Personal Factors as Determinants of Perceived Complexity in Accounting Courses among Accounting Education Students at Universitas Negeri Medan

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Abstract. This study aims to examine the impact of personal factors on students' perceptions regarding the complexity of accounting courses within the Accounting Education Study Program at Universitas Negeri Medan. The personal factors investigated include motivation, academic ability, prior learning experiences, and attitudes toward accounting subjects. Employing a quantitative approach, the study utilized a survey method through questionnaires distributed to 288 students across the 2nd, 4th, 6th, and 8th semesters who had completed accounting courses. The data were analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method through the SmartPLS 3.0 software. The findings indicate that all four personal factors significantly influence students' perceptions of the complexity of accounting subjects. These results provide valuable insights for the development of instructional strategies that consider students' personal characteristics in order to enhance the effectiveness of accounting education.

Keywords: *personal factors, accounting complexity, motivation, academic ability, learning experience, attitude*

1 Introduction

Accounting serves as a core subject within the Accounting Education Study Program at Universitas Negeri Medan. Many students view accounting as a challenging and demanding discipline to comprehend. This perception is manifested in the difficulties students face when dealing with fundamental concepts such as general journals, ledgers, income statements, and balance sheets [1]. The perceived complexity is not merely attributed to the breadth of the material, but also to the necessity for students to engage in analytical and integrative thinking processes.

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Personal factors have been widely acknowledged as critical elements that influence how students perceive the complexity of a subject. These include motivation, academic ability, prior learning experience, and individual attitudes toward accounting. Research suggests that students with strong intrinsic motivation and a solid academic foundation are more capable of navigating the demands of accounting coursework [2], [3]. Conversely, those with low academic ability or negative attitudes toward the subject are more likely to experience difficulties [4].

Self-Perception Theory, proposed by Bem [5], provides a theoretical basis for understanding how individuals form attitudes and judgments based on their own behaviors and experiences. Applied in the context of accounting education, students who routinely struggle with accounting tasks may interpret these experiences as evidence that the subject is inherently difficult, thus reinforcing negative perceptions.

Despite the relevance of these factors, a noticeable gap persists in the literature. Most existing research has approached the issue of accounting complexity from broader perspectives, including institutional, environmental, or technological contexts. Few studies have isolated personal factors and analyzed their individual contributions to perceived subject complexity. This study seeks to fill that gap by focusing solely on personal dimensions—specifically, motivation, academic ability, prior learning experience, and attitude—within the accounting education context.

A better understanding of these personal factors is crucial for educators and curriculum designers. For instance, prior exposure to related subjects such as mathematics or economics can significantly enhance students' comprehension of accounting concepts. Similarly, a positive attitude toward the subject can lead to increased engagement and improved learning outcomes.

To foster a more supportive learning environment, it is essential for instructors to identify students with low motivation and provide interventions such as mentoring, goal-setting workshops, or interactive learning modules. Furthermore, assessments that emphasize real-world applications over memorization may help bridge the gap between theoretical knowledge and practical understanding, thus reducing perceived difficulty.

This study aims to contribute empirical evidence to the field of accounting education by analyzing the role of personal factors in shaping students' perceptions of accounting course complexity at Universitas Negeri Medan.

2 Method

This study employed a quantitative associative approach to analyze the influence of personal factors on students' perceptions of the complexity of accounting courses. The personal variables included in the study were motivation, academic ability, prior learning experience, and students' attitudes toward accounting subjects. The objective was to test the causal relationships between these variables and students' perceived complexity of the subject.

The study population comprises students from the Accounting Education Study Program, Faculty of Economics, Universitas Negeri Medan, spanning the 2nd, 4th, 6th, and 8th semesters. A total of 288 students who had completed accounting courses were targeted. The sampling

method used was non-random convenience sampling, selected due to accessibility and suitability with the study criteria.

Data collection was conducted via an online questionnaire distributed with the assistance of enumerators. The instrument was adapted from validated sources and designed using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." Prior to hypothesis testing, the instrument's validity and reliability were assessed to ensure its capacity to measure the intended constructs accurately [6].

The data were analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach, utilizing SmartPLS version 4. Parameter estimation employed the Maximum Likelihood Estimation (MLE) method. Convergent validity was confirmed where indicator loadings were ≥ 0.70 and t-values were ≥ 1.96 [7]. The assessment of discriminant validity involved comparing each construct's Average Variance Extracted (AVE) with the squared correlations among constructs. An AVE value exceeding the squared correlations signified that discriminant validity was adequately met. AVE values greater than the squared correlations indicated acceptable discriminant validity [8].

Construct reliability was measured using composite reliability and Cronbach's alpha, with values ≥ 0.70 considered acceptable for internal consistency [9]. To evaluate model fit, several goodness-of-fit indices were reviewed, including absolute fit indices, incremental fit indices, and parsimony fit indices, to ensure the empirical robustness of the theoretical model [10].

3 Results and Discussion

3.1. Sample Demographics

This study obtained 260 valid responses from a target population of 288 students across the 2nd, 4th, 6th, and 8th semesters. The responses were tabulated and analyzed. Of the respondents, 20 were male (7.69%) and 240 were female (92.31%), indicating a strong female majority a pattern typical within the Faculty of Economics, where female students generally outnumber males. The respondents' ages ranged from 18 to 23 years, providing representation across different academic stages and ensuring that the data capture a broad range of student perspectives regarding the perceived complexity of accounting subjects.

The respondents' ages ranged from 18 to 23 years, providing a representative sample across various academic stages. This distribution ensures that the data reflect a broad range of student perspectives regarding the complexity of accounting subjects.

Table 1. Sample's Demographics

	N	%
Gender		
Male	20	7.69%
Female	240	92.30%
Total	**260**	**100%**
Age		
18	8	1.4%
19	56	16.7%
20	90	54.9%
21	54	22.2%
22	46	4.9%
23	6	2.31%
Total	**260**	**100%**

3.2. Complexity of Accounting Courses

Complexity of accounting courses refers to students' perceptions of the level of difficulty encountered in understanding, learning, and mastering accounting subject matter. Such complexity arises from the nature of accounting courses, which combine theoretical concepts, analytical skills, and practical application simultaneously. The level of complexity perceived by students is influenced not only by the characteristics of the course content but also by internal student conditions, one of which is personal factors.

Personal factors include motivation, academic ability, previous learning experience, and attitude towards the course. Motivation serves as the primary driver that determines the extent to which students are willing to invest time and effort in comprehending challenging materials. Academic ability influences students' capacity to grasp abstract concepts and process complex information. Previous learning experience can facilitate the integration of new knowledge with existing understanding, making the learning process more efficient. Attitude towards the course, whether positive or negative, affects student engagement in the learning process and ultimately shapes their perception of the course's difficulty.

Therefore, the complexity of accounting courses does not solely originate from the teaching materials or instructional methods but is also significantly influenced by students' personal conditions. When personal factors are at an optimal level—high motivation, adequate academic ability, relevant prior learning experience, and a positive attitude—the perceived complexity can be substantially reduced. Conversely, deficiencies in one or more personal aspects may increase the perceived difficulty, potentially hindering learning achievement.

3.3. Personal Factors

Personal factors include key aspects originating from within students, such as learning motivation, academic ability, prior learning experience, and attitudes toward the subject. These four aspects are interrelated and play an essential role in shaping students' readiness and success

in the learning process. Motivation serves as the primary driver influencing students' commitment to attend lectures and complete assignments. Academic ability determines how well students can grasp the material, while prior learning experience provides a foundation or reference point for engaging with new topics. Attitudes toward the subject influence whether students approach learning with enthusiasm or reluctance.

Table 2. Personal Factors

Scale	Number Of Student	Percentage (%)
Strongly Disagree	11	4.17
Disagree	22	8.33
Neutral	43	16.67
Agree	87	33.33
Strongly Agree	97	37.5
Total	260	100%

The descriptive analysis in Table 2 shows that the majority of students hold a positive perception of academic factors, with 35% agreeing and 36.15% strongly agreeing. This suggests that over 71% of students believe the academic environment supports their understanding of the subject. A portion of respondents (14.23%) selected a neutral stance, indicating uncertainty or mixed experiences, while smaller percentages (9.23% disagree and 4.39% strongly disagree) suggest that some students perceive shortcomings in teaching quality, curriculum relevance, or instructional strategies. Overall, the findings indicate that academic factors are generally perceived as favorable and conducive to learning in the accounting program.

3.4. Reliability and Validity Testing

Using SmartPLS, all indicator items demonstrated outer loading values greater than 0.70, confirming strong convergent validity. Both Cronbach's alpha and composite reliability values for all constructs exceeded 0.90, while Average Variance Extracted (AVE) values were greater than the recommended threshold of 0.50, indicating satisfactory internal consistency and convergent validity.

Table 3. Construct Reliability and Validity

Construct	Cronbach's Alpha	Rho A	Composite Reliability	Ave
Personal Factors	0.923	0.923	0.946	0.813
Academic Ability	0.930	0.931	0.950	0.827
Accounting Course Complexity	0.942	0.943	0.956	0.813
Motivation	0.931	0.931	0.951	0.828
Prior Learning Experience	0.928	0.930	0.949	0.823
Attitude Toward Subject	0.942	0.943	0.958	0.851

Table 3 shows the results of the construct reliability and validity tests. The Cronbach's Alpha values for all constructs range from 0.923 to 0.942, exceeding the threshold of 0.70, indicating high internal consistency. Similarly, the composite reliability values, ranging from 0.946 to 0.958, are well above the minimum requirement of 0.70, demonstrating strong reliability. The

Average Variance Extracted (AVE) values, ranging from 0.813 to 0.851, also meet the recommended minimum of 0.50, indicating good convergent validity. This means that each set of indicators sufficiently represents its respective latent variable.

3.5. Outer Loading

The assessment results in Table 4 show that all indicators for the constructs Personal Factors, Motivation, Academic Ability, Previous Learning Experience, Attitude Towards the Course, and Accounting Course Complexity have outer loading values ranging from 0.878 to 0.939, exceeding the recommended threshold of 0.70 [11]. These results confirm satisfactory convergent validity, with all indicators demonstrating strong correlations with their respective constructs. No indicators were removed, and all were retained for subsequent structural model analysis.

Table 4. Outer Loading

Personal Factors	Motivation	Academic Ability	Previous Learning Experience	Attitude Towards the Course	Accounting Course Complexity
FP1 0.906	FP1.1 0.912	FP2.1 0.928	FP3.1 0.921	FP4.1 0.921	KMA1 0.913
FP2 0.905	FP1.2 0.894	FP2.2 0.906	FP3.2 0.916	FP4.2 0.922	KMA2 0.899
FP3 0.884	FP1.3 0.924	FP2.3 0.901	FP3.3 0.914	FP4.3 0.909	KMA3 0.885
FP4 0.911	FP1.4 0.910	FP2.4 0.902	FP3.4 0.878	FP4.4 0.939	KMA4 0.901
					KMA5 0.910

3.6. Structural Model

3.6.1. The Influence of Personal Factors on the Perceived Complexity of Accounting Courses

The structural model was tested using SmartPLS 3.0 to determine the path coefficients of the causal relationships between constructs. The results indicate that personal factors (motivation, academic ability, previous learning experience, and attitude) have a significant influence on students' perception of the complexity of accounting courses. These factors interact to shape how students comprehend accounting material.

Table 5. Path Coefficients

Relationship Between Constructs	Path Coefficient	T-Statistic	P-Values
Motivation -> Complexity of Accounting Courses	0.253	116.71	0.000
Academic Ability -> Complexity of Accounting Courses	0.314	119.231	0.000
Previous Learning Experience -> Complexity of Accounting Courses	0.188	84.359	0.000
Attitude -> Complexity of Accounting Courses	0.245	100.676	0.000

3.6.2. Analysis of Findings

Motivation towards Accounting Courses

The research results show that motivation has a significant influence on the perceived complexity of accounting courses, with a t-statistic of 116.71. This finding strengthens the argument that motivation is a crucial personal factor in determining a student's perception of a subject's difficulty. Students with high levels of motivation tend to view academic difficulties as challenges to be overcome rather than as obstacles.

Academic Ability in Understanding Accounting

Academic ability, particularly in accounting comprehension and analytical skills, also influences how students cope with the complexity of the material. With a t-statistic of 119.231, academic ability is proven to have a significant effect. Students with better academic skills tend to find it easier to grasp the concepts in accounting.

Previous Learning Experience and Its Role in Accounting Education

The study's findings indicate that previous learning experience has a significant impact on the perceived complexity of accounting courses, with a t-statistic of 84.359. This value suggests that a student's academic background before taking an accounting course is a determinant of how they understand and respond to the material considered complex.

Attitude towards Accounting Courses

The research also found that students' attitude towards accounting courses significantly influences their perception, with a t-statistic of 100.676. A positive attitude and the effort demonstrated by students in facing the course will shape their perception that difficulties can be overcome.

The diagram in Figure 1 shows that all proposed research hypotheses were found to be significant. This is indicated by the t-statistic values for each path exceeding the threshold of 1.96, confirming that each personal factor (motivation, academic ability, previous learning experience, and attitude) has a significant influence on the perceived complexity of accounting courses.

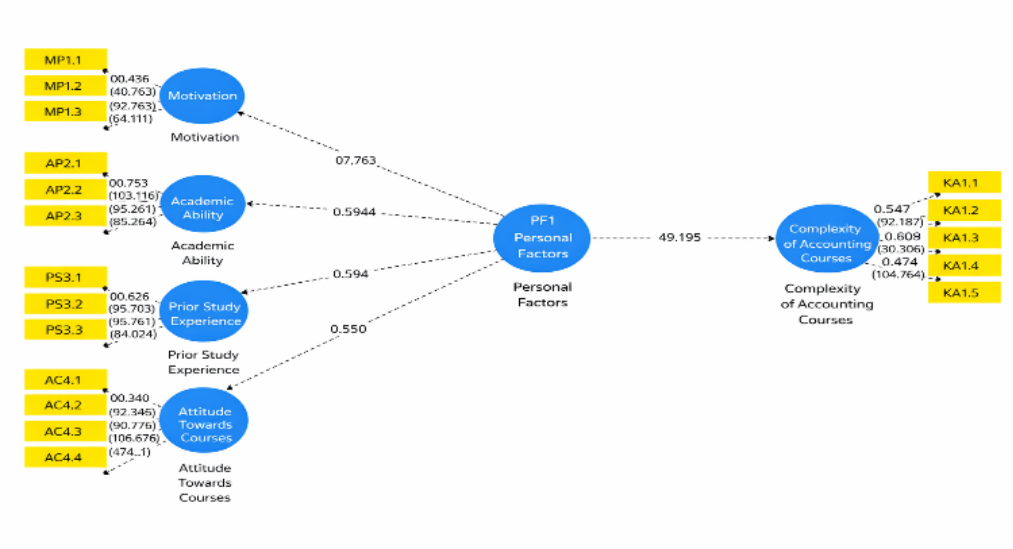

Fig.1. Path Coefficient

4. Discussion

Personal factors have been proven to significantly influence students' perceptions of the complexity of accounting courses. This study focused on four key aspects of personal factors: motivation, academic ability, prior learning experience, and attitude toward the subject. These findings reinforce existing theories and previous studies that internal student characteristics play a crucial role in learning success, especially in technical and conceptual subjects like accounting.

Learning motivation emerged as the dominant aspect affecting students' perception of course difficulty. Students with high intrinsic motivation tend to be more engaged in the learning process, more persistent, and more capable of developing independent learning strategies when faced with academic challenges [12][13][14]. In the context of accounting, motivated students are more likely to enjoy tasks such as preparing journals, compiling balance sheets, and understanding bookkeeping processes [15][16].

In addition, academic ability plays a key role in shaping perceptions of complexity. Students with strong logical, numerical, and analytical thinking skills find it easier to understand the abstract and systematic concepts in accounting [17][18]. Prior studies have shown that students with high academic achievement or GPA tend to perceive accounting as less difficult [19]. Conversely, students with weaker academic abilities often struggle to understand the logic behind accounting principles and the preparation of financial reports [20].

Prior learning experience also serves as an important predictor. Students who have previously taken courses in economics, business, or accounting during high school are generally more prepared for advanced content in higher education [21][22]. This previous exposure helps them connect new concepts with existing knowledge, making complex accounting material more approachable [23][24].

Furthermore, attitude toward the subject significantly impacts how students perceive course difficulty. A positive attitude enhances curiosity, persistence, and enthusiasm for learning. On the other hand, negative attitudes may lead to academic anxiety and passive participation in class [25][26]. This is supported by Self-Perception Theory, which suggests that a person's behavior and attitude toward a subject help shape their perception of it [27]. Students who actively demonstrate interest in accounting, even if they initially struggle, are likely to form the perception that accounting is a challenging but manageable subject [28].

Overall, these findings align with the constructivist learning approach, which emphasizes the role of students' subjective experiences and internal readiness in constructing understanding [29]. Therefore, reducing perceived complexity requires not only focusing on course content but also addressing the personal characteristics and learning needs of students [30][31].

5. Conclusion

This study concludes that personal factors significantly influence students' perceptions of the complexity of accounting courses. Specifically, motivation, academic ability, prior learning experience, and attitude toward the subject have a strong and significant effect on how students interpret the difficulty of accounting material. Among these, motivation emerges as the strongest predictor, reinforcing the importance of internal drive in academic success.

The findings demonstrate that students with high motivation and strong academic abilities are more likely to view accounting as manageable, while those lacking foundational knowledge or showing negative attitudes tend to perceive the subject as more complex. Moreover, students with positive prior experiences in learning related subjects also show reduced levels of perceived difficulty.

These results offer valuable implications for accounting educators and curriculum designers. By incorporating strategies that foster student motivation, strengthen academic skills, and cultivate positive attitudes toward accounting, educators can reduce perceived complexity and improve learning outcomes. Future studies are encouraged to explore how instructional interventions tailored to student profiles can further enhance understanding and retention in accounting education.

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