Impact of Online Learning on Academic Performance Based on Achievement Goal Theory

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ABSTRACT

This study analyzed whether personal, teaching, and institutional factors influence student academic performance during the COVID-19 pandemic using Achievement Goal Theory (AGT). The cross-sectional data was collected through an online survey using a purposive sampling method with students at the Faculty of Business as the criteria. Data were analyzed by using multiple regression analysis methods and it was found that personal and institutional factors had a significant influence on students' academic performance. On the other hand, the teacher factor does not have a significant effect. The results also confirm the AGT perspective that the students represent two groups of students who have learning motivation based on mastery goal orientation and performance goal orientation. The practical implication of this study can be explained that during the COVID-19 pandemic, the large-scale social restriction policy implementation has forced the public in general and higher education institutes, in particular, to adopt the new habits that are identical to hygiene, low touch, less crowd, and low mobility. To respond to these new policies and habits, universities implement an online distance learning system. Disruptions in the network of teachers and students certainly impact student academic performance. This paper provides benefits in analyzing what factors affect student academic performance, especially during online learning in the pandemic which becomes the value added of this study. In addition, this study contributes both practically and theoretically to the establishment of appropriate policies and strategies for implementing online learning. Considering that this study still involves a limited sample, the study results cannot be generalized and may be different if tested on samples from study programs, faculties, universities, and other countries. Therefore, further studies need to be carried out by involving a more significant number of samples from study programs in other countries by examining the role of socio-cultural as a factor influencing student academic performance.

Keywords: Personal factors, lecturer factors, institutional factors, student academic performance, achievement goal theory.

1.　INTRODUCTION

On March 2nd, 2020, the Indonesian Government officially announced the COVID-19 pandemic, and it has had a significant impact on community activity, including the

implementation of teaching and learning activities in education. To prevent the spread of COVID-19 acceleration, the Government issued PP no. 21 of 2020 concerning Large-Scale Social Restrictions which is known as PSBB accompanied by work-from-home and stay-at-home policies. PSBB forced people to adapt to new habits with hygiene, low touch, less crowd, and low mobility as the main characteristics (Bahtiar & Saragih, 2020; Yang & Zhang, 2022).

Due to the policy, higher education must implement a distance learning or better known as an online learning policy. Based on The data published by the Indonesian Central Statistics Agency shows that around 45 million students or 3% of the total students in the world are affected globally (Azzahra, 2021). The utilization of information and communication technology, laptops, and smartphones is increased to support the distance learning process. Even though various efforts have been made by the Government to support the implementation of online learning, it is undeniable that the different characteristics of regions in Indonesia, especially related to connectivity, are the main challenges that must be overcome. Other obstacles can be viewed from technical and practical aspects, for instance, the competence of lecturers in using technology and learning platforms or the high dependence of students on face-to-face learning and low independent learning initiatives resulting in a significant decrease in learning ability and even triggering learning failure.

Several studies on the impact of online learning on students' academic performance, especially in higher education, have been conducted both in Indonesia and other countries. Xhomara and Karabina (2021) conducted a study to examine the implementation of an online learning approach in influencing students' academic performance and satisfaction in Albania. By using the Analysis of Variance (ANOVA), the study found that variations in online learning are different and 49.7% variance in student academic performance can be explained and known based on differences in variations in the online learning process. The study also found that around 78% of the variation in student satisfaction can be explained by differences in variations in the online learning process.

Setena et al. (2021) examine the impact of online learning and teacher performance on student learning motivation. The study was conducted at the Faculty of Economics and Business, University of Warmadewa. The researchers examine the use of several online learning methods which included the Google Meet application, Zoom application, Google Classroom, YouTube, television, and WhatsApp social media. By involving 48 students who participated in the study, the study found that the implementation of online learning and teacher performance had a significant effect either partially or simultaneously on student motivation. The researcher suggests that to support the learning process effectively, the learning process must be supported by various learning methods and learning support facilities to increase students' learning motivation.

Achievement Goal Theory (AGT) can be used to understand student academic performance (Gopal et al., 2021). Elliot and Dweck (1988) in Gopal et al. (2021) define a student's achievement goal involves a program related to cognitive, affective, and behavioral consequences. Based on the theory, behavior related to motivation and achievement can be easily understood through the goals and reasons adopted when students are involved in the process of learning activities. The environment also has an important role in determining student academic performance. An example is the factor of the teaching staff and the classroom environment. So far, studies have confirmed that traditional classroom learning has a significant influence on student academic performance (Clayton et al., 2010). However, in the modern digital-based era, internet-based learning and applications have also become effective tools as student learning media

and have a significant influence in determining student academic performance (Azlan et al., 2020).

This study was conducted to analyze the factors that influence academic performance. The factors studied adopted by Alani and Hawas (2021) include personal factors, teaching factors, and institutional factors. This research is expected to contribute to understanding the factors that affect student academic performance during the online learning process during the COVID-19 pandemic.

The sample involved 95 students in the Management and Master of Management study programs. The sample selection was based on two main reasons: first, ease of access for researchers to obtain data, considering that the research team consisted of lecturers and students from the Management and Master of Management Study Program; second, during the data collection period, students who met the sample criteria conducted the learning process in full online, even in subjects that required practicum activities such as Capital Markets, Statistics, and Business Research Methods. This is due to the Government policy on Large-Scale Social Restrictions policy to reduce the rate of increase in COVID-19 cases. For these two reasons, the researcher decided to select a sample of Management and Master of Management Program students.

By involving students as samples, it is expected that the study results can make a significant contribution to the Faculty of Business, especially the Management and the Master of Management Study Program to accommodate student needs during the online learning process by developing related policies such as providing online and hybrid learning media facilities, increasing skills in utilizing technology for both lecturers and students, developing online learning systems and other things needed to support the online learning process success. In addition, the results of the study are expected to enrich the literature on strategic management and education quality management, especially regarding developing appropriate online learning strategies by accommodating student opinions as users of educational services provided by the university.

The results are also expected to provide insight for related parties, especially decision-makers to improve student academic performance. Based on the background of the study previously discussed, the research questions are formulated as follows:
1. Do personal factors affect students' academic performance?
2. Do teacher factors affect students' academic performance?
3. Do institutional factors affect students' academic performance?

2. LITERATURE REVIEW

2.1.Achievement Goal Theory

Achievement Goal Theory (AGT) is a socio-cognitive theory that seeks to explain the approach of students in completing academic tasks, the level of motivation that students have, and the reasons for the behavior patterns they adopt in completing a task. AGT describes two goal orientations that influence individual interpretation and reaction to a performance achievement (Zhou et al., 2019). Mastery of goal orientation refers to the focus of competency development. Goal orientation can be taught as an interpretive framework that focuses on individuals' attention to themselves or the task at hand. Mastery of goal orientation activates the individual's focus on developing competence through an emphasis on improvement, learning, and in-depth understanding.

Researchers related to AGT suggest two kinds of goal orientation, namely mastery and performance goal orientation (Dweck & Leggett, 1988). Mastery goal orientation emphasizes one's efforts to develop competence and to gain understanding or

input in a holistic perspective without expecting anything in return in the learning process they experience (Duman & Eren, 2014). This means that students with mastery-oriented goals have an intrinsic motivation to improve their own competencies and have the awareness to develop new skills for themselves. Students with mastery goal orientation rely more on themselves than on external influences such as friends, parents, and teachers. They have the awareness of doing self-assessments based on themselves to assess their success in the learning process.

Students with a performance goal orientation have different characteristics and goals from a mastery goal orientation. Students with performance goal orientation have the main motivation to have better performance than their friends, gain appreciation from teachers and friends, and become more successful students than their classmates. The desire to prove one's own abilities and the ability to win competitions with their friends is the main motivation for students with performance goal orientation. On the other hand, they try to avoid the risk of the possibility of getting negative evaluations from their teacher and their friends (Cetin et al., 2014). Their main goal is not to study but to get approval from others, therefore students with performance goal oriented tend to avoid situations that allow them to receive negative evaluations and will choose not to complete the assignment at hand.

The study conducted by Gopal et al. (2021) tested several factors that influence student satisfaction and academic performance related to online learning. By involving 544 student respondents and using Structural Equation Modeling (SEM) it was found that independent factors including teacher quality, learning design, student feedback, and student expectations had a significant influence on student satisfaction and performance.

Pham et al. (2021) conducted a study on the factors that influence online learning outcomes during the Covid-19 pandemic for students in Vietnam. The study involved 404 students with the sampling method using convenience sampling and data were collected through interviews and questionnaires. The results of the study show that student online learning outcomes are influenced by six main factors, namely, learner characteristics, perceived usefulness, course content, course design, ease of use, and faculty capacity.

Alani and Hawas (2021) conducted a study aimed at exploring the academic performance of students at Sohar University, Oman. Data collection was conducted through a survey and involved 562 students from several faculties. Data were analyzed using the regression analysis technique. The study found that environmental factors had a significant effect on student academic performance since students liked a quiet and appropriate learning environment. Students also have the perception that the teaching ability of lecturers through the implementation of various teaching techniques has a positive influence on students' academic performance.

2.2. Hypothesis Development

Personal factors are factors related to students' self-such as background, motivation, expectations, participation the income received by students. The teaching factor is related to the competence, personality, experience, effort, and teaching practices applied by the teacher. While institutional factors are more related to the conditions of the learning environment, which include the location of the university, pressure or motivation to learn from classmates, and the condition of the classroom environment. Considering the context of the research is online learning, in this study, institutional factors adopt the research conducted by Pham et al. (2021) including the ease of use of online media and the usefulness of online media that facilitates the learning process. Student academic performance is an important element in the education system and a determining factor in the success and failure of an educational institution (Rono, 2013; Narad & Abdullah,

2016). Student academic performance shows the student's achievements through the learning process and is related to knowledge, skills, analytical skills, communication, and the ability to practice what has been obtained during learning (Gopal et al., 2021; Pham et al., 2021).

Personal factors such as the ability to socialize both with lecturers and friends have a significant influence on achieving a better learning quality. The stronger the interaction and motivation of students to practice consistently, being proactive in the learning process will have a positive impact on improving student academic performance (Pham et al., 2021). In the online learning process, the ability to learn independently, and proactively, and a sense of obedience or self-discipline are the determining factors for student success in improving academic performance, so in this study, the following hypotheses were developed:

H1: Personal factors affect student academic performance.

The lecturer's factor is also important to determine whether a student's academic performance is excellent even in the online learning system. During online learning, the approach used is no longer lecture-centered as in the traditional learning process, however, student-centered. Pedagogical methods, professional competence, level of knowledge and technology application, and the ability to form, and combine various ideas, and diverse practices in the development and application of online learning content in higher education will help students improve academic performance (Alrefaie et al., 2020; Lee & Shim, 2023). Based on this explanation, the following hypotheses can be developed:

H2: Lecturer factors affect students' academic performance.

In this study, institutional factors emphasize the ease of use and usefulness of online media in the learning process. The use of online learning platforms, especially during the current pandemic, is designed for the purpose of facilitating learning activities and sharing knowledge. Technology is important in gaining knowledge and obtaining information, and it is undeniable that learning is a daily need, especially for students. Empirical studies show that ease of use of technology, accessibility, and speed of transmission of online media and mobile devices are important determinants that not only ensure the success of teaching and learning activities but also improve student academic performance (Salloum et al., 2020). Based on the rational explanation, in this study, the following hypotheses were developed:

H3: Institutional factors affect student academic performance.

3. METHODOLOGY

This study uses the purposive sampling method with the criteria of students of Management and Master of Management Programs who are the target respondents. Primary data collection used an online survey method, via a Google form. The primary data collected is cross-section data, that is, the research was conducted at a certain time using many respondents.

Regarding the variables' measurement, personal factors and lecturer factors were measured by 9 and 7 indicators adopted from the study conducted by Alani and Hawas (2021). Institutional Factors were measured by 8 indicators adopted by Pham et al. (2021), while student academic performance was measured by 8 indicators adopted by Pham et al. (2021) and Gopal et al. (2021). All of the indicators used 5 points Likert Scale. Table 3.1. summarizes the indicators used in this study.

Validity testing is conducted to measure the quality of the research instrument and how well the concept can be defined by the measuring instrument. The instrument is said

to be good or valid if the instrument is able to measure the data studied appropriately (Hair et al., 2010). The validity test in this study uses the Product Moment correlation which is done by correlating the score on the item with the total item score (Santosa, 2010). The instrument is concluded to be valid if it measures what it is supposed to measure and fulfills the requirements, namely that the item has a positive correlation with the factor and a maximum p of 0.05 in the one-tail test.

Table 3.1. Measurement

Variables	Indicators
Personal Factors	I attend lectures regularly
	I listened to the lecturer's explanation carefully
	I participate actively in class discussions
	I work hard on assignments, projects, and exams to get good grades
	I always read the tutorial questions before the lecture starts
	I always try to solve tutorial problems before the lecture starts
	I always improve and study lecture topics before class starts
	I always study and try to improve my understanding of course material independently
	I faced issues like laziness, anxiety, and lack of motivation and sleep
Lecturer Factors	I receive explanatory assistance from the lecturer when I need it
	I think the lack of a lecturer's ability to explain materials will have a negative impact on my academic performance
	I think lecturers need to use various practices or methods in the learning process
	I think lecturers need to have professional competence
	I think lecturers need to apply appropriate teaching methods according to the subjects being taught
	I think lecturers need to have the ability to apply technology and knowledge
	I think lecturers need to form and combine different ideas and practices
Institutional Factors	I think online learning software is easy to use
	I think online learning software is easy to understand
	I think online learning software is very flexible
	I think online learning software needs to be supported by an adequate support system when needed
	I think using e-learning makes learning easier
	I think using e-learning saves time
	I think using e-learning saves money
	I think using e-learning creates more excitement in the learning process
Academic Performance	I gained a lot of knowledge through online learning
	I am able to develop a variety of skills from the online learning process
	I can implement the lessons I get from online learning into practice
	I learned a lot of knowledge and skills from online learning
	Online learning sharpened my analytical skills
	Online learning helps me in developing the ability to plan my work
	Online learning improved my written communication and oral communication skills
	Online learning encourages me to develop my academic interests

Source: Author Elaboration

Reliability testing was also carried out to determine whether the test results were consistent under different conditions for each question item. Reliability testing in this study using Cronbach's Alpha with a Rule of thumb must be greater than 0.6 is still acceptable (Hair et al., 2010; Sekaran, 2003).

To test the hypotheses in this study, multiple regression analysis was used. Multiple regression analysis was conducted to predict the effect of several independent variables (X) on the dependent variable (Y). Classical assumption testing includes normality, heteroscedasticity, and multicollinearity tests before testing the hypothesis using multiple regression analysis.

4. FINDINGS

4.1.Result of The Data Collection

The data collection was conducted through a survey method, namely an online survey using a Google form starting from the beginning of June 2022 until the end of July 2022. The total number of questionnaires distributed was 123, while the total number of returned questions that can be processed was 95, yielding a response rate of 77,24%. Based on the respondent's profile summarized in Table 4.1, the majority of respondents in this study were female, namely 53.58% or 51 respondents, aged between 15-20 years, with the residential status being 67.37% at parent's house, with a preference for sources of information coming from the internet 83.16%. This study involved 95 student respondents of the Bachelor of Management and Master of Management Study Programs.

Table 4.1. Respondent Profile

No.	Statement	Criteria	Amount	Percentage
1	Gender	Male	44	46,32
		Female	51	53,68
2	Age	15 – 20 years old	40	42,10
		21 – 25 years old	37	38,95
		26 - 30 years old	8	8,42
		>30 years old	10	10,53
3	Residential Status	Parent's House	64	67,37
		Dormitory	17	17,89
		Apartment	-	-
		Own House	12	12,63
		Others (Living with siblings or extended family)	2	2,11
4	Preferences for the most popular sources of information	Internet	79	83,16
		Literature from Library	3	3,16
		Lecturer	7	7.37
		Friend	6	6,31
		Others	-	-

Source: Data Processed

4.2.Validity and Reliability Testing

Table 4.2 summarizes the results of the validity and reliability testing of the research instrument. The validity test shows that all measurement items are valid, therefore no measurement items are excluded in the subsequent analysis.

Table 4.2. Chronbach's Alpha and Item Homogeneity

Variables	Item	Item Excluded	Cronbach's Alpha	Item Homogeneity
Personal Factors (FP)	9	0	0.746	0.316-0.729
Lecturer Factors (FD)	7	0	0.761	0.410-0.786
Institutional Factors (FI)	8	0	0.845	0.410-0.774
Academic Performance (KA)	8	0	0.924	0.747-0.848

Source: Data Processed

The results of the validity test with Pearson Correlation showed all values of r count > r table with a significance value of 0.00. The test results show the homogeneity

values for each variable in this study are as follows: personal factors (0.316-0.729), teaching factors (0.410-0.786), institutional factors (0.410-0.774), and academic performance (0.747-0.848). The results of the reliability test show that Cronbach's Alpha value ranges from 0.746-0.924.

4.3 Descriptive statistics

Table 4.3 shows the average respondents' answers to each question item in the research variables which include personal factors, lecturer factors, institutional factors, and academic performance. The results of descriptive statistical tests showed that the average answers for personal factors (3.69-4.44), lecturers' factors (2.59-4.45), institutional factors (3.80-4.39), and academic performance (3.83-3.99).

Table 4.3. Descriptive Statistic

Variables	Mean Value
Personal Factors (FP)	3.69-4.44
Lecturer Factors (FD)	2.59-4.45
Institutional Factors (FI)	3.80-4.39
Academic Performance (KA)	3.83-3.99

Source: Data Processed

4.4 Hypotheses Testing

A multiple regression model was used in this study to test Hypothesis 1 (personal factors affect student academic performance), hypothesis 2 (lecturers factors affect student academic performance), and Hypothesis 3 (institutional factors affect student academic performance). Based on the multiple linear regression model, the estimation parameter is obtained with the value of t, and the coefficient of determination (R^2). If the regression coefficient is significant at $p < 0.05$, it can be concluded that the independent variable has a significant effect on the dependent variable, and the larger R^2, the better the model in explaining the variation of the dependent variable.

The results of the hypothesis testing are shown in Table 6 and all deviations from classical assumptions such as normality, homoscedasticity, and non-multicollinearity have been tested using normal probability plots, scatter plot diagrams, and statistical collinearity assessed from tolerance and VIF values. Hypothesis testing was done by using the multiple linear regression analysis methods and based on the results of partial model testing, it can be concluded that only the lecturer factor does not have a significant effect on student academic performance so the second hypothesis in this study is not supported, while the first and third hypotheses are supported.

Partially, personal factors and institutional factors have a significant influence on student academic performance while lecturers' factors have no significant influence on student academic performance. Simultaneously, it can be concluded that personal factors, lecturers' factors, and institutional factors have a significant influence on student academic performance. The adjusted R^2 value in this study is 0.608, this means that 60.8% of student's academic performance is influenced by the factors tested in the model including personal factors, teaching factors, and institutional factors, while the remaining 39.2% is explained by other factors. outside the research model. Table 4.4 summarizes the results of hypothesis testing for this research model.

Table 4.4. Results of Hypotheses Testing

Model	Stand. β	Stand. Error	t	Sig	F	Sig	Adj R²
Constant	-	.488	-2.149	.34			
Personal Factors (FP)	.335	.110	4.562	.000			
Lecturer Factors (FD)	-.064	.096	-.900	.371	49.696	.000	.608
Institutional Factors (FI)	.622	-088	8.821	.000			

Source: Data Processed

Based on open questions provided to students regarding the challenges of online learning, especially during the pandemic, several challenges can be identified. Most challenges faced by students are related to the internet (connection, signal, network, quota wastage), difficulty in concentration because they are often distracted by other activities outside of learning activities, difficulty in self-discipline, and difficulty understanding the material, especially those related to calculations and requires activities, practice, feeling bored and bored because there is no direct interaction with lecturers and classmates, not understanding the campus layout because lectures are conducted online, networking is limited, and the learning structure is considered less effective. Of the 95 students who were respondents in this study, only 3 students stated that there were no obstacles during online lectures and stated that online lectures were fun because they learned something new, especially related to the use of teaching and learning platforms during the lecture process.

In addition, students are also asked to provide answers to the question of what outcomes are expected by students during the online learning process. The majority of the answers given by students were related to interactions between lecturers and students as well as interactions with classmates. In this regard, some of the expectations expressed by students are the formation of small groups for discussion so that they can interact with classmates and can express opinions during the discussion process, the need for games in the learning process, and the need for learning videos and recordings during the lecture process. so that it can be replayed if students need it.

Regarding the effectiveness and efficiency of the learning process, there are several student opinions stating that online learning needs to be implemented even after the pandemic, this is because online learning students feel several positive impacts such as saving time, energy, and costs because they do not have to travel to campus, train students to be able to manage time well, study independently, explore other sources of knowledge outside of lecture hours and make students more creative in trying to enrich the knowledge. On the other hand, there are also opinions of students who want to study onsite immediately because they think online lectures are quite difficult for them to be able to understand lecture material well.

5. DISCUSSION

The results of hypothesis testing regarding the influence of personal factors and institutional factors on student academic performance support the findings of a study conducted by Alani and Hawas (2021). It means that students' academic performance is largely determined by personal factors and supporting facilities needed during the teaching and learning process which in this study were measured through institutional factor variables. Personal factors are related to students' own internals such as motivation, background, and participation or involvement in the learning process. Personal factors such as self-awareness to follow lectures on a regular basis, listening to lecturers'

explanations, participating actively in class, completing each given task, studying the given material, looking for solutions to personal problems such as laziness, demotivation, being easily distracted, unfocused, bored and boredom or other problems, as well as problems related to lecture material.

Institutional factors are related to the implementation of e-learning and online learning software used during the teaching and learning process. Online learning software that is easy to use, easy to understand, flexible, and supported by an adequate support system when needed will greatly affect the success of the student learning process. In addition, the use of e-learning in the online learning process is considered to provide positive benefits for students because it supports the learning process more easily, saves time and costs, and creates its own excitement for students to learn new things and has not been implemented during the onsite learning process.

The results of the hypothesis testing regarding lecturers' factors affect the academic performance of students show insignificant results. The results of testing this hypothesis contradict the findings of previous research conducted by Alani and Hawas (2021). The results of the study which stated that the teaching factor did not have a significant influence on students' academic performance could be explained based on the various answers given by students when filling open questions about challenges during the online learning process and what outcomes they expected from the online learning process.

One of the challenges faced by most students involved in this research is the problem of network constraints such as unstable signals so that students often face conditions out of the learning process several times, lack of focus, and are easily distracted during the learning process resulting in an inefficient learning process and students experiencing difficulties. in understanding the material being discussed.

Regarding the expected outcomes during the online learning process, not a few students stated the importance of a more interactive learning process between students and their lecturers and classmates, the formation of small discussion groups so that students could have more opportunities to discuss with their lecturers and classmates, including an opportunity to discuss how the theories learned in class relate to implementation in the world of work and a brief explanation of the material, no need to be long-winded. It explains that so far the online learning process where lecturers have an important role in the process, there is still much that needs to be improved to accommodate the students' needs and desires so as to motivate students to be able to improve their academic performance.

The managerial and practical implications of this study will explain further. The responses given by most students confirm the Achievement Goal Theory (AGT) which is the basis for developing the hypothesis in this study. The results of the study prove that in the learning process, especially during the learning period, there are two groups of students who have different views regarding the online learning process. The first group stated that online learning was less effective for them because it was difficult for them to understand the lecture material for various reasons such as connection problems, lecturer explanations that were too fast, the lack of interaction between lecturers and students and fellow students so that this affected their level of understanding and final grades earn.

The second group stated that online learning provided various benefits for them, although only three (3) students out of 95 students involved in this study stated that online learning would still be carried out even though the Covid-19 pandemic was under control. Not a few students stated that the online learning process provides an opportunity for them to save more time, be more effective and efficient in utilizing their time so that they can develop discipline, motivation, and creativity to develop their competencies by learning

independently and exploring the knowledge they have acquired. they get in class.

The reality related to student motivation and perspectives in responding to online learning is in accordance with the AGT which explains that student learning motivation can be classified into two groups including mastery goal orientation and performance goal orientation. The first group discussed in the discussion of the results of this study represents students with a performance goal orientation. This group of students has the main motivation to have better performance, gain appreciation from lecturers and friends, and become more successful students. This is evidenced by student statements that emphasize the negative side or lack of online learning implementation which results in less interaction with lecturers and classmates, lack of understanding of the material presented due to connection constraints, and lack of interaction with lecturers and friends, resulting in a lack of understanding. it is feared that the material provided will reduce their achievement of grades or academic performance.

In contrast to students in the performance goal orientation group, students in the second group discussed in this study were students in the mastery-oriented goals group. Students in this group have an intrinsic motivation to improve their own competence. Students also have the awareness to develop new skills for themselves. They rely more on themselves than external influences such as lecturers and classmates and have the awareness of self-assessment to assess their success in the learning process.

6. CONCLUSION AND FUTURE RESEARCH

The results of the data analysis show that there are two supported hypotheses and one rejected hypothesis, with a brief explanation as follows.
1. The results of hypothesis testing stating that personal factors affect student academic performance are supported and in accordance with the findings of previous studies.
2. The results of testing the hypothesis that teacher factors affect student academic performance are not supported and this is contrary to the findings of previous studies.
3. The results of hypothesis testing stating that institutional factors affect student academic performance are supported and in accordance with the findings of previous studies.

This research is expected to provide benefits as consideration for universities, especially in terms of supporting and improving the optimization of online learning. In accordance with the arguments given by students regarding the challenges and expected outcomes during online learning that can be input for policymakers and implementers of the learning process in the field, for example, students want more interaction between lecturers and students during the teaching and learning process, forming groups of students. groups in carrying out tasks so that they can still build networking and interact with their classmates even though they are online, use a games approach in conducting lectures (although it is undeniable that not all courses can be taught using a games approach), and the structure of learning applications that are considered less effective.

This research is expected to contribute both practically and theoretically. Practically, this research is expected to accommodate student needs during the online learning process by developing policies for both providing online and hybrid learning media facilities, increasing skills in using technology for both lecturers and students, developing online learning systems, and other things needed to support the smooth and successful process online learning. Theoretically, this research is expected to enrich the literature to develop appropriate online learning strategies.

Considering that this study was conducted in a small scope, namely a Management, and Master of Management Study Program, the result of the study cannot be generalized and may not apply in different research settings, whether in different study programs,

faculties, universities, or country contexts, so that the development of further studies involving more, and wider respondents are needed. In addition, other variables such as socio-cultural can also be examined to investigate other factors that may affect student academic performance, especially during online learning.

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