Analysis on How Learning Motivation And The Understanding of Information Technology Affects Accounting Students Cumulative Grade Point Average (GPA)

Nabila Yolanda[1]*, Dina Izzati[2], Vista Alisha Zahrani[3], Maisya Delani[4], Wan Fachruddin[5]

[12345] Accounting Major, Faculty of Social Sciences, University of Pembangunan Panca Budi, Indonesia

*Correspondence: Author

Email: nabilayolanda0000@gmail.com

Abstract: This study examines the relationship between accounting students' cumulative grade point average (GPA) and their information technology proficiency and motivation to learn. In the current digital era, success in the accounting business, where managing and reporting financial data is essential, increasingly depends on having a strong information technology background. The study used a survey methodology and a quantitative approach, focusing on 50 accounting students in Medan. A standardized questionnaire measuring demographics, learning motivation, and IT comprehension was used to gather data. Information technology knowledge and GPA have a significant positive link (p = 0.001), according to the data, suggesting that improving students' IT proficiency can significantly raise their academic achievement. On the other hand, learning motivation's impact on GPA is not statistically significant (p = 0.096), indicating that although motivation is relevant, other elements might be more crucial for academic achievement. To improve overall academic performance in accounting education, the findings highlight the necessity for educational institutions to concentrate on enhancing students' IT comprehension in addition to learning motivation tactics.

Keywords: Learning Motivation, Information Technology, Accounting Students, Cumulative Grade Point Average (GPA), Academic Achievement

Introduction

Background

In today's digital era, advances in information technology have had a significant impact on many areas, including education. To successfully compete in an increasingly competitive job market, accounting students must understand information technology. Accounting is a field that focuses on managing and reporting financial information, so students being able to use information technology is essential. The quality of learning and academic achievement of students is directly affected by their ability to use information technology.

Every university, both public and private, always expects students with degrees that can be considered in the world of work. As a result, the accounting learning process in every college focuses on the formation of quality human resources (Matapere & Nugroho, 2020).

The quality of education is an important component that can determine the progress of human development and improvement, especially in Indonesia, for the better. Education is an activity or process carried out systematically that aims to build students' personalities. Education is closely related to learning in schools (Ega Putri Nurrawi et al., 2023).

In interactions with one another, students frequently call themselves "A," "B," or "C" students, and they feel embarrassed when they receive failing grades. They utilize phrases like "That class is an easy A," "It's hard to get a good grade in that class," or "Don't take that class because it will ruin your GPA" while discussing their classes. Points and grades are nearly always mentioned when students inquire about assignments, tests, quizzes, or absences (Knesek, 2022)

To prevent academic cheating in higher education, learning motivation is the overall driving force within a person that motivates them to learn and continue learning (Florestina Aron et al., 2021). To encourage someone to act in a certain way to achieve a certain goal or result, a person is said to be motivated (Matapere & Nugroho, 2020). Learning motivation denotes the intrinsic impetus that compels individuals to attain certain educational objectives. This drive may stem from the pursuit of knowledge, the attainment of success, or the fulfillment derived from comprehending the subject matter (Chaniago, 2024).

Today, human civilization is greatly influenced by advances in information technology (IT), especially in the world of accounting. As the need for information increases and distances get closer, accountants must keep learning to keep up with IT trends. In addition to the business sector, IT advancements affect other sectors such as health, education, government, and others (Fauzi et al., 2022).

Technology can usually be used to solve things that humans cannot solve. This can include hardware and software that can streamline work. Information, on the other hand, is a report that is completed and used to help make decisions or as a source of information. In other words, information is the delivery of a message or report about something to a person or society. In addition, information can also be considered as a source of knowledge, which allows further discovery (Hanif & Kurniawati, 2024).

The following benefits result from using contemporary information technology in human management: decreasing the amount of time spent making judgments at all corporate management levels; enhancing the caliber of hiring decisions; timely report preparation for government organizations in compliance with legal and regulatory mandates; lowering personnel management expenses; raising employee output; making the best use of a particular employee's professional attributes; managing firm employees' pensions on a personal basis; keeping a thorough record of each employee's employment history; creation of a management reserve and advancement of the company's most talented workers (Shamsiya Abidovna, 2024)

In today's digital era, advances in information technology have had a significant impact on many areas, including education. To successfully compete in an increasingly

competitive job market, accounting students must understand information technology. Accounting is a field that focuses on managing and reporting financial information, so students being able to use information technology is essential. The quality of learning and academic achievement of students is directly affected by their ability to use information technology.

Therefore, this research aims to study how understanding of information technology and motivation to learn affect the academic achievement of accounting students. This research is expected to help build better and relevant learning strategies and improve accounting education. This research is also expected to help policy makers create programs that encourage students to be more interested in and understand technology.

It is expected that this study will provide a deeper understanding of the relationship between learning motivation, understanding of information technology, and academic achievement of accounting students. Consequently, it is expected that this study will not only help the development of science but also improve future educational practices.

The objectives of this study are to analyse the effect of learning motivation on the academic performance index of accounting students, measure the contribution of understanding of information technology to the academic performance index of accounting students, examine the interaction between learning motivation and understanding of information technology in influencing academic performance index, and identify factors that become obstacles or supporters in improving learning motivation and understanding of information technology among accounting students.

Literature Review

a. Learning Motivation

Many studies have shown that learning motivation can improve learners' potential. Intrinsic motivation, which comes from personal interest and pleasure in learning, significantly increases student engagement and academic achievement. Students who have this motivation are more likely to actively participate in the learning process and explore their interests in depth (Kusumawati, 2024). An urge of will or desire that propels someone to take action in order to accomplish a particular objective is known as motivation. In this instance, motivation consists of two components: knowing what needs to be learnt and comprehending why discover (Melasari, 2019).

b. Information Technology

Information technology consists of two syllables, "technology" and "information." There are different opinions on the meaning of this word based on its etymology. In Greek, the word "techne" can mean art, craft, or skill, and "logia" can mean learning, or knowledge. Technology can also mean a way or action to accomplish a task. Technology helps humans achieve their goals. Technology can usually be used to accomplish things that humans cannot. This can include hardware and software that can streamline work. Information, on the other hand, is a report that is completed and used to help make decisions or as a source of information. In other words, information is the delivery of a message or report about

something to a person or society. In addition, information can also be considered as a source of knowledge, which allows for further discovery (Hanif & Kurniawati, 2024).

A formal, socio-technical organizational structure created to gather, process, store, and distribute information is called an information system (IT). Information systems are made up of four parts, according to sociotechnical theory: tasks, people, structure (or roles), and technology. Digital solutions known as information systems offer data, advance organizational knowledge, and help with decision-making (Mulaydinov, 2023).

c.   Student Achievement index

One of the benchmarks used in the educational process is the achievement index, which is a system or method of assessment used during the educational process. The achievement index (IP) is the result of the summation of all course grades taken by students and has been completed within a certain period. (Sholeh & Andayati, 2023) GPA is very important for students' academic life because its value affects their study period, scholarship acceptance, and even job applications in the future. Students will do whatever it takes to improve their GPA to be better.(Putri et al., 2018)

d.   Self – Determination Theory by Edward L. Deci and Richard M. Ryan

When it comes to their demand for competence, people must think they can acquire the skills and talents needed to accomplish their goals. Regarding their need for autonomy, people must feel free to choose their own activities and feel capable of acting in a way that is consistent with their values and true selves. Lastly, people must believe that they may emotionally connect to others in their environment to satisfy their related desire. According to the theory, these fundamental psychological requirements can be met to varying degrees depending on the circumstances of each individual and that meeting these needs can improve outcomes, such as intrinsic motivation for the particular activity the person is involved in (Thibault Landry et al., 2020).

Research Method

1)   Type of Research

This research uses a quantitative method with a survey approach. This method was chosen to measure the relationship between the research variables, namely learning motivation, understanding of information technology, and Grade Point Average (GPA) of accounting students.

2)   Population and Sample
   a) **Population:** The population in this study were all students enrolled in accounting study program at the University of Pembangunan Panca Budi up from the 3rd Semester, the total population could be less or more than 100 students.
   b) **Sample:** The sample was taken using purposive sampling technique, namely by selecting students who have completed at least two semesters and have experience

in using information technology in the accounting learning process. To count the targeted sample, the slovin method will be used in this research:

$$n = \frac{N}{1 + N\,(e)^2}$$
$$n = \frac{100}{1 + 100\,(0,1)^2}$$
$$n = \frac{100}{1 + 100\,(0,01)}$$
$$n = \frac{100}{1 + 1}$$
$$n = \frac{100}{2} = 50$$

From this calculation we can conclude that the targeted sample size would be 50 accounting students.

3) Research Instruments

This study uses a questionnaire consisting of three parts:

a. **Part I**: Respondents' demographic data (age, gender, semester, etc.).

b. **Part II**: Questionnaire to measure learning motivation. This questionnaire can use a Likert scale of 1-5 (1 = strongly disagree, 5 = strongly agree). This questionnaire covers two independent variables, the first variable is learning motivation, and the second variable is the students' understanding of information technology. While the dependent variable is accounting students cumulative grade point average (GPA).

c. **Part III**: A questionnaire to measure understanding of information technology. This questionnaire also uses a 1-5 Likert scale which includes statements regarding the ability to use accounting software and understanding of information technology concepts.

The survey questionnaire is written in Indonesian language, and it's divided into 2 sections. Each section is divided based on the variables and it contains 5 questions per-section.

Table 1. Research Indicators

No.	Type of Variable	Scale	Indicators
1.	Learning Motivation	Likert	1. Engagement in the Learning Process
			2. Clear Learning Objectives
			3. Use of Effective Learning Strategies
			4. Intrinsic and Extrinsic Motivation
			5. Social and Environmental Support
2.	Students' Understanding of the Information Technology	Likert	1. Ability to Use Accounting Software
			2. Mastery of Information Technology Tools
			3. Engagement in Online Learning
			4. Use of IT Resources for Research
			5. Data Analysis Skills Using IT

d. **Part IV**: Student GPA will be taken from official academic data provided by the university.

4) Data Collection Procedure

Data will be collected through online questionnaire distribution using the survey platform, Google Form. Respondents will be given three days to complete the questionnaire. After the questionnaire is closed, the data obtained will be downloaded and prepared for analysis.

5) Data Analysis

The effect of students' learning motivation and understanding of information technology on their GPA will be analyzed using multiple linear regression analysis. This study uses a significance level of 0.05.

Results and Discussion

Respondents' Identity

From the questionnaires filled in by the respondents, information was obtained about their identity. The presentation of this identity data aims to provide an overview of the respondents' conditions. The description that will be presented in this study provides general insight into the distribution of data obtained in the field. The data displayed is raw data collected through descriptive statistics. This description is important to explain the distribution of data based on frequency, main trends, and dispersion patterns, including maximum and minimum values, as well as to describe the homogeneity of the data.

a) Respondents Age

Knowing the age of respondents allows researchers to conduct more in-depth analysis and data segmentation. For example, a person's behaviour and preferences are often influenced by their phase of life. By knowing the age, researchers can identify patterns that may emerge among different age groups. (Dillman, D. A., Smyth, J. D., & Christian, 2013)

Tabel 2. Age Respondent

Age	Number (Person)	Percentage (%)
18	4	8%
19	28	56%
20	10	20%
21	3	6%
22	5	10%

Source: Data obtained in 2024

The respondent age table shows that the age distribution varies between 18 to 23 years old, with 19 years old as the most represented group, reaching 28 respondents or 56%. 20-year-olds followed with 10 respondents (20%), while 18-year-olds, 21-year-olds and 22-year-

olds had 4, 3 and 3 respondents respectively. The predominance of 19-year-olds in this survey reflects that most respondents are in their late teens, which can provide important insights for further analysis of the characteristics and needs of this age group.

b) Gender of Respondents

There are differences in the way men and women process information, which can affect understanding and responses to questions. (Kennison, 2012)

Table 3. Gender of the Respondents

Gender	Number (Person)	Percentage (%)
Woman	42	84%
Man	8	16%

Source: Data obtained in 2024

The respondent gender table shows that out of a total of 50 respondents, 42 were women, accounting for 84% of the total, while 8 male respondents accounted for only 16%. This indicates that the survey was dominated by women, making it important to consider the influence of gender in data analysis. The predominant number of female respondents may provide insights into perspectives and experiences that may differ compared to male respondents.

Normality Test

One of the statistical components that is usually used to process and analyze data is the data normality test, which is also used to ascertain whether the data is well distributed.(Olivia, 2022) Normal distribution values for population data occur when the mean is equal to the mode, the score is equal to the median, and some of the values or scores are clustered in the center. If the data has a non-normal distribution, then non-parametric statistics are used. (Permana & Ikasari, 2023)

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		50
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	6.25661711
Most Extreme Differences	Absolute	.073
	Positive	.073
	Negative	-.041
Test Statistic		.073
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

The results of the One-Sample Kolmogorov-Smirnov Test show that the analysis was conducted on 50 data, with a mean of unstandardized residuals of 0 and a standard deviation of 6.26. The absolute value of the largest observed difference was 0.073, where the highest positive difference also reached 0.073, while the highest negative difference was -0.041. The resulting test statistics are 0.073, and the Asymp. Sig. (2-tailed) or significance was recorded as 0.200 after the application of the Lilliefors correction. Given that this p-value is greater than the conventional significance level, such as 0.05, we failed to reject the null hypothesis. Thus, there is insufficient evidence to conclude that the residuals are not normally distributed, suggesting that the residual data can be considered to follow a normal distribution.

Multiple Linear Regression Test

A linear regression model that uses more than one independent variable or predictor is called multiple linear regression. To identify the relationship between the variables that influence the goal of selling houses that generate high profits, this study examines land area, building area, building age, number of bedrooms, average distance from the center of the crowd, and installed electric power.(Sudariana & Yoedani, 2021)

In this case, there is one dependent variable and two independent variables. Therefore, the following mathematical equation shows multiple linear regression:

$$Y = a + b_1 x_1 + b_2 x_2 + \cdots + b_n x_n + e$$

Y   = Dependent Variable

$x_1 x_2$ = Independent Variable

a   = Constant

$b_1 b_2$ = Regression Coefficient

e   = Confounding Variable

A. Coefficient Of Determination Test

Model Summary				
Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.647a	.418	.393	6.38835
a. Predictors: (Constant), Understanding of Information Technology, Learning Motivation				

The coefficient of determination test in regression analysis is a statistic that measures the proportion of variance of the dependent variable that can be explained by the independent variables in the model. It is also referred to as the R-squared (R^2) test. R^2 values range between 0 and 1; lower values indicate that the model does not explain any variation in the data, while higher values indicate that the model explains all the variation in the data. A high R^2 indicates good model fit but does not necessarily guarantee its quality as overfitting can occur. Adjusted R^2, a modified version of R^2, considers the number of

independent variables and is useful for comparing models with different numbers of variables.

The independent variables Understanding Technology and Motivation to Learn can explain about 41.8% of the variation in the dependent variable (IP), according to the data attached, with an R2 of 0.418. This provides important information about the quality of the regression model constructed.

B. F Test

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1378.462	2	689.231	16.888	.000b
	Residual	1918.118	47	40.811		
	Total	3296.580	49			
a. Dependent Variable: IP						
b. Predictors: (Constant), Understanding of Information Technology, Learning Motivation						

With an F value of 16,888 and a significance (p-value) of .000, the F test of regression analysis shows that the model used to predict the achievement index is significant. This indicates that there is a significant relationship between the independent variables, namely Learning Motivation and Understanding Information Technology, and the dependent variable. In other words, at least one of the independent variables has a real influence on the achievement index.

C. Correlation Test

Correlations

		Motivasi Belajar	Pemahaman Teknologi Infornasi	Indeks Prestasi
Motivasi Belajar	Pearson Correlation	1	.556**	.505**
	Sig. (2-tailed)		.000	.000
	N	50	50	50
Pemahaman Teknologi Infornasi	Pearson Correlation	.556**	1	.616**
	Sig. (2-tailed)	.000		.000
	N	50	50	50
Indeks Prestasi	Pearson Correlation	.505**	.616**	1
	Sig. (2-tailed)	.000	.000	
	N	50	50	50
**. Correlation is significant at the 0.01 level (2-tailed).				

The results of the Correlations table show that:

a) Learning Motivation towards Understanding Information Technology has a significance of 0.00-0.05, which indicates there is a significant correlation. On the other hand, the significance of Learning Motivation towards Grade Point Average has a significance of 0.00-0.05, which indicates there is a significant correlation.

b) Understanding Information Technology on Motivation to Learn and Achievement Index has a significance of 0.00-0.05, which indicates there is a significant correlation.

c) The significance of the Achievement Index on Learning Motivation is 0.00 <0.05, which means there is a significant correlation. While the significance of the Achievement Index on Understanding Information Technology is 0.00 <0.05, which means there is a significant correlation.

D. Multicollinearity Test

Coefficients[a]			
		Collinearity Statistics	
Model		Tolerance	VIF
1	Learning Motivation	.690	1.448
	Understanding of Information Technology	.690	1.448
a. Dependent Variable: IP			

Tolerance and Variation Inflation Factor (VIF) values are included in the Multicollinearity Statistics Column. The Tolerance value for Motivation to Learn and Understanding of Information Technology is 0.690, which indicates that there is no significant multicollinearity problem. Although the calculations are not accurate, the VIF resulting from this Tolerance is approximately 1.448, well below the threshold of 10, indicating that the independent variables in the regression model do not exhibit significant multicollinearity. Consequently, this finding allows for a more accurate interpretation of the influence of each independent variable on the dependent variable (IP).

E. T Test (Hypothesis Test)

Hypothesis for Multiple Linear Regression

The following hypothesis can be formulated in multiple linear regression analysis with dependent variable Y (Grade Point Average) and independent variables X1 (Motivation to Learn) and X2 (Understanding of Information Technology)

Table 4. Hypothesis Parameters

No.	Hypothesis	Hypothesis Results
1.	Null Hypothesis (H0)	For X1 (Learning Motivation): H0: There is no significant influence between Learning Motivation on Achievement Index.

No.	Hypothesis	Hypothesis Results
		For X2 (IT Understanding):
		H0: There is no significant influence between Understanding IT on the Achievement Index.
		Combined Null Hypothesis:
		H0: There is no significant influence between Learning Motivation and Understanding of Information Technology on Grade Point Average simultaneously.
2.	Alternative Hypothesis (H1)	For X1 (Learning Motivation):
		H1: There is a significant influence between Learning Motivation on Achievement Index.
		For X2 (IT Understanding):
		H1: There is a significant influence between Understanding IT on the Achievement Index.
		Combined Alternative Hypothesis:
		H1: There is a significant influence between Motivation to Learn and Understanding of Information Technology on the Grade Point Average simultaneously.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	43.075	8.466		5.088	.000
	Learning Motivation	.198	.117	.227	1.697	.096
	Understanding of Information Technology	.306	.083	.492	3.675	.001

a. Dependent Variable: IP

T Test Results

Table 5. T Test Results

No.	Independent Variable	Interpretation Result
1.	Learning Motivation	a.) Coefficient = 0.198 b.) P value = 0.096 (not significant)
2.	Information Technology Understanding	a.) Coefficient: 0.306 b.) P value = 0.001 (significant)

The regression analysis in the file you supplied has a significance value of 0.096 and a regression coefficient of 0.198, both of which are greater than the typical cutoff point of 0.05. This suggests that learning motivation's impact on the dependent variable (IP) is not significant at the 95% confidence level. These results imply that while learning motivation is vital, the focus may need to be redirected to other, more crucial elements, like comprehension. Researchers or educators might think about looking at other factors that

can boost motivation to learn. To enhance learning outcomes, they might also think about how to integrate learning motivation with other strategies.

Overall, the analysis's findings indicate that while learning motivation is a valuable concept, its influence on IP is not sufficiently strong in the models under consideration to be deemed relevant. This implies that there is a higher chance that additional factors influencing results ought to be considered.

Comparison of T Count and T Table

Table 6. Comparison of T Count and T Table

No.	Test	Results
1.	**T Test Table**	$(df) = n - k - l$ Where n = Number of samples (50) and k = number of independent variables (2), then $(df) = 50 - 2 - 1 = 47$ At a significance level of 0.05 and df = 48, the T table (from the T distribution table) is = 2.012.
2.	**Comparison**	Learning Motivation: T Count = 1.697 < 2.012 (Not significant) Therefore, H0 is accepted (H1 is rejected) Understanding of Information Technology: T Count = 3.675 > 2.012 (Significant) Therefore, H1 is accepted (H0 is rejected)

Multiple Linear Regression Equation Analysis

$$Y = 43.075 + 0.198X1 + 0.306X2$$

a. **Constant:** When Learning Motivation and Understanding of Information Technology are equal to zero, IP is estimated at 43.075.
b. **Coefficient of Learning Motivation:** Each one-unit increase in learning motivation is expected to increase IP by approximately 0.198 units, but not significantly (p = 0.096).
c. **Coefficient of Information Technology Understanding:** Each one-unit increase in information technology understanding is expected to increase IP by approximately 0.306 units and is significant (p = 0.001).

It is possible that knowledge of information technology has a significant impact on accounting students' Grade Point Average (GPA), according to the T-test results of the multiple linear regression analysis. So that the null hypothesis is found, learning motivation has a regression coefficient of 0.198 and a p value of 0.096, which is greater than the significance level of 0.05, with a regression coefficient of 0.306 and a p value of 0.001, which shows a strong positive relationship. The findings show that learning motivation had no effect on this study. However, the findings emphasize how important it is to understand information technology to improve academic performance.

Because of several circumstances, including the emphasis on extrinsic rewards like grades, which might overwhelm intrinsic motivation for learning, learning motivation may not have a substantial impact on accounting students' GPA. Academic success may also be

more significantly influenced by other factors, such as study habits, course difficulty, and outside distractions.

The Self-Determination Theory (SDT) by Edward L. Deci and Richard M. Ryan (Ryan & Deci, 2017) may help provide a better explanation if the multiple linear regression analysis test does not produce satisfactory results for the learning motivation variable. First, the quality of motivation may be very important. Intrinsic motivation, which comes from personal interest and satisfaction, may be stronger than extrinsic motivation, which is driven by rewards or influences from external sources.

In addition, the fulfilment of the basic needs for autonomy, competence, and relatedness are very important in SDT; if students feel that these needs are not met in their learning environment, their motivation may not be strong enough to influence academic performance. Furthermore, it is possible that other variables, such as learning methods, social support, or personal conditions, have a more dominant influence on academic performance, thus obscuring the relationship between learning motivation and Grade Point Average (GPA).

In addition, the cause may stem from inadequate measurement of motivation; if the tools used to measure motivation are not credible or valid, the results of the regression analysis may not show the true relationship. Complex and difficult-to-measure relationships can also be caused by variations in the student population under study, who may have very diverse backgrounds and experiences.

Finally, unsupportive learning contexts, such as lack of interaction with lecturers or classmates, can reduce learning motivation, hindering its influence on academic performance. Therefore, it is important to consider the interaction between learning motivation, basic psychological needs and other factors that may affect students' academic performance.

Self-Determination Theory (SDT) developed by Edward L. Deci and Richard M. Ryan (Ryan & Deci, 2017) suggests that an understanding of information technology can have an impact on accounting students' Grade Point Average (GPA). According to this theory, fulfilling three basic needs-autonomy, competence, and connectedness-is essential to improving intrinsic motivation and academic performance.

One of the key requirements for SDT is capability. Accounting students who understand information technology will be better able to use the software and tools required for data analysis and preparation of financial statements. When students feel capable of using technology and confident, they are more motivated to learn and actively participate in the learning process. This sense of competence can improve their academic performance, which is indicated by a higher GPA.

Secondly, staying independent is important. By understanding information technology, students can be more independent in finding information, completing tasks and managing their time. They can also choose the study method that best suits their learning style, which increases their sense of autonomy. When students feel they have control over their learning process, they are more likely to actively participate and commit to their studies, which can lead to better results.

Third, another important need that can be affected by understanding information technology is connectedness. Students who are proficient in information technology can more easily collaborate with classmates, participate in online discussions, and access educational resources in the context of learning. This connectedness can help create a more supportive learning environment where students feel connected to their lecturers and peers. These beneficial social relationships can increase the desire to learn, which in turn can improve academic performance.

Overall, understanding information technology helps accounting students learn technical skills and self-reliance theory. Students can increase their intrinsic motivation by fulfilling the needs of competence, autonomy, and relatedness. This will result in improved academic performance and GPA.

Conclusions

According to this study, knowledge of information technology has a significant impact on accounting students' Grade Point Average (GPA). With a regression coefficient of 0.306 and a significance p value of 0.001, it can be concluded that students' GPA is expected to increase with each increase in the understanding of information technology.

In contrast, learning motivation showed a regression coefficient of 0.198, but was not significant (p = 0.096). This suggests that, although important, the effect of learning motivation on academic performance in this study is not large enough to be considered significant.

The results suggest that educational institutions should concentrate more on improving accounting students' understanding of information technology. In addition, although the impact of the research may be indirect, it is also necessary to consider methods to increase students' desire to learn. It is hoped that this research will provide educators and policy makers with insights into how to create more effective learning programs.

References

Chaniago, S. (2024). The Influence of Learning Motivation and Self-Efficacy on Accounting Understanding (Case Study at Institute of Information Technology and Business). *JoBIC : Journal of Business Integration Competitive*.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2013). Internet, mail, and mixed-mode surveys: The tailored design method *. In *Journal of Continuing Education in the Health Professions* (Vol. 30, Issue 3). Centro de Investigaciones Sociologicas. https://doi.org/10.1002/chp.20083

Ega Putri Nurrawi, A., Tu Zahra, A., Aulia, D., Greis, G., & Mubarok, S. (2023). Motivasi Belajar Siswa Terhadap Hasil Belajar Matematika. *PLUSMINUS : Jurnal Pendidikan Matematika*, *3(1)*.

Fauzi, E., Sinatrya, M. V., Ramdhani, N. D., Muhammad, Z., & Safari, R. (2022). Pengaruh kemajuan teknologi informasi terhadap perkembangan akuntansi Ruhuphy Ramadhan. *Jurnal Riset Pendidikan Ekonomi*, *7*, 2540–9247. http://ejournal.unikama.ac.idHal|189

Florestina Aron, E., Diana, N., & Junaidi, dan. (2021). Analisis Pengaruh Penyalahgunaan Teknologi Informasi Terhadap Perilaku Academic Fraud Mahasiswa Akuntansi Pada Masa Pandemi Covid-19 Dengan Motivasi Belajar Sebagai Variabel Intervening (Studi Kasus Terhadap Mahasiswa Program Studi Akuntansi Pada Perguruan Tinggi Di Kota Malang). *E-JRA*, *10*.

Hanif, A. N., & Kurniawati, L. (2024). Pengaruh Pemahaman, Penerapan, Pemanfaatan Sistem Informasi Akuntansi dan Keterampilan Penggunaan Teknologi Informasi Dalam Perkembangan UMKM. *Jurnal Akademi Akuntansi Indonesia Padang*, *4*(1), 115–125. https://doi.org/10.31933/h8jese04

Kennison, S. M. (2012). Sex differences in cognitive abilities (3rd edition). Diane F. Halpern. Lawrence Erlbaum Associates, Mahwah, NJ, 2000. No. of pages 420. ISBN 0-8058-2792-7. Price: $39.95. *Applied Cognitive Psychology*, *17*(3), 375–376. https://doi.org/10.1002/acp.883

Knesek, G. E. (2022, April 25). *Why Focusing on Grades Is a Barrier to Learning*. Https://Hbsp.Harvard.Edu/Inspiring-Minds/Why-Focusing-on-Grades-Is-a-Barrier-to-Learning.

Kusumawati, A. A. (2024). Self Regulation Dalam Meningkatkan Motivasi Belajar Peserta Didik. In *Jurnal Empati* (Vol. 13).

Matapere, N. M., & Nugroho, P. I. (2020). Pengaruh Hasil Belajar Pengantar Akuntansi Terhadap Tingkat Pemahaman Akuntansi Mahasiswa Prodi Akuntansi UKSW Dengan Motivasi Belajar Sebagai Variabel Moderasi. *JIMEA | Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, *Vol. 4 No. 1*.

Melasari, R. (2019). Pengaruh Motivasi Belajar, Penyalahgunaan Teknologi Informasi Dan Integrasi Mahasiswa Terhadap Perilaku Kecurangan Akademik Mahasiswa Akuntansi Sebagai Calon Akuntan (Studi Pada Mahasiswa Akuntansi Universitas Islam Indragiri). *Jurnal Akuntansi Dan Keuangan*, *Vol. 8, No.1*.

Mulaydinov, F. M. (2023). Integrated Information Systems In Industrial Enterprises And Business Activities. *TRANS STELLAR*, *13*(1).

Olivia, O. (2022, August 23). *Bagaimana Cara Uji Normalitas dengan SPSS? Ikuti langkah-langkahnya berikut ini?* Https://Buku.Kompas.Com/Read/1965/Bagaimana-Cara-Uji-Normalitas-Dengan-Spss-Ikuti-Langkah-Langkahnya-Berikut-Ini.

Permana, R. A., & Ikasari, D. (2023). Uji Normalitas Data Menggunakan Metode Empirical Distribution Function Dengan Memanfaatkan Matlab Dan Minitab 19. *Seminar Nasional Riset Dan Inovasi Teknologi (SEMNAS RISTEK)*.

Putri, C. P., Mayangsari, M. D., & Rusli, D. R. (2018). Pengaruh Stres Akademik Terhadap Academic Help Seeking Pada Mahasiswa Psikologi Unlam Dengan Indeks Prestasi Kumulatif Rendah The Influence Of Academic Stress On Academic Help Seeking

Among Psychology Student Of Unlam With Low Grade Point Average. In *Jurnal Kognisia* (Vol. 1, Issue 2).

Ryan, R. M., & Deci, E. L. (2017). *Self Determination Theory (Basic Psychological Needs in Motivation, Development and Wellness)*. The Guilford Press.

Shamsiya Abidovna, A. (2024). The Role Of Information Technology In The Personnel Management System. *International Scientific Journal : Modern Science and Research*, *3*(2). https://doi.org/10.5281/zenodo.10647479

Sholeh, M., & Andayati, D. (2023). Penerapan Metode Clustering dengan Algoritma K-Means Pada Pengelompokan Indeks Prestasi Akademik Mahasiswa. *SKANIKA: Sistem Komputer Dan Teknik Informatika*, *6*(1), 51–60.

Sudariana, N., & Yoedani, M. M. (2021). *Analisis Statistik Regresi Linier Berganda*. https://seniman.nusaputra.ac.id/index.php/seniman/article/download/40/18

Thibault Landry, A., Zhang, Y., Papachristopoulos, K., & Forest, J. (2020). Applying self-determination theory to understand the motivational impact of cash rewards: New evidence from lab experiments. In *International Journal of Psychology* (Vol. 55, Issue 3, pp. 487–498). Wiley-Blackwell Publishing Ltd. https://doi.org/10.1002/ijop.12612