

THE MODERATING EFFECT OF GENDER ON THE INFLUENCE OF LEARNING APPROACHES AND ACADEMIC ACHIEVEMENT AMONG ACCOUNTING STUDENTS AT UNIVERSITI PENDIDIKAN SULTAN IDRIS

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Article history

Received date : 19-6-2026
Revised date : 20-6-2026
Accepted date : 25-7-2026
Published date : 1-8-2026

To cite this document:

Chan, K. B., Khamar Tazilah, M. D. A., Md Lazim, C. S. L., Ismail, N. D., & Syed AbuThahir, S. B. (2026). The moderating effect of gender on the influence of learning approaches and academic achievement among accounting students at Universiti Pendidikan Sultan Idris. *International Journal of Accounting, Finance and Business (IJAFB)*, 11 (67), 377 - 391.

Abstract: *This study explores the impact of learning approaches deep, strategic, and surface on the academic achievement of accounting students at Universiti Pendidikan Sultan Idris (UPSI). Using a quantitative research design, data were collected from 142 students through structured questionnaires. Findings reveal that strategic learning is the most commonly adopted approach, followed by surface and deep learning. Strategic learners achieved higher Cumulative Grade Point Average (CGPA) scores, while deep learning, despite fostering critical understanding, was less effective in producing immediate academic gains. Gender analysis showed that female students slightly favoured deep and strategic approaches, while male students leaned toward surface learning. The study emphasizes aligning teaching strategies with students' learning preferences and recommends interventions to promote effective learning habits.*

Keywords: *Learning Approaches, Academic Achievement, Strategic Learning, Deep Learning, Surface Learning, Gender Influence, Accounting Education*

Introduction

Learning approaches are commonly categorized into three broad types: deep, surface, and strategic (Marton & Säljö, 1976). A deep learning approach strives for a comprehensive understanding of the topic and how it can be applied in a wider context. These learners will likely consider the information critically, connect it with previous knowledge, and attempt to clarify concepts. The surface approach is characterised by memorization and surface working, commonly driven by a need to pass examinations. The strategic approach consists of systematic and deliberate activities to achieve the best grades in a study course, commonly by careful planning and organisation.

Empirical evidence has also confirmed that students who adopt deep and strategic learning styles perform academically better than others. Such learning styles also correlate with increased levels of intrinsic and extrinsic motivation (Owusu et al., 2019). The surface learning styles usually correspond with poorer performance in academics because these learning styles concentrate on short-term memorisation rather than deep comprehension. These considerations present an important question: how do universities encourage the adoption of efficient learning styles to enhance the performance in academics of students?

Furthermore, gender differences in learning styles have also been the topic of study in education. Male and female differences in learning, in the processing of knowledge, and in applying knowledge may provide informative knowledge regarding their learning style. Some have investigated differences in learning style in various studies and in most cases pointed to the fact that each gender appeared to have a preferred style. Some studies have highlighted the fact that students who happen to be female are likely to adopt deep learning methods. Such a leaning has a higher potential ability to be able to comprehend, analyse and contextualise information in a meaningful manner. Rather than surface learning or focusing entirely on short-term results, female students may engage with learning content in a more analytical manner by relating new information with previous knowledge in seeking an integrated understanding.

Conversely, male students have in some instances demonstrated a surface or strategic learning style. These learning styles have a propensity to be outcome-focused as opposed to learning as a process. The surface or strategic learning style, for example, may involve learning with the sole intention of meeting short-term learning needs or guidelines without necessarily pursuing the principles behind them. The strategic style depicts a goal-oriented nature in that students intend to attain high grades or meet specific learning goals by maximizing study effectiveness rather than pursuing content as in the deep learning style. According to Eze, Ezenwafor, and Obidile (2016), these inclinations describe male students as being extrinsically motivated where concrete reward or short-term achievement takes precedence with female students being motivated by the desire to comprehend in-depth and long-term learning.

Although these inclinations vary widely, they do offer interesting perspectives on how gender might influence learning behavior. They also help to highlight the impact of broad contextual forces school learning cultures and histories, cultural values and norms, and individual goals on student learning styles. This serves to emphasize the necessity of continued study into the development of inclusive and efficient learning environments.

Moreover, academic achievement is a multifaceted phenomenon usually measured in terms of measures such as cumulative grade point average (CGPA). CGPA in accounting education is an important measure of students' ability to translate conceptual knowledge into practice. Strong associations have been indicated in a number of studies between deep and strategic learning styles and CGPA levels (Owusu et al., 2019). Greater understanding of these associations must be developed to inform interventions on fostering the use of efficient learning styles.

For instance, Universiti Pendidikan Sultan Idris (UPSI), one of Malaysia's leading public universities, takes a leading part in the professional and academic development of the students. Being particularly focused on graduate employment and academic achievement, UPSI presents an ideal context in which to study the impact of learning attitudes on academic performance. The accounting students in UPSI also have some specific challenges unique to them regarding learning of practical skills alongside theory-oriented teaching. Through this study, the most common learning attitudes of the accounting students in UPSI will be determined to observe its impact towards academic performance.

Addressing these issues is essential to improving academic performance, promoting equitable educational outcomes, and producing competent accounting graduates. This study aims to examine the effects of deep, surface, and strategic learning strategies on the academic achievement of accounting students at UPSI. It also addresses gaps in existing literature by investigating how these learning strategies influence academic performance. In addition, the study considers the role of gender in the application of learning strategies and its relationship with students' academic achievement.

Literature Review

This literature review aims to explore three key areas: deep, surface, and strategic learning approaches; their influence on academic achievement, as measured by CGPA; and the moderating role of gender in the use of these learning approaches.

Learning Approaches Theory

Learning approaches describe the ways students perceive, process, and engage with learning tasks. Rather than representing fixed personal characteristics, learning approaches are considered adaptive responses to the learning environment, instructional methods, assessment practices, and students' individual motivations. The concept was first introduced by Marton and Säljö (1976), who distinguished between deep and surface approaches to learning based on students' intentions when engaging with academic material. The research demonstrated that students who sought to understand the meaning of learning materials adopted fundamentally different strategies from those who focused primarily on memorisation.

Building upon this work, Biggs (1987) proposed the 3P Model (Presage–Process–Product), suggesting that students' learning outcomes are influenced by personal characteristics and learning environments (presage), learning approaches (process), and academic achievement (product). Later, Biggs, Kember, and Leung (2001) refined this framework by introducing the Revised Two-Factor Study Process Questionnaire (R-SPQ-2F), which has become one of the most widely used instruments for measuring deep and surface learning approaches in higher education.

Contemporary educational research further recognises that learning approaches are dynamic rather than static. Students frequently modify their learning strategies according to assessment requirements, teaching methods, perceived workload, and expected academic outcomes. Hattie and Donoghue (2016) argued that effective learning requires progression from surface acquisition of knowledge towards deeper conceptual understanding, while successful students are capable of integrating multiple learning strategies depending on the nature of academic tasks. Consequently, universities increasingly encourage instructional practices that promote meaningful learning rather than simple knowledge reproduction.

Within accounting education, learning approaches are particularly important because accounting programmes require students to combine conceptual understanding with technical competencies and professional judgement. Accounting graduates are expected not only to master accounting standards and regulations but also to apply analytical thinking in solving complex business problems. Consequently, understanding how different learning approaches influence academic achievement is essential for improving teaching effectiveness and graduate quality.

Deep Learning

According to Alrakaf and Abdelmageed (2021), deep learning correlates positively with long-term academic success and intellectual development as it fosters independent thinking and problem-solving skills. In their study of pharmacy students, they found that those who used deep learning strategies displayed higher performance in clinical reasoning and theoretical comprehension. Similarly, Wardana et al. (2020) noted that students who adopted deep approaches retained information more effectively and performed better in assessments requiring analytical reasoning. Deep learners are also better equipped for self-regulated learning, which has become increasingly important in modern higher education environments that emphasize autonomy, lifelong learning and critical engagement (Samydevan et al., 2021).

This learning style is not only effective for academic achievement but also aligns well with the goals of higher education institutions globally. Recent studies consistently report that deep learning positively contributes to higher-order cognitive development. Hattie and Donoghue (2016) argued that deep learning enables students to transfer knowledge into unfamiliar contexts, thereby improving critical thinking, problem-solving ability, and long-term retention. Similarly, Alrakaf and Abdelmageed (2021) reported that pharmacy students adopting deep learning strategies demonstrated stronger clinical reasoning and conceptual understanding than students relying primarily on memorisation.

Within accounting education, deep learning encourages students to interpret accounting standards, evaluate financial information critically, and apply professional judgement when solving practical problems. Rather than memorising accounting procedures, deep learners attempt to understand the rationale underlying accounting principles, making them better prepared for professional practice. Consequently, higher education institutions increasingly promote instructional strategies that encourage inquiry-based learning, collaborative discussions, and authentic assessment to cultivate deeper learning experiences.

Strategic Learning

According to Wardana et al. (2020), strategic learners are methodical and efficient. They tend to excel in standardized assessments due to their ability to prioritize content and tailor their efforts to align with grading criteria. These learners are typically skilled in time management, goal setting, and test preparation strategies, allowing them to perform well even in content-heavy academic environments. Supporting this view, a study by Ruhil Amal et al. (2022) involving undergraduates in Malaysian public universities found that students who adopted strategic learning approaches consistently reported higher CGPAs compared to their peers. This suggests that the ability to adapt and optimize learning strategies based on assessment demands and academic expectations plays a critical role in student success.

Ruhil Amal et al. (2022) reported that Malaysian university students adopting strategic learning approaches achieved significantly higher cumulative grade point averages than their peers. Similarly, recent research suggests that strategic learning has become increasingly important in contemporary higher education because students must manage multiple assignments, online learning platforms, collaborative projects, and continuous assessments simultaneously. Strategic learners effectively prioritise tasks according to deadlines and assessment weighting, allowing them to maintain consistent academic performance throughout their studies. Although strategic learners may initially appear primarily grade-oriented, recent educational research argues that strategic learning should not be viewed negatively. Instead, strategic learning represents effective academic self-management that enables students to achieve learning outcomes efficiently while adapting to diverse assessment methods.

Surface Learning

Samydevan et al. (2021) found that students who depend primarily on surface learning strategies generally exhibit lower academic performance, particularly in courses that require analytical thinking and synthesis of ideas. This approach is also linked to increased academic stress and lower levels of satisfaction with the learning experience. Furthermore, Mahfud et al. (2023) noted that surface learners often struggle to transfer knowledge to new contexts limiting their ability to apply what they have learned in practical, real-world situations. While surface learning may offer short-term benefits, such as memorization for exams, it lacks the depth and adaptability required for long-term academic success.

As such, educators and policymakers must work to reduce reliance on surface learning by fostering educational environments that encourage curiosity, active engagement, and critical reflection. Biggs et al. (2001) suggested that surface learning frequently develops when students perceive excessive workload, unclear learning objectives, or inappropriate assessment methods. Under such conditions, students often memorise isolated facts without understanding relationships among concepts.

Recent research continues to demonstrate that surface learning is negatively associated with long-term academic development. Students relying primarily on memorisation frequently struggle when assessments require critical thinking, problem-solving, and application of knowledge. Furthermore, surface learners often experience greater academic stress because memorised information is easily forgotten after examinations.

Within accounting education, excessive dependence on surface learning presents significant challenges. Accounting graduates are expected to analyse financial information, exercise professional judgement, and interpret accounting standards rather than merely recalling accounting procedures. Consequently, students relying solely on memorisation may perform adequately in objective examinations but encounter difficulties when solving complex case studies or professional accounting scenarios.

Academic Achievement

Ruhil Amal et al. (2022) conducted a comprehensive study among undergraduates at public universities in Malaysia and found a strong positive correlation between deep and strategic learning approaches and higher CGPA scores. Students who employed deep learning approaches demonstrated a genuine interest in their subjects which translated into higher performance in assessments requiring comprehension and critical thinking. Strategic learners who planned their study activities meticulously and managed their time and resources effectively were able to tailor their efforts to meet assessment demands, leading to consistently higher academic performance.

Conversely, surface learners who primarily focus on rote memorization and minimal understanding exhibited lower academic performance. Ismail et.al (2021) reported that surface learners tend to avoid complex materials and engage with course content only at a superficial level which negatively impacts their grades. These students may perform adequately in multiple-choice exams but struggle in analytical or application-based tasks. Academic success has also been found to be significantly influenced by self-regulated learning. Students are more likely to employ deep and strategic techniques successfully if they keep track of their learning processes, make goals and evaluate their performance. Mahfud et al. (2023) emphasized that metacognitive awareness plays a crucial role in enabling students to adapt their strategies according to task demands and learning contexts.

Students adopting deep learning generally demonstrate stronger conceptual understanding and higher-order thinking, leading to improved performance in analytical assessments. Strategic learners similarly achieve high academic outcomes through effective self-regulation, systematic planning, and efficient resource management. Conversely, students relying predominantly on surface learning frequently obtain lower academic performance because memorisation alone is insufficient for solving complex academic problems.

Owusu et al. (2019) investigated accounting students in Ghana and found that deep and strategic learning approaches positively influenced academic performance, whereas surface learning demonstrated weaker associations with achievement. Similarly, Ruhil Amal et al. (2022) reported that Malaysian university students employing strategic learning approaches consistently achieved higher CGPAs than students adopting alternative learning strategies.

Recent educational research further highlights the importance of self-regulated learning as an underlying mechanism connecting learning approaches with academic achievement. Students capable of monitoring their own progress, evaluating learning outcomes, and modifying study strategies are more likely to achieve sustained academic success regardless of discipline. Consequently, universities should provide learning environments that encourage metacognitive development alongside disciplinary knowledge.

Gender

Wardana et al. (2020) found that female students are more likely to adopt deep and strategic learning approaches compared to their male counterparts who often exhibit a preference for surface learning strategies driven by external motivations such as passing exams or meeting minimum course requirements. In contrast, male students often exhibit a preference for surface learning strategies. According to Mahfud et al. (2023), male learners tend to focus on minimal compliance with academic requirements, engaging in last-minute studying and relying on memorization without seeking conceptual clarity. This approach may limit their ability to perform well in tasks that require critical thinking and synthesis of information.

Several recent studies indicate that gender differences become substantially smaller after controlling for motivation, self-regulated learning, and academic engagement. Rather than biological differences, variations in learning approaches appear to be influenced by contextual factors such as classroom environment, assessment practices, learning experiences, and individual learning preferences.

Within accounting education, empirical findings remain inconsistent regarding whether gender significantly moderates the relationship between learning approaches and academic achievement. Some studies report minor differences in learning preferences, whereas others conclude that academic performance depends more strongly on motivation, learning strategies, and self-regulatory behaviours than gender itself. Consequently, further investigation remains necessary, particularly within Malaysian public universities where cultural and educational contexts may influence students' learning behaviours differently from Western educational settings.

Research Gap

Despite the growing body of literature examining learning approaches and academic achievement, several important research gaps remain. First, relatively limited empirical evidence focuses specifically on accounting students within Malaysian public universities. Most previous studies have investigated general undergraduate populations without considering the distinctive characteristics of accounting education, which requires analytical reasoning, ethical judgement, and professional competence.

Second, many previous studies concentrate primarily on deep and surface learning while giving comparatively less attention to strategic learning, despite evidence suggesting that strategic learners consistently achieve superior academic performance. Investigating all three learning approaches simultaneously provides a more comprehensive understanding of students' learning behaviour.

Third, findings regarding gender differences remain inconsistent across different educational contexts. Although some studies report significant gender differences, others conclude that gender has little influence after accounting for motivation and self-regulated learning. This inconsistency indicates the need for additional empirical investigation within Malaysian accounting education.

Accordingly, this study addresses these gaps by examining the influence of deep, strategic, and surface learning approaches on academic achievement among accounting students at Universiti

Pendidikan Sultan Idris while simultaneously investigating whether gender moderates these relationships. The findings are expected to contribute to accounting education literature and provide practical recommendations for improving teaching strategies and student learning outcomes.

Conceptual Framework and Hypotheses Development

The conceptual framework for this study illustrates the relationship between learning approaches and academic achievement among accounting students at Universiti Pendidikan Sultan Idris (UPSI). This framework is intended to provide a clear understanding of the important aspects that influence students' academic achievement.

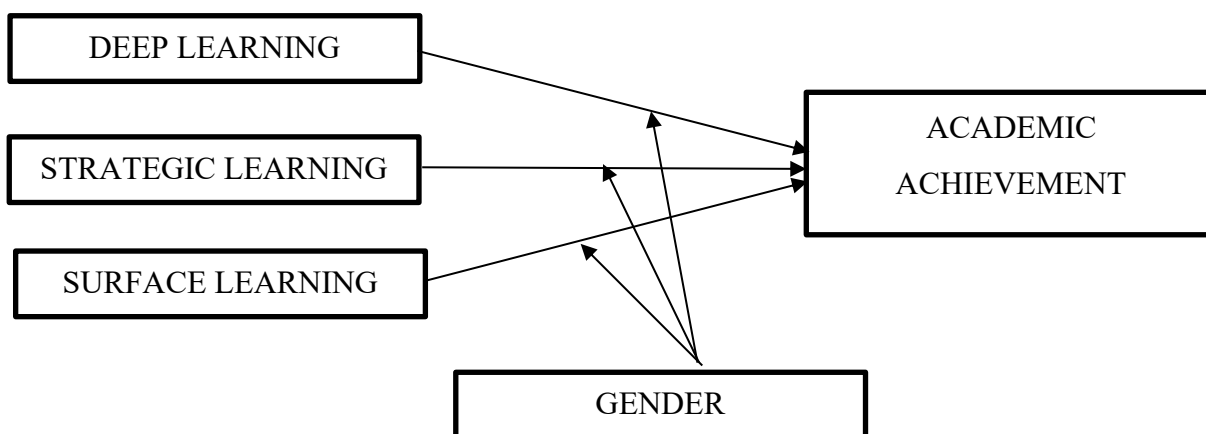


Figure 1: Conceptual Framework

Three independent variables are deep learning, strategic learning and surface learning. To examine the influence of different learning approaches on the academic achievement of UPSI accounting students. The study also investigates the potential influence of gender in moderating these effects, the following hypotheses are developed:

- H1: There is a significant relationship between deep learning and academic achievement among UPSI accounting students.
- H2: There is a significant relationship between surface learning and academic achievement among UPSI accounting students.
- H3: There is a significant relationship between strategic learning and academic achievement among UPSI accounting students.
- H4: Gender moderates significantly between learning approaches and academic achievement among UPSI accounting students.

Methodology

The self-administered questionnaire was constructed with three sections (Section A, Section B and Section C). Section A contained demographic data such as gender, age, semester of study and cumulative grade point average (CGPA). Section B contained psychometric data consisting of three independent variables: deep learning, strategic learning and surface learning and one dependent variable, academic achievement of UPSI accounting students. The psychometric data was measured by four statements for each of the variables. This section assesses students' learning approaches using a structured Likert scale with the following scale: 1 - Strongly

Disagree 2 - Disagree 3 - Agree 4 - Strongly Agree. Section C invites students to provide written responses to two open-ended questions. These questions explore students' perceptions of gender influence on learning approaches and the strategies they use to improve their academic performance.

This survey was conducted with accounting students at Universiti Pendidikan Sultan Idris (UPSI) at the end of Semester 2 of the 2024/2025 session. A total of 200 sets of survey questions were distributed and data were collected from 142 students through structured questionnaires. The study distributed the questions to the respondents based on their semester and study program. The questionnaire was chosen because it is cost-effective, easy to prepare, and requires less time than other data collection methods. The questionnaire was administered online formats via Google Forms to ensure convenience and accessibility. Hence, respondents could complete the questionnaire at their own pace, making the procedure more flexible. Furthermore, the questionnaire was anonymous, encouraging participants to make honest and true responses.

Result And Discussion

The respondents of this study consist of a total of 142 students. The majority of the respondents are female students, comprising 93 individuals which represents 65% of the total sample. Meanwhile, male students make up the remaining 49 respondents accounting for 35% of the total. This data indicates that female students formed a larger portion of the study participants compared to their male counterparts. The gender distribution highlights a notable difference in participation between male and female students suggesting that female students were more actively involved or available for this particular study.

As the question was open-ended, the responses were categorized into appropriate age groups for analysis. The majority of the respondents were 22 years old which represented by 54 students (38%). This was followed by 34 students aged 23 years accounting for 23.9% of the total. Next, 27 respondents were 21 years old making up 19%, while 19 students were aged 20 years which representing 13.4%. In addition, 4 students were aged 24 which is equivalent to 2.8%. Lastly, there was one respondent each aged 18, 19, 25 and 26 years, all representing 0.7% respectively.

The respondents selected for this study consist of students from various semesters specifically from Semester 2, 3, 4, 5, 6, 7 and 8. The majority of the respondents were from Semester 2 with a total of 44 students representing 31% of the overall sample. This indicates that a significant portion of the participants are in the early stages of their academic programs. The second-highest number of respondents came from Semester 6 consisting of 31 students which accounts for 21.8% of the total. This was followed closely by Semester 4 which had 25 respondents or 17.6% indicating a balanced representation from students in the middle phase of their studies.

Meanwhile, 18 students (12.7%) were from Semester 5 and 16 students (11.3%) were from Semester 3. However, semester 7 had a much lower number of participants with only 7 respondents comprising just 4.9% of the total. The least represented group in the study was from Semester 8 with only one respondent (0.7%) suggesting very limited participation from students in their final semester.

Table 1: Demographic Information Of Respondents (n=142)

	Frequency	Percentage (%)
Gender		
Male	49	35
Female	93	65
Age		
18	1	0.70
19	1	0.70
20	19	13.4
21	27	19.0
22	54	38.0
23	34	23.9
24	4	2.80
25	1	0.70
26	1	0.70
Semester		
Sem 2	44	31.0
Sem 3	16	11.3
Sem 4	25	17.6
Sem 5	18	12.7
Sem 6	31	21.8
Sem 7	7	4.90
Sem 8	1	0.70

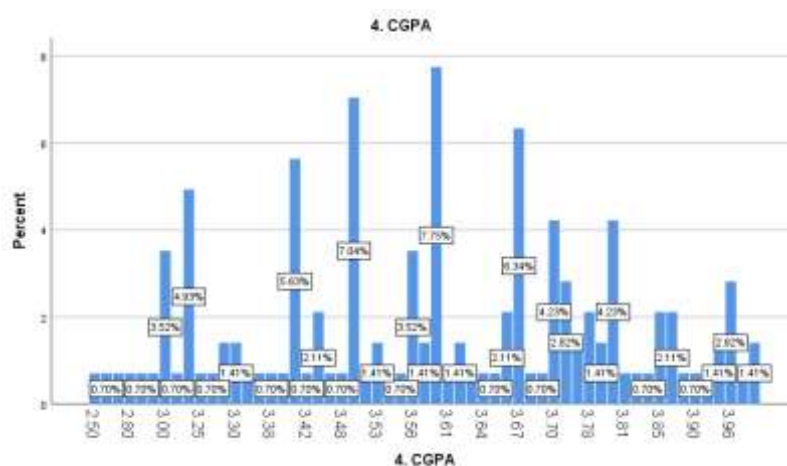


Chart 1: Distribution Of Respondents According to Cumulative Grade Point Average (CGPA)

The most frequently reported CGPA was 3.60 achieved by 11 students representing 7.7% of the sample. This was followed closely by 10 respondents (7%) with a CGPA of 3.50 and 9 respondents (6.3%) with a CGPA of 3.67. Other commonly reported CGPA included 3.40 (5.6%), 3.20 (4.9%) and both 3.70 and 3.80 (4.2% each). These values suggest that a significant portion of the respondents maintained CGPA in the range of 3.40 to 3.80 which is typically categorized as well in many academic grading systems.

At the higher end of the academic spectrum, several students reported near-perfect CGPA such as 3.90, 3.91, 3.92, 3.96, 3.97 and 4.00. Although each of these values was reported by only one or two students. This indicates that while top academic performance was present within the sample, it was less common.

Conversely, a small number of students reported lower CGPA scores particularly those below 3.00. These included individual reports of CGPAs such as 2.30, 2.40, 2.50, 2.56, 2.67, 2.80, 2.90 and 2.92 each accounting for only 0.7% which represent one respondent of the total respondents. This indicates that students with low academic performance formed a minority within the sample.

Table 2: Analysis Mean for Each Learning Approach

Type of Learning Approaches	Mean
Deep Approach	3.27
Strategic Approach	3.37
Surface Approach	3.36

Table 2 shows that UPSI accounting students use all three learning strategies to varying degrees throughout their coursework. The strategic technique is obviously the most popular, closely followed by the surface approach while the deep approach is the least employed. This trend depicts a student body that is primarily concerned with using performance-driven and calculated techniques to succeed academically rather than relying solely on innate motivation and intellectual understanding.

Table 3: Analysis Mean for The Influence of Learning Approach on Academic Achievement

Demographic	Deep Approach	Strategic Approach	Surface Approach
Academic Achievement – Cumulative Grade Point Average (CGPA)	3.23	3.38	3.27

Table 3 presents the mean CGPA scores of students based on their dominant learning approach. The findings reveal that students who adopted a strategic learning approach recorded the highest mean CGPA of 3.38 followed by students with a surface learning approach who achieved a mean CGPA of 3.27 while those who preferred a deep learning approach had the lowest mean CGPA of 3.23.

According to these findings, UPSI accounting student's academic performance may benefit more from a strategic approach to learning than from a deep or surface approach. Using structured, goal-oriented study techniques and efficient time management, strategic learners are usually committed to getting the best marks possible. Additionally, they are more likely to modify their study strategies to accommodate test and assignment requirements which could account for their comparatively better academic achievement.

Table 4: Analysis Mean for The Influence of Gender on Learning Approaches

Demographic	Deep Approach	Strategic Approach	Surface Approach
Female	3.23	3.41	3.22
Male	3.22	3.33	3.36

As shown in Table 4, the findings reveal interesting patterns in the use of learning strategies between male and female students. Female students scored a mean of 3.23 in the deep approach slightly higher than their male counterparts who recorded a mean of 3.22. This suggests that both genders engage in deep learning at relatively equal levels with females showing a marginally greater tendency to seek understanding, relate ideas and reflect on learning materials.

Table 5: Summary of The Results of Hypothesis Testing

	Sig.	Hypotheses
Deep learning approaches	0.000	H1 accepted
Surface learning approaches	0.002	H2 accepted
Strategic approach	0.001	H3 accepted
Gender	0.000	H4 accepted

The Pearson correlation analysis showed a significant positive relationship between the deep learning approach and academic achievement (CGPA). The p-value was less than 0.001, indicating that the relationship was highly statistically significant. The significant positive relationship implies that the students adopt deep approach in their study through the understanding of a meaning in specific situation, understanding the meaning of study, investigate the case study, critical thinking and connecting concepts tend to achieve a higher academic result.

The finding data support the research hypothesis that surface approach is significant and negative relationship effect on academic achievement (CGPA) among UPSI accounting students. It is because P value is less than significant level at 0.05 therefore the correlation is statistically significant. Meanwhile, the research hypothesis shows strategic approach significantly and positively effect on academic achievement (CGPA) among UPSI accounting students. Students who adopt strategic approach not only focus with satisfy academic achievement but also understanding what is expected which means more to critical thinking. The strategic approach requires a high level of cognitive engagement to get a better academic achievement (CGPA).

On the other hand, this study used open-ended questions. The first question asked respondents on how gender influences types of learning approaches used by students, in their perspective. The majority of respondents (63.4%) agreed that gender has little influence on students' learning approaches, highlighting the importance of personal interest, motivation, effort, and learning strategies. Meanwhile, 24.6% believed that boys prefer practical activities, whilst girls favor collaborative learning. A smaller proportion of respondents (8.5%) believed that gender has minimal influence on learning styles. Only 3.5% believed that girls outperformed boys academically, and very few connected women with structured or rule-based activities.

Another question asked respondents to indicate the strategies they employ to improve their academic performance. A total of 47.2% of respondents chose developing a study schedule and setting realistic goals as the most beneficial technique. This implies that many students use planning, time management, and goal setting to improve their academic performance, which is consistent with the strategic learning approach. In contrast, 24.6% of respondents relied solely on class lectures without any further practice, which may impede their understanding.

Meanwhile, 19.7% acknowledged to procrastinating on homework, showing ineffective time management. Another 7% preferred to study alone and avoided group conversations, which limited prospects for cooperation and peer learning. Only 1.4% reported using additional study tactics, such as studying daily after class or taking pauses between assignments, but these responses were insufficient to influence the total results.

Conclusion

This study emphasizes how strategic and deep learning approaches can significantly boost academic performance among accounting students at UPSI. Although surface learning might help in the short term, it does not support long-term success. To truly support student growth, educators are encouraged to create inclusive and well-balanced teaching strategies that help every learner reach both their academic and future career goals.

Overall, both descriptive and inferential analyses confirmed that gender does not significantly influence the adoption of deep, strategic or surface approaches among UPSI accounting students. This finding reinforces the importance of promoting effective learning strategies to all students regardless of gender. Educators should focus on implementing balanced and inclusive teaching practices that support academic success and accommodate diverse learning needs across the student population.

Educators should encourage a deep approach among students to be more efficient in teaching strategies. Besides, the strategic approach was the most adopted by UPSI accounting students and correlated with a higher academic achievement based on the analysis data. Based on this result, educators should continue to encourage strategic approaches for students in their academics to develop a higher academic performance. Effective time management and study planning based on the goals of an assignment or task can minimize the time required to complete the work compared to adopting a deep learning approach. Educators can also place greater emphasis on providing formative feedback to help students align their study efforts with assessment expectations while still encouraging deep learning and meaningful engagement with the content.

It acknowledges the limitations of surface-learning habits while highlighting the critical role that deep and strategic learning approaches play in promoting academic success. Teachers should aggressively support deep and strategic learning tactics in their lessons while simultaneously creating a welcoming environment for all students, regardless of gender. The study also lays the groundwork for future investigations into the ways in which learning strategies and academic achievement are influenced by the interplay of curriculum design, assessment techniques and personal motivation. Future studies should consider to expand the study to multiple Universities, include other academic disciplines and employ a longitudinal research design.

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