

## Students' Study Pressures during the Covid-19 Global Pandemic: Exploration of the effects of Workload, Self-Expectation, Grade Worriness and Despondency on College Students in Indonesia

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### Abstract

Pressure during the learning process is a common thing experienced by students. At some points, this pressure will be beneficial in increasing fighting power and motivation, but on the other hand, high-pressure conditions will affect students' mental health. This condition was also experienced when students entered the learning phase during the Covid-19 pandemic. Although several studies have revealed the effectiveness of distance learning during the pandemic, this study aims to reveal causal factors of learning pressure conditions during the pandemic such that it can trigger the emergence of academic stress. This study involved 750 students spread throughout Indonesia. Data gathering was through the use of a questionnaire with indicators developed from existing measuring tools. Data analysis using Structural Equation Model-Partial Least Square (SEM-PLS) with Model Measurement Analysis (MMA) indicate loading, Cronbach Alpha, composite reliability, Average Variance Extracted (AVE) in fit conditions, and Structural Model testing also demonstrated valid condition and fit. The analysis shows a positive relationship between the predictors of the structural model consisting of self-expectation, despondency, grade worriness, and workload, which impact student learning pressures during the pandemic. There is an effect of workload mediation on the relationship between self-expectation and learning pressure. In reducing and controlling student learning pressures during a pandemic, it is necessary to consider these factors in learning activities.

**Keywords:** Study Pressures, Global Pandemic, College Student, Academic Stress.

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### Introduction

The Covid-19 pandemic has caused extraordinary disruptions to the higher education landscape (Clabaugh, Duque, & Fields, 2021). It was found that there were changes and adaptation needs of students in the last two years due to the Covid-19 pandemic, such as changes in the implementation of learning in universities to online learning, where previously the learning process was carried out through face-to-face mode (Hutchings et al., 2022; Park, Kim, & Jeong, 2022; Sucu & Çakiroğlu, 2022a). Not only that, students were also faced with various demands as the learning process progressed optimally. It is undeniable that various obstacles occur during the online lecture process (Eko Indrajit & Wibawa, 2020;

Zubaidah et al., 2021). Initially, this learning was responded to positively by some students, but as the learning process progressed, students experienced difficulties such as the presence of unstable signals and quotas, some disturbances like interference when studying at home, learning difficulties because the material presented is challenging to understand due to the lack of direct interaction with lecturers and other students, as well as the lack of readiness of lecturers to prepare the material (Karjo et al., 2022; Rahayu et al., 2022; Shareefa, Muneez, Hammad, & Shihama, 2021). This condition is coupled with many students who complained of several assignments without sufficient materials and those that were a bit overwhelmed in following the learning process, especially in doing assignments and discussing minimal lectures (Adams, Chuah, Sumintono, & Mohamed, 2022; Elberkawi, Maatuk, Elharish, & Eltajoury, 2021; Karjo et al., 2021).

According to Azizan, S.A., Abu Shamsi, N. (2021), students in this condition must adapt to a new system with several implementation challenges (Azizan & Abu Shamsi, 2022; Deniz, Müller, Steiner, & Sergi, 2022; Svatos, Holub, Fischer, & Sobotka, 2022). Students adaptation of the learning process provides new impacts and challenges. The impact of the changes experienced by students during the pandemic has the potential of causing mental health problems, and the impact that is most often encountered is the emergence of pressure in the learning process. A national survey in China (Sun, Dunne, Hou, & Xu, 2011) found that most children and adolescents (66.7%) perceive academic stress as the most significant stress in their lives. Other studies have shown that COVID-19 and its related disorders have resulted in significant increases in stress, anxiety, depression, and suicide in college students (AlJhani, Alateeq, Alwabili, & Alamro, 2022; Arslan, Yıldırım, & Zangeneh, 2022; Husky, Kovess-Masfety, & Swendsen, 2020; Y. Li et al., 2021; Mosleh, Shudifat, Dalky, Almalik, & Alnajar, 2022; Stamatis, Broos, Hudiburgh, Dale, & Timpano, 2022; Zhang, Lin, Peng, & Li, 2021; Zhu et al., 2022). The inability to manage the pressure that arises in learning often occurs among students. Some of these students' pressures and academic burdens hinder their daily activities, both in self-development and other activities (Ardi, Daharnis, Neviyarni, & Ildil, 2021). In general, the symptoms that appear in students are difficulty focusing on learning, difficulty remembering the material, difficulty understanding the subject matter, and negative thinking about themselves and their environment (AlJhani et al., 2022; Dutta, Anand, Gupta, Kanchan, & Parhi, 2022; Ganji, Alam, Siddiqui, Munisekhar, & Alduraywish, 2022; Stamatis et al., 2022; Wang, Zhang, Ding, Wang, & Deng, 2022; Zhen, Yao, & Zhou, 2022).

The pressure on the learning process can have a negative impact and be one of the causes of learning loss. As stated by recent research, students tend to experience learning loss in distance learning (Arciaga et al., 2022; Dizon & Errabo, 2022). In addition, if students are continuously under pressure, it will affect their academic achievement (Ali Homaid, 2022; Alsabi et al., 2022). This pressure in learning can trigger academic stress. Thus, pressure and demands originating in academic activities are referred to as academic stress. Therefore, Ardi, Daharnis, Neviyarni and Ildil (2021) reveal that the burden and pressure felt in the lecture process and campus life is quite disturbing to students, and there are still some students who have high-stress levels (Ardi, 2021; Ardi, Daharnis, et al., 2021).

Students with higher capacities are expected to understand concepts, map problems, and choose the best solution for these problems (Ardi, 2021; Durán Acevedo, Carrillo Gómez, & Albarracín Rojas, 2021; Stubbe et al., 2021). Nevertheless, in reality, students tend to have difficulty in managing various kinds of pressures that arise on them when learning. To be able to offer solutions to academic pressure, it is necessary to have an in-depth study of the factors that form pressure in learning. Some contributing factors are excessive workload while undergoing online lectures, feelings of hopelessness, high self-expectation, and worries about grades (N. Li, Fan, Wang, Wang, & Huang, 2022; Sun et al., 2011).

The workload is predicted to be a significant contributor to the academic pressure experienced by students. Students generally face various tasks, such as coursework, papers, exams, and other assignments. Many workloads can make students feel depressed and trigger stress. In a study investigating the main problems faced by young adolescents in Singapore, 220 high school students in Singapore were ranked as the top pressure to do schoolwork (Ang & Huan, 2006). Elberkawi et al., (2021) in their research stated that when online learning is currently being done, lecturers give more assignments than learning in class (Elberkawi et al., 2021; Litam, Ausloos, & Harrichand, 2021; Nguyen, 2021). A burden that is deemed too heavy will trigger memory impairment, concentration, decreased ability to solve problems, and academic ability. These student conditions, of course, impact the decline in student learning activities.

In addition, having hope for oneself can also be a double-edged sword. On the one hand, hope can be a source of individual motivation. On the other hand, it could be a factor that can increase burnout and, at the same time, trigger a decrease in learning activities. Studies reveal that academic expectations are an influential source of stress among Asian students (Ang & Huan, 2006; Sun et al., 2011). Students who often experience depression during online learning cannot be separated from the influence of high self-esteem and the surrounding environment, such as parents. Research conducted by Jun, Wang, Suh, and Yeung (2022) explains that high parental expectations positively correlate with high levels of depression in students (Fekih-Romdhane, Amri, & Cheour, 2022; Jun, Wang, Suh, & Yeung, 2022; Sælid et al., 2022).

On the other hand, despair towards the learning process can be a factor causing pressure in learning activities (Akdemir et al., 2022; Geng et al., 2022; A. K. Gupta, Mathur, Bijawat, & Dadhich, 2022; Roberts, Henry, Harvey, Homer, & Davis, 2022). Despair is also referred to as a negative emotional response in individuals when they cannot achieve the goal/target, and naturally, they will feel a psychological collision within themselves. Desperate individuals seem to behave sluggishly, rigidly, stupidly, and reluctantly to engaging in activities (Cao et al., 2022; Ganji et al., 2022). This feeling of hopelessness makes the individual's natural pressure increase. Despair is seen when individuals lose their desire to learn, such as resigning themselves to online learning situations with various difficulties and low learning outcomes. Studies show that students' learning motivation in online learning during the COVID-19 pandemic tends to decrease (Cao et al., 2022; Durán Acevedo et al., 2021; Park et al., 2022). The individual should be able to get out of this situation, but on the contrary, the individual tends to drag on in this sense of despair.

Excessive worry about learning outcomes can be a significant trigger in forming learning pressure. It is found that nowadays, students perceive test scores or study results as very important, thus making students compete to achieve satisfactory results (Burdzovic Andreas & Brunborg, 2022; Chutipattana, Le, & Kaewsawat, 2022). In addition, during online learning, the demands that must be met by students increase, one of which is obtaining satisfactory learning outcomes (Peng et al., 2022). This demand for high achievement also adds to the anxiety of individuals because they are afraid to disappoint parents and teachers when they get low learning outcomes (Correia et al., 2022). For this reason, this study aims to analyze the factors that cause learning pressure on students during the pandemic.

## Theoretical Review

### Study Pressure in University

*Study pressure* is a condition that often becomes an obstacle for students in developing their potential and affects their learning process and performance (Butterfield, Price, Woody, Morris, & Silk, 2021; N. Li et al., 2022; Majewska, Denis, Jarecka-Bidzińska, Jaroszewicz, & Krupowicz, 2022). Learning pressure occurs because of demands exceeding capacity and inappropriate ways of coping with students. There are many pressures experienced by students during their study period, some of which are an enormous task load, high expectations, worries about getting grades, and despair experienced by students (Guldager, Jervelund, & Berg-Beckhoff, 2021; Meyer, Doromal, Wei, & Zhu, 2017). In addition, difficulties in communicating with teachers, inappropriate learning methods, inharmonious relationships with family and peers and inability to manage time well are also triggers for this pressure (Ciasullo, Orciuoli, Douglas, & Palumbo, 2021; Jailani et al., 2020; J. Li & Zhao, 2021). Learning pressure is a significant source of stress for many students and is the tremendous pressure they face; when individuals feel pressure, their perception and evaluation of the situation will result in psychological experiences and emotional experiences, including anxiety, tension and frustration (Guldager et al., 2021; Novick et al., 2022; Venuleo, Ferrante, & Rollo, 2021).

There are many cases, especially Asian students, who experience learning pressure which leads to mental health disorders (Cao et al., 2022; Jailani et al., 2020). If the academic pressure on students is high, it will affect their physical, mental and emotional health to various levels and are not conducive to their healthy development and growth. A report on China's educational development in 2019 indicated that excessive study pressure was the main reason for student suicide (Ćosić et al., 2021; N. Li et al., 2022). These obstacles or causes often come from conditions within students, such as perceptions, attitudes and behaviour towards these academic demands, school assignments, group work, and organisation participation. In addition, changes in learning patterns or approaches, self-discipline challenges, long study

times, and lack of interaction with teachers and other students can also worsen things (Askarizad & He, 2022; Sucu & Çakiroğlu, 2022b).

Disrupted feelings of despondency are prone to occur in students, leading to pressure during the learning process (Cook et al., 2021). Despondency or commonly referred to as hopelessness, and this term refers to a pessimistic attitude towards future results and the belief that the results obtained cannot be repaired. It also includes deep feelings of hopelessness, sadness, hopelessness or gloom and inadequacy. In this situation, individuals who experience it will feel abandoned and lonely and unable to decide anything and everything around them looks dark (Laporte, Soenens, Brenning, & Vansteenkiste, 2021).

In the lecture environment, this despair often occurs in students. Furthermore, the cause comes not only from the problems experienced but also the continuous failure when trying to achieve something desired, and the lack of ability to cope with stress multiplies this condition (Al-Hilawani, 2018; Hall, Liang, & Riley, 2021; Jakola, 2019). These conditions allow individuals to experience frustration and even develop more serious mental disorders like depression. The main trigger of depression is hopelessness which is defined by symptoms of decreased motivation, sadness, suicide, decreased energy, psychomotor retardation, sleep disturbances, poor concentration, and negative cognition (Akdemir et al., 2022; Cao et al., 2022; Fuligni, Chiang, & Tottenham, 2021). According to hopelessness theory, low self-esteem or beliefs about a life event will have significant long-term consequences that can instil a sense of hopelessness, expressed in a specific set of depressive symptoms called hopelessness depression (Cao et al., 2022; Chutipattana et al., 2022; Ganji et al., 2022).

Study pressure can also arise due to students' high workload and the limited capacity of individual abilities, both physically and psychologically (Jailani et al., 2020; N. Li et al., 2022; Majewska et al., 2022). Exacerbated by the emergence of a pandemic and changes in education and learning has patterns in almost all countries (Ardi, Hidayat, Ifdil, Guspriadi, & Fauziyyah, 2021). This pandemic has caused disorders in almost every line of life, in this case, the mental health of individuals, because they have experienced psychological stressors such as high academic pressure. The high demands of lectures accompanied by workloads tend to add to the pressure that occurs in the learning process. In addition to feeling depressed, this enormous task load will also cause boredom and ultimately impact decreasing learning activities (Guldager et al., 2021; Swayamsiddha & Mohanty, 2020). This excessive task load is a condition that occurs in the individual, where a task given or carried out exceeds the power or ability of the individual. Heavy duty load contributes to the level of pressure or stress on the individual. When viewed from a developmental perspective, it is stated that high pressure and excessive expectations on students to get something will be able to eliminate their intrinsic motivation, curiosity and enjoyment of learning (Durán Acevedo et al., 2021; Stubbe et al., 2021).

*H1: Student despondency has a positively related with study pressure*

*H3: Student self-expectation has a positively related to study pressure*

*H5: Student workload has a positive related to study pressure*

### **Impact of Self-Expectation and Worryness in Learning**

Self-expectation is an essential dimension that impacts individual disturbances in the learning process (A. Gupta, Batra, & Gupta, 2020; Xiao, Bowen, & Lindsey, 2018). In this case, self-expectation is the individual's expectations in terms of academics. This expectation refers to the prediction of individual achievement in school/college, including short-term expectations such as test scores/achievements at the end of the academic year and long-term expectations such as final achievement, namely completing education in school or college (Hall et al., 2021; Haug & Mork, 2021; Kearney, Akos, Domina, & Young, 2021). Individual expectations in this academic tend to be influenced by their parents' expectations of themselves. For example, expectations that lead to their children's academic and career achievements in the future. A study conducted in China revealed that the higher the parents' expectations for their children's academics and careers, the higher the children's expectations for their academics and career in the future (Jiang et al., 2018). Expectations also come from academic institutions and individuals who participate in them, for example, teachers, students, and peers. Although individuals have their expectations, it cannot be denied that there are external factors that influence them (Fischer, Nater, & Laferton, 2016; Kutty, 2014). Self-expectations tend to be influenced by several factors such as self-esteem,

individual perceptions, rewards, support, the existence of clear goals and many more (Fekih-Romdhane et al., 2022; Juusola & R ih a, 2020).

Specific expectations of the learning process and results will provide essential contributions and manifestations that produce particular concerns in individuals. The expectations that individuals have affect themselves both now and, in the future, impacting their success and abilities in school or college. However, these different expectations can lead to pressure and worry in the individual. Studies show that self-expectations can cause students pressure to carry out their studies. This perceived pressure certainly affects his academic achievement (Bařtemur & Uar, 2022; Cohen-Zamir, 2021; Huang, Saleh, & Liu, 2021).

The existence of high expectations of learning outcomes will impact how individuals respond to the workload of the lectures undertaken (Alotaibi, 2016; Guldager et al., 2021; Meyer et al., 2017). In life as students, the existence of hope can lead them to choose learning goals and achievements, one of which is the hope to obtain satisfactory learning outcomes (Ćosić et al., 2021; Ning, 2018; S a, Santos, Serpa, & Ferreira, 2021). So far, it seems that some students have high hopes for acquiring learning outcomes. This allows students to do various ways so that their expectations can be achieved. This can be observed when students have difficulty fulfilling the task load (Cheung-Blunden & Khan, 2018; Ning, 2018; Stoll et al., 2017). However, excessive expectations of learning outcomes and pressure to excel in school can damage self-esteem and accelerate depressive symptoms over a long period.

*H2: Student self-expectation has a positive correlation with grade worriness*

*H4: Student self-expectation has a positive correlation with workload*

## Method

### Research Design

This research uses a purely quantitative approach with a survey method. Specifically, the survey research design involves a cross-sectional study process with post-positivism assumptions. This study's design was adapted to analyze large amounts of data and draw conclusions from the data. This study used a quantitative approach to analyze the factors causing study pressure in learning in terms of workload, self-expectation, grade worriness, and despondency.

### Participants

The research data was collected from respondents from the student segment throughout Indonesia. There were 750 students involved in this study who were first asked for approval to take an online survey to maintain the integrity of the research. The sample comprised 567 (75.6%) females and 183 (24.4%) males. The number of samples has met the requirements in the test to produce a good Structural Equation Modeling Path Analysis so that it can produce an accurate model with a minimal error level. Before data collection was carried out, each respondent was asked for approval of data collection through an electronic form to maintain the ethics and treatment of research data.

### Measurement

Instruments that have been adjusted for variables are used for data collection. To measure the conditions of Study Pressure (five items) and Workload (four items) using the Educational Stress Scale Adolescent (ESSA) that developed by Jiandong Sun et al, which has been adapted to the Indonesian language. This instrument has undergone several developments in various language versions (Sun et al., 2011). The response to the instrument uses a 5-point Likert scale with a range of strongly disagree to strongly agree, with the provision that the higher the score, the higher the indication of stress. As for the indicators of Expectation (five items), Despondency (four items), and Grade Worriness (four items), we used the Academic Expectation Stress Inventory (AESI) scale (Ang & Huan, 2006) which still has five alternative answers according to the Likert scale model. Both instruments were translated into Indonesian so that the respondents easily understood them. In addition, the instrument was also tested for validity and reliability using the Measurement Model Assessment (MMA) so that all criteria obtained relevant results in terms of convergent and discriminant validity, including outer loading > 0.7, Cronbach's alpha > 0.7, composite reliability > 0.7, and Average Variance. Extracted (AVE) > 0.5.

**Data Collection and Data Analysis**

The data collecting was using the questionnaire method by distributing links to respondents. First, respondents were given information about the purpose of the study and filled in their willingness to provide data in this study. The following data are sources related to the validated model from various reviews and previous research.

The research data were analyzed using SmartPLS 3.0 software by considering this analysis's ability to build a measurement model from a predictive perspective. The next consideration is related to a large number of samples so that they meet the minimum sample requirements and automatically do not impose a normal distribution on the sample. The next consideration is regarding the ability of the Structural Equation Model (SEM) with the Partial Least Square method to provide a causal explanation of the model with various factors on the variables (Hair, Sarstedt, & Ringle, 2019; Hair Jr et al., 2021).

In analyzing the data, this research uses path analysis to determine the direct and indirect impact or influence of exogenous variables on endogenous variables and their mediation. In addition, the analysis is intended to test the hypotheses that make up the model. In the analysis process, first testing is carried out on the direct impact between variables, and then indirect testing is carried out and determines the mediating variable. The indirect effect obtained must significantly confirm the existence of a mediating effect that forms the variable, in this case, concerning Study Pressure (SP). In terms of indirect effects, mediation can be positive or negative. In addition, to confirm exogenous constructs to get the relevance of predictions, the Blindfolding technique (Stone-Geisser's q<sup>2</sup>) was used, and the Bootstrapping method to confirm the predictions of the model.

**Ethics Statement**

All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Health Research Ethics Committee, Universitas Negeri Padang, West Sumatra Province, Indonesia.

**Results**

To examine the various impacts that shape Study Pressure on students, Partial Least Square-Structural Equation Modeling (PLS-SEM) analysis was conducted to predict the correlation between latent constructs in the model and the multi-item multi-variable scale that was used in the measurement. PLS-SEM analysis was also used to examine causality and fit on a multi-item scale.

**Model Measurement Analysis**

The first step in evaluating the model is to apply the Model Measurement Assessment (MMA). The composite loading or correlation weight is analyzed to obtain robust item reliability. Hair et al. (2019) state that the recommended loading value for each indicator is above 0.708 (Hair et al., 2019). In addition, loading testing ensures the communality of items to the construct. If this condition is met, the construct can automatically explain more than 50% of the variance of the indicator. Based on this principle, if there is an item that does not meet the requirements, it will be dropped from the scale.

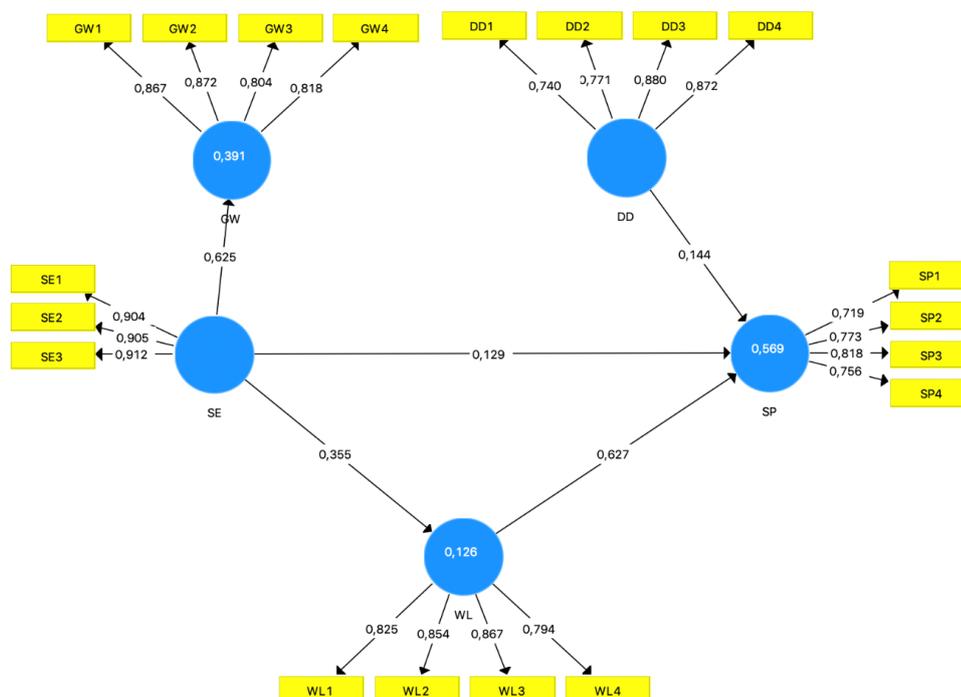
Furthermore, an evaluation of internal consistency reliability was carried out using Cronbach's Alpha as conservative reliability. To strengthen it, an analysis of Composite Reliability (CR) and Rho\_A analysis was carried out with an estimated value ranging from 0.7 to 0.95. The following assessment point in the model is the convergent validity value through the evaluation of the Average Variance Extracted (AVE) metric, which must be above the value of 0.5.

Table 1. Loadings, reliability estimates, and convergent validity

	Indicator	Loading	C. Alpha	Rho_A	CR	AVE
Study Pressure	SP1	0.719	0.766	0.770	0.851	0.589
	SP2	0.773				
	SP3	0.818				
	SP4	0.756				

	Indicator	Loading	C. Alpha	Rho_A	CR	AVE
Self-Expectation	SE1	0.904	0.892	0.894	0.933	0.823
	SE2	0.905				
	SE3	0.912				
Despondency	DD1	0.740	0.836	0.852	0.890	0.670
	DD2	0.771				
	DD3	0.880				
	DD4	0.872				
Grade Worriness	GW1	0.867	0.861	0.862	0.906	0.707
	GW2	0.872				
	GW3	0.804				
	GW4	0.818				
Workload	WL1	0.825	0.856	0.860	0.902	0.698
	WL2	0.854				
	WL3	0.867				
	WL4	0.794				

Table 1 shows an analysis of loading conditions on indicators, estimated reliability, and AVE. All loading values on the indicators show that they are above 0.7, the value of the reliability estimate is in a good acceptance range, and the AVE is above 0.5, following all acceptance of the model's measurement requirements. This condition indicates the formation of excellent indicator reliability, internal consistency, and convergent validity following the opinion of Hair et al. (2019).



**Figure 1. Result of Hypotheses Tests.**

The results in Figure 1 show that all indicators have a loading factor value above 0.7, and it can be concluded that all indicators have met convergent validity, which indicates a good validity condition. Next in analyzing the measurement model is to evaluate discriminant validity through Heterotrait-Monotrait or HTMT (Hair et al., 2019) and Fornell-Larcker (Fornell & Larcker, 1981). The interpretation of the HTMT is obtained from a coefficient of more than 0.9, which indicates a weak discriminant validity between the constructs and is related to the significant difference between the constructs. So the HTMT value of less than 0.85 is highly recommended to indicate discriminant validity.

Meanwhile, for evaluating the Fornell-Larcker coefficient, it is indicated that the square root value of the AVE in each construct must be higher than its correlation with other constructs.

Table 2. The Heterotrait-Monotrait Ratio (HTMT)

	<b>Despondency</b>	<b>Grade Worriness</b>	<b>Self-Expectation</b>	<b>Study Pressure</b>	<b>Workload</b>
Despondency					
Grade Worriness	0.162				
Self-Expectation	0.286	0.711			
Study Pressure	0.522	0.516	0.467		
Workload	0.447	0.478	0.405	0.807	

As described in Table 2, all HTMT values are less than 0.85; this indicates that the formation of discriminant validity is good and follows the criteria.

Table 3. The Fornell-Larcker Criterion

	<b>Despondency</b>	<b>Grade Worriness</b>	<b>Self-Expectation</b>	<b>Study Pressure</b>	<b>Workload</b>
Despondency	0.818				
Grade Worriness	0.117	0.841			
Self-Expectation	0.259	0.625	0.907		
Study Pressure	0.423	0.423	0.389	0.767	
Workload	0.392	0.411	0.355	0.730	0.836

In addition, Table 3 also explains that all correlations in the Fornell-Larcker criteria analysis have a more negligible correlation than the square root of the AVE. The test results showed high scores on Despondency (0.818), Grade Worriness (0.841), Self-Expectation (0.907), Study Pressure (0.767), and Workload (0.836) compared to correlations with other variables. The condition of obtaining the Fornell-Larcker criterion value indicates a good discriminant validity on the variable

### Structural Model Assessment

Evaluation of the structural model involves assessing collinearity on exogenous constructs, testing significance, the relevance of path coefficients, and indirect effects on variables. In addition, measurements of the model's predictions were also carried out, followed by an assessment of the model's out-of-sample predictive power. The assessment of the collinearity between the constructs was carried out by evaluating the VIF value of the exogenous construct. In the evaluation process, the VIF value is not recommended to be above five, and it is highly recommended/ideally below 3. The analysis of the VIF value shows that all indicators show values in the range of 1-2, so there is no indication of problems related to collinearity.

When the test requirements have been met, the next step to assess the structural model is to test the strength of the model in predicting causality between variables through the Bootstrapping method.

Bootstrapping testing was carried out at a significance level of 5% and 1000 subsamples to check the significance of the developed path. Then, decision-making is also carried out by testing the fit model through the values on the NFI, effect size (f2), SRMR, and Rms Theta, as presented in Table 4.

The test results on the model structure show that all of the test indicators the model built have met the requirements and passed the test. In addition to the effect size, it can be seen that Self-Expectation and Workload have a large effect in predicting the model. The test in Table 4 shows that the model is robust and able to explain the relationship between predictors very well.

Table 4. Structural Model Testing

Predictor	NFI	SRMR	rms Theta	f2	Effect Size
Despondency				0.040	Small
Grade Worriness				0.033	Small
Self-Expectation	0.841	0.077	0.159	0.641	Large
Study Pressure				0.144	Medium
Workload				0.711	Large
Decision	Model Fit (84.1%)	Model Fit	Model Fit		

**Structural Model**

In evaluating the relationship between the latent constructs described in Figure 1, a structural model or inner model was tested. This model is evaluated by using R-square for endogenous constructs, path analysis values and t-value statistics on each indicator that makes up the latent variable construct.

Table 5. R-Square Value

	R Square
Grade Worriness	0.391
Study Pressure	0.569
Workload	0.126

Table 5 explains that the worriness grade has an R-square of 0.391, which indicates that the predictor variance can be explained by 39.1% of self-expectation. Meanwhile, the study pressure predictor has an R-square of 0.569, which indicates that a self-expectation of 56.9% can explain this variance. In this condition, it can be said that the learning pressure is relatively high, which is predicted by the existence of self-expectation in students. Furthermore, the workload predictor has an R-square value of 0.126, so it can be interpreted that the external predictor explains 87.4% of the variance. Table 6 summarizes the path analysis and hypothesis testing results.

Based on the explanation in Table 6, it can be seen that all research hypotheses are accepted. This is obtained from the p-value on each path coefficient which has a value of <0.005 with t statistics >0.05. Based on the values presented in Table 6, it can be interpreted that all hypotheses are supported and can be accepted.

**Table 6. Summary of path analysis results and hypothesis testing**

Path Analysis	Path coefficient ( $\beta$ )	Standard Deviation (STDEV)	T Statistics	P Values	Hypotheses result ( $\alpha=0.05$ )
DD -> SP	0.144	0.029	4.938	0.000	H1 Accepted
SE -> GW	0.625	0.031	20.064	0.000	H2 Accepted
SE -> SP	0.222	0.029	4.467	0.000	H3 Accepted
SE -> WL	0.355	0.040	8.882	0.000	H4 Accepted
WL -> SP	0.627	0.028	22.596	0.000	H5 Accepted

## Discussion

The results of the path analysis show that there is a significant effect on study pressure due to despondency conditions in students (Hypothesis 1) with a coefficient value of 0.144 (p-value: 0.000). This is in line with studies in previous research which indicated that feelings of hopelessness and lack of confidence in one's abilities could have an impact on pressure and stress on students (Ghahremani, Nazari, Changizi, & Kaveh, 2021; Wilkins, Clayton, Jones, & Brown, 2021). This condition could ultimately hinder students' ability to develop according to their potential. Although it has weak relevance, the effects of despondency on students in forming learning pressure can be considered. The condition of despondency is also a direct manifestation of feelings of hopelessness during distance learning during the Covid-19 pandemic (Cao et al., 2022; Chutipattana et al., 2022; Jailani et al., 2020).

In addition, in Hypothesis 2, it is also explained that concerns about grades (GW) can occur because of students' self-expectations of themselves. The achievement coefficient obtained in this path is 0.625 (p-value: 0.000), which is one of the most robust relevance in this model. This condition follows research findings that explain that a strong level of self-expectation will be able to raise specific concerns in students related to the grades they will get at the end of the lecture session (Khan et al., 2022; Sunindijo & Kamardeen, 2020). The end of this feeling of worry can lead to excessive anxiety and even academic stress, which will reduce academic achievement (Weber, Skodda, Muth, Angerer, & Loerbroks, 2019). Another concern that is also felt is very closely related to the fear of the future that arises due to the Covid-19 pandemic (Khan et al., 2022).

Next, learning pressure is given a strong impact by self-expectation when student workload (Hypothesis 4) conditions first passed it with a coefficient value of 0.627 (p-value: 0.000). This condition is a prevailing situation following previous research which states that learning pressure can occur due to a relatively large task load and is experienced by many students (Şimşek, Taş, Gülşen, Savran, & Durmuş, 2016). This condition can trigger academic stress that is detrimental to students. Coupled with the existence of expectations that are too high for academic achievement, the workload that is passed will be felt quite heavy by students (Jackson et al., 2022; Kotini-Shah et al., 2022). Learning pressure due to the high workload is exacerbated by online learning during the Covid-19 pandemic, which requires distance learning (Hypothesis 5). The impossibility of students to consult directly with lecturers and the implementation of large-scale social restrictions in Indonesia are factors that trigger the emergence of this condition (Daryanto et al., 2022; Moll et al., 2022; Novick et al., 2022). Various studies also show that the increase in academic stress experienced by students is a manifestation of the inability to manage and manage time and the workload given during lecture sessions (e.g. courses/subjects with field practice assignments and case reports that require in-depth observations).

However, the direct relationship between self-expectation and learning pressure appears to have a coefficient value that is not too high ( $\beta = 0.222$  and  $p\text{-value} = 0.000$ ). Although it still has a high significance value and good hypothesis acceptance (Hypothesis 3), this condition can also be explained by previous research, which explained that learning pressure is a negative feeling experienced by many students as a result of expectations that are sometimes beyond what students can achieve (Cao et al., 2022; N. Li et al., 2022; Peng et al., 2022). This expectation condition could give rise to irrational beliefs such that it will be able to have an impact on perceptions and how students cope with the stress that arises. The inability to cope will weaken student resources, resulting in increased pressure in undergoing studies; the following research conducted show that in Asian students, the tendency of expectations of learning outcomes is a source of stress that significantly impacts psychological conditions (Cao et al., 2022; Jailani et al., 2020; Litam et al., 2021). Along with the acceptance of all proposed hypotheses, it can be said that the four variables developed in the model were significantly able to predict the emergence of learning stress experienced by students during the pandemic.

## Conclusions

Pressure in the learning process is a condition that can arise as a result of various interrelated variables. This condition is one of the triggers for students' emergence of academic stress. Moreover, online learning due to the emergence of the Covid-19 pandemic is an extreme situation that students must face. Concerns about grades, despondency, self-expectation, and workload during the learning process during a pandemic have a significant impact on the emergence of learning pressure. This condition is a manifestation that will continue to exist in the learning process, but its level and appearance are something that various related parties must control. Mental health services are an alternative to reducing the occurrence of this condition. The limitation of this research lies in need for a more in-depth study of the systemic impact of the emergence of learning pressure which has not yet been studied. Besides, the study has not explained the possibility of moderating variables that bridge the emergence of learning pressure on students during the Covid-19 pandemic

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