Student Course Engagement for Students of the Faculty of Economics State University of Medan

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Abstract. This study investigates the dual role of students, balancing academic responsibilities with active engagement in lecture-related activities. Focusing on the Faculty of Economics at State University of Medan, the research evaluates the extent of student involvement in lectures. It also explores correlations between lecture engagement, Grade Point Average (GPA), and on/off-campus activities. Utilizing a survey method, data was gathered from students who completed the Course Registration System (KRS) in the even semester. Structural equation modeling (SEM) was employed for data analysis. Findings reveal high levels of student engagement in accounting education courses. Additionally, GPA significantly influences course engagement (t-statistic: 1.965), while both on and off-campus activities exert a notable impact (t-statistic: 10.958). This study sheds light on the intricate interplay between student involvement and academic performance in economics education.

Keywords: Student Engagement, Academic Performance.

1 Introduction

Higher education is an important stage in a person's life to acquire knowledge, skills, and preparation necessary to face an increasingly complex and competitive job market. At the level of higher education, the Faculty of Economics at Medan State University plays a crucial role in producing competent graduates ready to compete in the field of economics. One of the academic programs offered by the Faculty of Economics is Accounting Education, with the objective of preparing students to graduate as exceptional professionals. [1]

In accounting education, the factors influencing students success levels are crucial to understand. One significant factor contributing to student success is the level of engagement with the courses they are taking. Engagement, in this context, refers to the condition in which students actively participate in the learning process, are motivated, and have a strong sense of responsibility for their academic success. The level of student engagement can influence

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learning outcomes, information retention, and the development of skills relevant to the job market.

In the context of this research, the researcher is interested in exploring the relationship between the level of student course engagement and variables such as Cumulative Grade Point Average (CGPA) and student activities both on and off campus. CGPA is a common indicator used to assess students' academic achievements [2]. It reflects the learning outcomes and academic achievements of students throughout their studies. On the other hand, student activities encompass participation in student organizations, social activities, attendance at seminars or workshops, as well as involvement in academic and non-academic activities outside the campus environment.

Prior studies have pinpointed various factors that may have an impact on student engagement levels, including CGPA and participation in student activities [3]. Nevertheless, there is a dearth of focused research investigating the correlation between these variables and the degree of engagement among students pursuing Accounting Education within the Faculty of Economics at Medan State University. Consequently, the primary goal of this research is to bridge this knowledge gap by scrutinizing the interconnection between CGPA, and both on-campus and off-campus student involvement in the Accounting Education program.

Through comprehending the link between CGPA, and both on-campus and off-campus student involvement, the faculty can design more efficient approaches and initiatives to boost student engagement within the realm of accounting education. The outcomes of this study are anticipated to have a substantial impact on elevating the standards of accounting education within UNIMED's Faculty of Economics. Furthermore, this research is expected to yield insights into the determinants of student engagement in accounting courses on a broader scale. It can serve as a valuable reference for other institutions of higher learning seeking to enhance student engagement and academic achievement.

2 Method

The population of this study consists of students from the Accounting Education Program at the Faculty of Economics, Universitas Negeri Medan. The criteria for the subjects of this study are all students who are actively participating in the lecture activities, meaning those who have already filled out the Course Registration System (KRS) for the even semester.

The sampling technique used is non-random sampling. This technique was chosen because it emphasizes convenience in the data collection process. For this reason, the researcher selected samples from classes with courses that are easily accessible by directly contacting the lecturers in charge of those courses. The researcher selected classes consisting of students from the even semester: semesters 2, 4, and 6. Additionally, the researcher also selected some students who are around the Faculty of Economics at Universitas Negeri Medan and are willing to fill out the research questionnaire. This additional selection of respondents was done due to limitations in accessing all classes.

The data for all research variables in this study were collected using a questionnaire through a survey method. A survey is a measurement process used to gather information in a well-structured interview, with or without an interviewer [4]. The survey in this research was

conducted by sending the questionnaire electronically to respondents who met the criteria mentioned above. The research instrument was adapted from the Student Course Engagement Questionnaire (SCEQ) [3]. This measurement tool consists of 24 items.

This study tests construct validity in three stages: Convergent Validity, Discriminant Validity, and Reliability. Convergent validity is related to the principle that measures of a construct should have high correlations [4]. To calculate convergent validity in this study, Confirmatory Factor Analysis (CFA) was used. Observed variables are considered valid if they have a standardized loading factor ≥ 0.7 and a t-value ≥ 1.96 [4]. If they do not meet these criteria, the observed variables will be removed, and a retest will be conducted [4].

Next, Discriminant Validity indicates the extent to which the constructs used truly differ and are unique in capturing phenomena compared to other constructs [5]. Discriminant validity in this study is tested by comparing the average variance extracted for each pair of constructs with the squared correlation estimates between those constructs [5]. The extracted variance estimates should be greater than the squared correlation estimates. This logic is based on the idea that latent constructs should better explain the variance in the measured items that they share compared to other constructs. This test provides strong evidence for discriminant validity [5].

Lastly, Reliability Testing is conducted to assess the consistency of a measurement. High reliability indicates that the indicators have high consistency in measuring their latent constructs [4]. Construct reliability is calculated from the sum of squared factor loadings for each construct and error variance terms for the construct. A construct has good reliability if it has a construct reliability value of ≥ 0.7. High construct reliability indicates internal consistency, meaning it consistently measures the same latent construct [5].

The data analysis in this study employs Structural Equation Modeling (SEM). In data analysis, SEM relatively produces more dynamic and sophisticated model fit assessments compared to regression analysis. In the data analysis process using SEM, this study employs the Maximum Likelihood Estimation (MLE) model estimation technique. MLE is a flexible approach for parameter estimation in terms of obtaining the best likelihood for the model fit. This study utilizes AMOS 19 for each step of model estimation and model fit testing [5].

3 Results and Discussion

3.1 Sample Demographics

This research has collected 102 pieces of data. These data were then tabulated and analyzed. The data tabulation on the sample's demographics shows that out of the 102 respondents, there are 14 (13.7%) male respondents and 88 (86.3%) female respondents. These figures indicate that females dominate the respondents. This cannot be controlled as women are indeed dominant in the demographic of the Faculty of Economics students. In terms of age, the respondents are represented within the age range of 18 to 23 years. This is good because the respondents represent each class, so the responses obtained reflect the Faculty of Economics students' general involvement with learning communities.

Table 1. Sample's Demographics

	N	%
Gender		
Man	14	13,7%
Woman	88	86,3%
Total	**102**	**100,00%**
Age		
18	2	1,4%
19	24	16,7%
20	45	54,9%
21	16	22,2%
22	10	4,9%
Total	**102**	**100,00%**

3.2 Descriptive Analysis

In this study, the level of Student Course Engagement in Accounting education is observed through several variables reflecting their level of participation and interaction in the learning process. The measured variables include skill engagement, Emotional Engagement, Participation Engagement, and performance engagement.

Descriptive analysis indicates that the majority of Accounting education students demonstrate a good level of Student Course Engagement in their learning. Frequency and percentage measurements show that about 60% of students actively participate in class discussions, with participation rates exceeding 75% of the total discussion sessions. This indicates active interaction between students and instructors in the classroom, where students actively contribute to discussions and idea exchange.

Skill engagement refers to an individual's ability to understand, apply, and develop skills required in a field of knowledge or work. In this context, the level of engagement or skill engagement reflects how involved, active, and dedicated students are in developing these skills. This can be measured through participation in class discussions, attendance, participation in group assignments, presentations, projects, or exams reflecting the application of relevant skills in the field of Accounting.

In this study, 60 percent of students demonstrate an understanding of course material, seek out new reading sources, study notes in addition to lecture notes, and listen attentively during lectures. The analysis of online resource usage shows a high level of engagement. About 80% of students regularly use online resources, such as digital learning platforms, to access course materials, assignments, or additional readings. This indicates that students utilize technology as a means to support their learning outside the classroom, which can enhance engagement and accessibility to learning materials. Attendance also serves as a crucial indicator of student engagement. Attendance analysis shows that about 70% of students have attendance percentages above 90%, indicating a fairly high attendance rate in lectures. Good attendance reflects students' commitment to the learning process and their interest in actively participating in lectures.

Furthermore, the analysis of emotional engagement encompasses the level of individual care, interest, and emotional involvement in the learning material and overall learning experience. Descriptive analysis results show that about 80% of Accounting education students demonstrate a high level of emotional engagement in learning. They show high concern for the learning material, exhibit interest and enthusiasm in attending lectures, and actively engage in class discussions and activities. Additionally, about 75% of students exhibit positive emotional responses to Accounting learning material. They demonstrate strong interest in the topics taught. However, there is variation in the level of emotional engagement among students. Approximately 25% of students may exhibit lower levels of emotional engagement, which can be influenced by factors such as personal motivation, learning preferences, or perceptions of the learning material.

Overall, the descriptive analysis results, using percentages, depict that about 80% of Accounting education students demonstrate a high level of emotional engagement. This indicates a strong involvement and positive interest in the learning experience. Although there is variation in emotional engagement levels, these percentages provide an overview of the extent to which students are emotionally engaged in the context of Accounting education.

As for the Participation Engagement variable, the analysis of participation in group assignments shows that about 45% of students consistently participate in group tasks, while some other students may demonstrate lower levels of participation. This indicates that there is variation in the level of engagement in the context of group work, which can be influenced by factors such as motivation, coordination abilities, or adherence to task deadlines.

The next variable, Performance Engagement, encompasses the level of involvement, diligence, and achievements attained by individuals in reaching set goals and performance standards. Descriptive analysis results show that about 85% of Accounting education students demonstrate a high level of engagement in their lectures. They actively participate in individual and group tasks, complete tasks on time, and demonstrate commitment to the quality of work produced.

Additionally, about 80% of students achieve an adequate level of academic achievement in Accounting education. They are capable of understanding and applying accounting concepts effectively in assignments and exams. However, there is variation in the level of performance engagement among students. Approximately 15% of students may exhibit lower levels of performance engagement, which can be influenced by factors such as personal motivation, task difficulty level, or resource limitations.

Overall, the descriptive analysis results, using percentages, depict that about 85% of Accounting education students demonstrate a high level of engagement. This indicates a strong involvement in tasks and achieving adequate results in academic goals. Despite variations in Student Course Engagement, these percentages provide an overview of the extent to which students are involved in achieving expected outcomes in the context of Accounting education.

3.3 Construct Validity

Furthermore, the researcher examined construct validity through cross-loadings to assess convergent validity, Root of AVE and correlation matrix to measure discriminant validity, and Cronbach's Alpha to gauge reliability. The results of the cross-loading measurements indicate

that each loading has a value > 0.7, and no loading has a value < 0.7 on more than one construct [5]. Thus, no measurement items were dropped, and each dimension meets construct validity.

3.4 Convergent Validity

Convergent validity in this study was assessed by checking the factor loading values and the Average Variance Extracted (AVE). The factor loading indicates that all potential configurations should be higher than 0.5. The research results show that the total factor loading values are greater than 0.50. Additionally, this study measured the AVE of each analyzed construct. This was done to enhance the statistical conclusions regarding the convergent validity results. If the AVE score is greater than 0.50, all configurations claim good convergent validity. Table 2 displays the AVE results, indicating that each configuration meets the criteria for convergent validity as the AVE values are greater than 0.5 [5].

3.5 Discriminant Validity

After obtaining convergent validity, this study tested for discriminant validity and demonstrated that each configuration is indeed distinct from one another. This was done by observing the square root of AVE values plotted diagonally on the correlation matrix and checking if the AVE values exceed the correlations between variables, which are typically the lowest [5]. Table 2 shows the AVE route values. All of these are higher than the correlation coefficients of the subconditions, indicating that each configuration meets the criteria for discriminant validity.

3.6 Reliability

In the final section of construct validity, this study assessed data reliability using Cronbach's alpha and Composite Reliability. Internal data reliability consistency requires a minimum of 0.6 for both Cronbach's alpha and composite reliability values [6]. The lowest Cronbach's alpha values for each variable in this study are above 0.80, as presented in Table 2. These results are consistent with the previously tested convergent and discriminant validity outcomes.

Table 2. Construct Reliability and Validity

Variable	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Grade Point Average (GPA)	1.000	1.000	1.000	1.000
on/off-campus activities	1.000	1.000	1.000	1.000
SEC	1.000	1.000	1.000	1.000
Skill Engagement	1.000	1.000	1.000	1.000
Emotional Engagement	1.000	1.000	1.000	1.000
Participation Engagement	1.000	1.000	1.000	1.000
Performance Engagement	1.000	1.000	1.000	1.000

3.7 Structural Model Testing

The testing of the structural model was conducted using the SmartPLS 3.0 application. The structural model testing was carried out to determine the coefficient values of the causal relationships between constructs. GPA (Grade Point Average) demonstrates a significant

influence on Student Course Engagement with a t-statistic value of 1.965. This t-statistic value is above the threshold for significance, which is > 1.96 [5]. Students with a high GPA generally have a good track record in receiving and responding to feedback provided by instructors or classmates. They tend to use this feedback for learning and development, adjusting their behavior based on the advice and guidance given. Additionally, students with a good GPA typically have a higher concern for their academic outcomes. Consequently, this ultimately enhances students' Student Course Engagement or academic involvement in learning and helps them achieve better results. These research findings align with Wang, M.T.'s study [7].

Table 3. Path Coefficient

Variable	Original Sample	Sample Mean	Standard Deviation	T statistic	P Values
GPA => SEC	0.079	0.079	0.040	1.965	0.050
on/off-campus activities =>	0.424	0.427	0.039	10.958	0.000
SEC => Emotional Engagement	0,977	0.978	0.005	214.034	0.000
SEC => Participation Engagement	0.982	0.982	0.003	371.178	0.000
SEC => Performance Engagement	0.931	0.932	0.019	48.397	0.000
SEC => Skill Engagement	0.985	0.985	0.003	368.032	0.000

Similarly, both on-campus and off-campus activities also have a positive impact on student course engagement. When students engage in activities that are interesting and meaningful, they tend to be more motivated to attend classes and study diligently. Engaging in campus activities also helps students build stronger social networks. This social interconnectedness ultimately has a positive impact on Student Course Engagement because students can collaborate and share experiences in the courses they take. Therefore, overall, on-campus activities provide additional experiences and opportunities for students that can positively influence their engagement in the classroom. This aligns with research by Strayhorn [8], Pascarella [9], and Carini et al [10]which found that both on-campus and off-campus activities have a positive influence on Student Course Engagement.

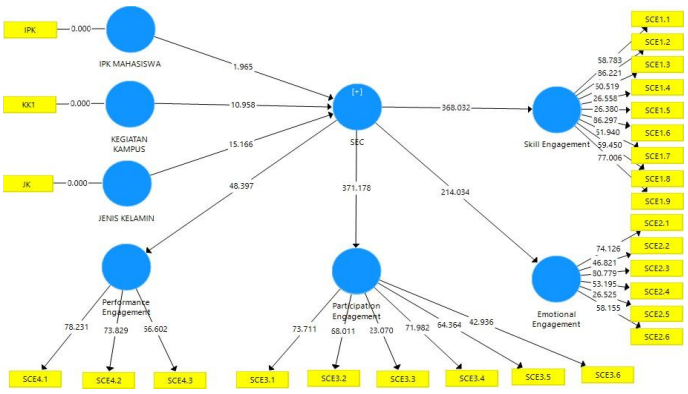

Fig. 1. Results of Structural Model Testing.

Furthermore, GPA and On-campus and Off-campus Activities collectively demonstrate a positive and significant influence on Student Course Engagement at α= 5% with a p-value of 0.000 (<0.05). This aligns with the study by Hidayah [11] which indicates that GPA and On-campus and Off-campus Activities have a positive impact on Student Course Engagement. These results indicate that these factors interact with each other in shaping student involvement in learning or in the classroom.

4 Conclusion

This study aims to assess the level of student course engagement and examine the influence of GPA and on-campus and off-campus activities on student course engagement in the Faculty of Economics, Department of Accounting. The respondents in this study were 102 even-semester accounting students. The majority of respondents were female, aged 17-22 years old. The testing conducted in this study included data validity and reliability tests, as well as Structural Model Measurement and hypothesis testing using the Smart PLS 3.0 tool.

The results of this study indicate that overall, the level of student course engagement shows that about 85% of accounting education students demonstrate a high level of engagement. This indicates a strong involvement in tasks and achieving adequate results in academic goals. Although there is variation in Student Course Engagement, these percentages provide an overview of the extent to which students are involved in achieving expected outcomes in the context of Accounting education.

As for the variables GPA and on-campus and off-campus activities, they show a positive and significant influence on Student Course Engagement. This aligns with the study by Rostiana and Indriayu [11] which indicates that GPA and on-campus and off-campus activities have a positive impact on Student Course Engagement. These results indicate that these factors interact with each other in shaping student involvement in learning or in the classroom.

This research is expected to generate recommendations for improving classroom learning. It can serve as a reference for college instructors, emphasizing the importance of student engagement to make learning materials more easily understood and applied by students. It also provides additional knowledge related to Student Course Management, highlighting that students have

multiple roles and can be more aware of the importance of taking responsibility as learners, thus balancing their roles effectively.

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