable and academic burnout. This results could be further analyzed used linier regression.

Hypothesis Examination

The hypothesis testing was carried out using a simple linear regression method. The software used to analyze simple linear regression was SPSS version 25. The results of a simple linear regression analysis would be described as follows.

Table 3. Hypothesis Test Results

Variable	Coefficient (B)	t-count	Sign.	Description
Constant	13.202	4.904	0.000	
Perceived teaching style	0.405	12.971	0.000	H1 was significant
R-Square (R ²)	0.778			
Significant Rate	5% or 0.05			

Based on Table 3, it could be explained that the contribution of perceived teaching style as the independent variable to academic burnout as the dependent variable considered high (R²=0.778). The score meant that 77.8% of academic burnout was interfered by perceived teaching style. Meanwhile, 22.2% that determined the academic burnout was predicted by other factors. These results showed that the hypothesis was approved. The t-count was high which was 12.971.

Discussion

Based on the results of the study, the significance value is $0.00 < 0.05$ with t count of 12.971. Therefore, it implies that H₀ is rejected and H₁ is accepted. This means that perceived teaching style as the independent variable (X) has a significant positive effect on academic burnout which is the dependent variable Y of vocational high school students.

It is clear that perceived teaching style experienced by students has a significant effect on academic burnout. According to Jiang and Zhang, (2021), perceived teaching style can supports autonomy and social relations positively and students' involvement. This involvement which includes active and constructive participation in the learning process is an important predictor of academic achievement and other positive outcomes. When students feel that their teaching style is supportive and motivating, the risk of academic burnout tends to decrease. The results of the study by Merino-Soto et al., (2024) explain that the ability of nursing students to evaluate and regulate their emotions reduces the level of perceived academic burnout. The failure in the subject has a direct impact and in increasing academic burnout on students.

Other research highlights the importance of social support in preventing academic burnout, especially in the context of online learning during the COVID-19 pandemic. In these situations, students often feel isolated from their usual social environment which can increase stress and the risk of burnout. Social support from family, friends, and teachers can serve as a significant protective factors (Liu & Cao, 2022). Meanwhile, other opinions that also examine academic

burnout can be influenced by other variables. The study conducted by Ma (2024) explained that self-efficacy and motivation can significantly reduce the level of academic burnout in EFL students in China. That is, the higher the level of self-efficacy and motivation, the lower the level of academic burnout. This implies that EFL students with high levels of self-efficacy and motivation tend to be less susceptible to academic burnout.

Jiang et al., (2021) stated that there are other variables that can affect the level of academic burnout in junior high school students of grade VIII and IX in a city from Hebei Province, China. That variable is the level of academic stress, where the results of the study found that higher levels of academic stress were related to higher levels of student academic burnout. Further this can turn into higher levels of depression. The variables such as family environment can also affect academic burnout. Luo et al., (2020) explain that the student's family environment with family conflicts can increase academic burnout. Therefore, efforts to resolve conflicts in the family and create a warm and harmonious home environment are very important in overcoming the problem of academic fatigue.

In addition, research shows that academic stress caused by high academic demands contributes significantly to academic burnout. Less supportive or overly demanding teaching methods often increase these stress levels; therefore, teachers should emphasize the importance of supportive teaching approaches to reduce the risk of burnout (Harahap et al., 2020). Cognitive and affective engagement of students are also strongly influenced by teaching styles. Jaggars and Xu, (2016) find that positive and supportive teaching styles are closely related to higher levels of engagement, which reduces the risk of academic burnout.

According to Moghadam et al., (2020), the high workload and achievement motivation will influence academic burnout experienced by students. In other words, the higher the perceived workload and the lower the achievement motivation, the more likely students are to experience academic burnout. This shows the importance of these factors in influencing students' academic well-being. Overall, perceived teaching styles play a key role in influencing academic burnout. Teaching styles that support autonomy, provide social support, and reduce stress have been shown to be effective in reducing the risk of academic burnout among students. Further research could explore more on how to develop expected teaching style that matched with student's needs. This is related to the development of a suitable design curriculum by the schools or government. The research found that during post COVID-19 for instance, a potential curriculum as a response to the changes causing academic stress needs to urgently development (Nuryana et al., 2023). Further effect of curriculum adjustment is the changes of teaching style that match with student needs.

CONCLUSION

Based on the research, it can be concluded that perceived teaching style has a significant effect on academic burnout in vocational high school students with significance value of 0.00 (<0.05) and t count 12.971. Perceived teaching styles consisting of variations in sound intonation, matter suppression, pause timing, eye contact, body movements, and position changes, show some influences on fatigue, cynicism, and decrease professional efficacy. The R square value of 0.778 showed that perceived teaching style committed a 77.8% effect on academic burnout, and the remaining 22.2% was influenced by other factors. It can be understood that perceived teaching style has a big impact in interfering the academic burnout. Therefore, teachers should develop variety in teaching such as making an emphasis on sound to convey important material, giving pause time for students to understand the material, and using body movements in explaining the subject matter, this will reduce academic burnout in

students. In the future, other research can focus on the development of expected teaching style.

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