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Understanding the students' learning style to enhance the effectivity of learning method: a study on accounting students

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Abstract

Research aims: The study aims to test the students' learning style preferences and investigate the influence of the lecturer's teaching methods in the accounting study program.

Design/Methodology/Approach: This study used the Quasi-Experimental method. This experiment research was a non-equivalent control group design joined by 552 students of the undergraduate accounting program. Every respondent completed a questionnaire regarding the individual learning style (pre-test and post-test) and filled out a score on the learning style that the lecturer had presented. Afterward, an independent sample t-test was conducted to test the relationship between students' learning styles and the lecturer's learning methods.

Research findings: This study revealed that most students in the accounting program had a passive learning style rather than an active one. Additionally, the research found that active teaching methods were more effective for students with an active learning style compared to passive teaching methods for students with a passive learning style. There was no difference in learning styles between active and passive students under the two teaching methods because the student groups were not previously separated based on learning styles.

Theoretical contribution/Originality: Understanding students' learning styles is essential to enhance the accuracy of lecturers' teaching methods in the teaching and learning process, particularly in accounting. Studies on evaluating students' learning styles and examining their relationship with lecturers' teaching methods have been widely conducted in other disciplines, except in accounting within the Indonesian context. It can provide new insights into the field of accounting education and behavior.

Keywords: Learning style; Accounting students; Effectivity; Learning method; Accounting



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Introduction

In the current educational environment, researchers frequently discuss learning styles alongside the development of diverse teaching methods. Therefore, identifying and establishing learning style preferences aims to build a robust educational system (Paulraj et al., 2013); Cekiso et al., 2015). Grouping students according to their learning styles is crucial because each student may have different preferences (Cameron et al., 2015). Thus, variations in teaching methods can provide maximum benefits to engage students in the learning process and create an

environment that supports various learning styles, thereby enhancing the effectiveness of accounting education, which is oriented toward improving the competencies of accountants who will face the professional world (Dai & Zhang, 2019; Zakaria & Abdul Malek, 2019; Jamaluddin et al., 2020).

The current challenge in the professional world is mastering technology-based competencies and managerial skills oriented toward higher quality human judgment to adapt to a business environment that undergoes massive changes. The dynamic changes in the business environment significantly impact the accounting profession. In turn, higher education institutions must prepare prospective accountants to face these challenges (Alshurafat et al., 2020; Yusof et al., 2020; Murthy & Talluri, 2022). Instead of students being expected to graduate with skills that meet industry needs, the current academic model, which lacks relevance to supporting accounting practices in the professional world, often leaves students struggling to comprehend their coursework and materials fully (Cameron et al., 2015; Alshurafat et al., 2020; Murthy & Talluri, 2022). Educators have started to adapt to newer teaching models. However, they still need help deciding the appropriate teaching methods to support the learning process, given that some course materials still need to be delivered through lecturer-centered learning (Murthy & Talluri, 2022).

What educational institutions should pay attention to nowadays is the learning method applied by lecture and their students' learning style (Jamaluddin et al., 2020; Alshurafat et al., 2020; Yusof et al., 2020; Murthy & Talluri, 2022). The learning method is the lecturer's way of presenting their material to students to increase their comprehension and make them more comprehensive on any material. It is in line with learning theory, suggesting that learning preferences influence an individual's effectiveness in communication and learning (O'Leary & Stewart, 2013; Bracci et al., 2020). In practice, students show various approaches to learning which are more modern and practical. However, the lecturer is more active than the students during the learning-teaching process. In the classroom, the teacher emphasizes teacher-centered learning more. As a result, this approach only reaches some students (Cekiso et al., 2015; Cameron et al., 2015; Murthy & Talluri, 2022). What educational institutions should pay attention to nowadays is the learning method applied by lecture and their students' learning style (Jamaluddin et al., 2020; Alshurafat et al., 2020; Yusof et al., 2020; Murthy & Talluri, 2022). The learning method is the lecturer's way of presenting the material to students to increase their comprehension and make it more comprehensive. Learning preferences influence an individual's effectiveness in communication and learning (O'Leary & Stewart, 2013; Bracci et al., 2020). In practice, students show various approaches to learning which are more modern and practical. However, the lecturer is more active than the students during the learning-teaching process, while the teacher is more teacher-centered. As a result, this approach only reaches some students (Cekiso et al., 2015; Cameron et al., 2015; Murthy & Talluri, 2022).

Moreover, several studies showed differences with Kolb's model approach to examining students' learning styles (Cekiso et al., 2015; Mccarthy, 2016; Yusof et al., 2020). Research on learning styles based on Kolb's Experiential Learning Model (ELM) found

that the shift in learning style from passive to active was significant as the class progressed until the end of the semester. Studies using the Kolb model are most frequently used to examine students' learning style preferences. The importance of conducting this research because the purpose was to understand accounting students' interest in attending lectures, particularly the tested subjects in professional exams that would be applied post-graduation in the workplace. This study had limitations in that it focused solely on learning styles without examining the relationship between them and the teaching method employed by lecturers.

Previous research has also extensively discussed teaching methods by introducing new learning methods to accounting students (Miza et al., 2018; Dai & Zhang, 2019; Yusof et al., 2020; Rajeevan, 2020; Murthy & Talluri, 2022). Most of these studies show that teaching methods can positively impact students by enhancing learning, making them relevant for accounting programs. For instance, Jamaluddin et al. (2020) implemented Accounting On The Block (AOTB), a "financial accounting game" format. They indicated an improvement in understanding financial accounting courses. However, this model does not address its relevance to other courses, and student groups were not separated, leaving gaps between students unidentified. Additionally, Alshurafat et al., (2020) research on applying various learning methods in forensic accounting courses found that an experiential (active) approach was far more effective than a conservative (passive) approach. However, this study is limited to one course without considering other courses, and students were not differentiated based on learning styles.

Based on the above explanation, the interaction between learning styles and teaching methods has the potential to become a complex pedagogical area. Therefore, examining learning style preferences is crucial to research further to ensure the practical application of teaching methods by course lecturers (O'Leary & Stewart, 2013; Cameron et al., 2015; Jamaluddin et al., 2020; Alshurafat et al., 2020). Moreover, the effectiveness of teaching methods increases when lecturers test their relationship with students' learning style preferences, as various learning models that emphasize students, commonly known as Student-Centered Learning (SCL), are supported by teaching methods that tend to be active. However, these methods often do not separate student groups and fail to test the relationship between passive teaching methods and their combined impact on both active and passive student groups.

There is still a lack of research on students' learning style preferences and examining their relationship with the teaching methods employed by lecturers, particularly in accounting programs. Issues such as the impact of certain learning styles on students and comparing effective teaching methods are areas that require further research (Cekiso et al., 2015; Dai & Zhang, 2019; Jamaluddin et al., 2020; Alshurafat et al., 2020; Murthy & Talluri, 2022). Therefore, this study will delve deeper into students' learning style preferences and their relationship with the teaching methods used by lecturers. The study has two main objectives: first, to evaluate the learning styles of accounting students (Pre-test and Post-test) in the accounting program at STIE 66 Kendari. Second, to examine the relationship between the interaction of teaching methods and the learning styles of accounting students. Additionally, the research objectives align with

Permendiknas Nomor, 41 Tahun 2007 on Process Standards, suggesting that in the learning process, the teacher should consider the characteristics of their students to quickly identify preferred learning styles and the strategic plans of higher education institutions that are oriented towards producing quality and competitive outcomes.

For accounting education and behavioral literature, the theoretical findings of this research will provide new insights and empirical explanations regarding students' learning styles and examine the relationship between students' learning styles and the teaching methods used in accounting programs. This research is expected to serve as a guideline for educators to understand students' learning style preferences in accounting programs better.

Practically, this research provides insights for teaching staff regarding students' learning styles, particularly in accounting. Additionally, the findings will enhance their understanding of the effectiveness of teaching methods that consider students' learning style preferences. It is crucial because modern accountants are now required to understand the technical aspects of accounting (hard skills) and integrate these with soft skills, such as teamwork and effective communication. Active teaching methods with a participatory approach support these abilities.

Literature Review and Hypothesis Development

Theoretical Framework

This research is based on the behaviorist learning theory developed by (Bandura, 1977) and Gage and Berliner (1984). This theory is attributed to the study of human behavior through feedback between input in the form of stimulus (S) and output in response (R), commonly referred to as S-R psychology (Bandura, 1977); Gage & Berliner, 1992). This theory suggests that rewards or reinforcements from the environment control human behavior in learning, and this interaction builds the cognitive schema of students. The theory also emphasizes that all learners are passive individuals (Bandura 1977; (Gage & Berliner, 1992).

In exploring this theory, the teaching-learning process can be influenced by the teaching methods used by lecturers, assuming that lecturers have a deep understanding of students' learning styles to enhance the effectiveness of the teaching-learning process in the classroom (Cameron et al., 2015; Zakaria & Abdul Malek, 2019; Bracci et al., 2020; Jamaluddin et al., 2020). Therefore, there is a relationship between behaviorist theory and the examination of students' learning style preferences. By identifying students' learning styles, effective stimuli can be provided to elicit positive responses in the classroom, mainly through the appropriate use of teaching methods by lecturers (Cameron et al., 2015; Alshurafat et al., 2020; Murthy & Talluri, 2022).

Learning Style

Students' learning styles reflect their preferences in the teaching-learning process (Keefe, 1979; Cekiso et al., 2015; Bracci et al., 2020; Natoli et al., 2020). Previous research has categorized learning style preferences into active and passive groups. Some studies have shown that accounting students tend to be more active (Cameron et al., 2015; Miza et al., 2018; Yusof et al., 2020). It is based on numerous studies using the Learning Style Inventory (LSI) developed by Kolb (2014), which indicates that students tend to adopt a convergent learning style, focusing on abstract conceptualization and having an interest in experimentation (Cekiso et al., 2015; Cameron et al., 2015; Alshurafat et al., 2020). It aligns with the role of an accountant, which emphasizes transforming data into reports useful for users (Cekiso et al., 2015; Cameron et al., 2015; Miza et al., 2018; Alshurafat et al., 2020).

However, previous research also indicates that some students still exhibit passive learning styles; (Mattar & El Khoury, 2013; Kutluk et al., 2015; Miza et al., 2018). It is attributed to the conventional teaching methods still prevalent in accounting programs, emphasizing Problem-Based Learning (O'Leary & Stewart, 2013; Cameron et al., 2015; Zakaria & Abdul Malek, 2019). Additionally, the Visual, Aural, Read/Write, and Kinesthetic (VARK) model identifies that students tend to be passive in the teaching-learning process, mainly when assessed through visual modalities (Miza et al., 2018; Zakaria & Abdul Malek, 2019; Bracci et al., 2020). Changes in learning styles can occur if lecturers encourage the application of teaching methods aligned with the course material, allowing students' learning styles to adapt to the teaching methods (Cameron et al., 2015; Zakaria & Abdul Malek, 2019; Natoli et al., 2020; Alshurafat et al., 2020). Based on this explanation, accounting students still tend to have passive learning styles in the teaching-learning process. Therefore, the first hypothesis proposed is as follows:

H₁: Accounting students prefer passive learning styles when given a choice between passive and active.

Learning Method

In education, there are various teaching methods employed by lecturers, which can be broadly categorized into two types: active and passive (Cameron et al., 2015; Bracci et al., 2020; Alshurafat et al., 2020; Murthy & Talluri, 2022). Active learning methods place students at the center of the teaching-learning process and encourage them to participate in educational activities actively (Cameron et al., 2015; (Natoli et al., 2020; Yusof et al., 2020). These modern teaching methods focus on students as active learners. They are highly recommended in recent decades because they help students develop reflective, critical, and collaborative skills while enhancing their motivation, satisfaction, and academic performance (Jamaluddin et al., 2020; Alshurafat et al., 2020; Murthy & Talluri, 2022). On the other hand, passive learning methods place the lecturer at the center of learning and are considered conventional in the teaching process (Cameron et al., 2015; Miza et al., 2018; Yusof et al., 2020; Murthy & Talluri, 2022).

The various teaching methods lecturers use aim to encourage students, especially in accounting programs, to become active learners (Cameron et al., 2015; Bracci et al., 2020; Alshurafat et al., 2020; Yusof et al., 2020). It can be seen in different teaching approaches that incorporate technology and gamification to enhance visualization in the learning process based on the efficiency of learning time, which allows for a more comprehensive understanding in a shorter period (Alshurafat et al., 2020).

Some previous studies suggest that active teaching methods are currently more effective than passive methods in applied accounting. However, passive methods are still highly effective for educating on relevant theories in accounting, making both methods valuable for accounting programs Alshurafat et al., (2020) found that blended teaching pedagogies are very effective in case study models, which emphasize student engagement using supportive media and aim to move away from traditional (passive) teaching methods. Addressing the second research question related to teaching methods and learning styles, students categorized as active learners will find active teaching methods more beneficial, while students with passive learning styles will find passive teaching methods more advantageous during lectures (O'Leary & Stewart, 2013; Cameron et al., 2015; Miza et al., 2018; Yusof et al., 2020; Alshurafat et al., 2020). Therefore, the second research objective is attributed to the following hypotheses:

H₂: Students with active learning styles respond more positively to active teaching methods than to passive teaching methods in accounting courses.

H₃: Students with passive learning styles respond more positively to passive teaching methods than to active teaching methods in accounting courses.

Several previous studies did not differentiate between student groups based on their learning styles during classroom instruction, whether using separate teaching methods or a combination of active and passive methods. Consequently, accounting students participating in the classes could not be identified as either active or passive learners (Cameron et al., 2015; Dai & Zhang, 2019; Zakaria & Abdul Malek, 2019; Natoli et al., 2020; Alshurafat et al., 2020). Therefore, it cannot be assessed whether teaching methods impact accounting students based on their learning styles. Thus, the fourth hypothesis is proposed as follows:

H₄: Teaching methods have a significant impact on accounting students based on their learning styles, whether active or passive.

Research Method

This study employed a quantitative approach. Based on previous research, the model used is an experimental study with a quasi-experimental design. This type was chosen because external variables influencing the respondents' answers cannot be controlled during the experiment, making it a quasi-experiment (O'Leary & Stewart, 2013;

Cameron et al., 2015; Creswell & Creswell, 2017; Hartono, 2018). The two variables (teaching methods and learning styles) cannot be manipulated because this study is correlational. The quasi-experimental design used in this study is the non-equivalent control group design, where the control group and the experimental (intervention) group are separated to obtain research results (Creswell & Creswell, 2017). Quasi-experimental data is derived from activities that have already occurred and are not influenced by the researcher, also known as ex-post-facto data (Hartono, 2018).

Population and Sample

The population of this study consisted of all students enrolled in the accounting program at Sekolah Tinggi Ilmu Ekonomi Enam-Enam Kendari (STIE 66 Kendari). The sampling technique employed was purposive sampling, where the criteria for selection include students from the accounting program at STIE 66 Kendari who are currently attending classes in any semester from the 1st to the 7th. The respondents are students taking one of the courses based on the seven courses tested in the Chartered Accountant (CA) competency test.

According to the CA competency test curriculum, seven exam subjects are listed in Table 1. The experiment was conducted during the 2021/2022 academic year, spanning one year, divided into two semesters (odd and even), each lasting six months. A total of 552 respondents participated in the treatment, after which they self-assessed their preferred learning styles and teaching methods.

Table 1 Respondents based on class

Code	Subjects	Number (N)
1	Corporate Reporting	132
2	Taxing Management	52
3	Strategic Management and Leadership	34
4	Management Accounting	95
5	Financial Management	68
6	Audit and Assurance	88
7	Information Systems and Internal Control	83
	Combined Total	552

Data Collection Technique and Experimental

The data collection technique used the pair-matching method to compare the results of the two treatments (pre-test and post-test). The questionnaire used was based on a survey instrument previously developed by O'Leary & Stewart (2013) and Cameron et al. (2015), which has undergone validity and reliability testing. The survey instrument was divided into two parts: pre-test and post-test. The course instructors provided full instructions regarding the teaching methods used (treatment) before the start of the lectures. Respondents were then asked to complete an assessment of their learning styles before the first lecture (pre-test). Respondents selected answers describing their preferred learning style before attending the categorized courses.

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Table 2 Respondents Based on Class

No	Variable	Operational Definition	Indicator	Measurement Tool	Measurement Scale	Score
1	Teaching method	The teaching method refers to the principles used by educators (Lecturers and Teachers) in their interaction with students (University Students).	Active Passive Combined (Active and Passive)	Questionnaire	Ordinal	Ordinal 1-3 = Less beneficial 4-6 = Beneficial 7-9 = Highly beneficial
2	Learning style	Learning style refers to the cognitive, affective, and psychological characteristics inherent in students (university students) as individual traits in perceiving, interacting with, and responding to the learning environment.	Active Passive		Nominal	Pre-Test dan Post Test Q1 Active Passive None (Abstain) Post Test Q2 Yes No Post Test Q3 Changed Unchanged None (Abstain)

To explain the active and passive learning styles, as well as the active and passive teaching methods, please refer to Table 2 for the operational definitions of the variables. The indicators of the variables and measurement tools were developed based on research by O’Leary & Stewart (2013) and Cameron et al. (2015). The second version asked students to reassess their learning styles after the course (post-test) and also to rate the teaching methods employed by the course instructors (active and passive).

Data Analysis

The experimental data was then analyzed descriptively for each test group using SPSS version 25 as the data analysis tool for the quasi-experimental model. Descriptive statistical tests were conducted to identify students' learning style preferences. An independent sample t-test was also performed to examine the relationship between each student's learning style and the teaching method used by the lecturer, as well as to determine no difference in the teaching methods applied to both learning styles of students.

Result and Discussion

This study aims to reveal whether accounting students tended to prefer an active learning style over a passive one. It investigated which teaching methods accounting students respond to base on their learning style preferences and whether their learning style was the same when faced with different teaching methods among the accounting students in the Accounting Program at STIE 66 Kendari.

According to hypothesis 1, students are expected to tend toward a passive learning style, considering that previous research has shown accounting students to have a concurrent learning style (both active and passive), with a tendency for students to be still stimulated by lecturers during the teaching and learning process. Based on the percentage of students' learning styles shown in Table 3, the pre-test questionnaire results indicated that 52% preferred a passive learning style, 40% identified as active learners, and 8% were unsure how to identify their learning style independently.

After completing the course, there was no significant difference in the results when filling out the post-test questionnaire. The percentage of students with a passive learning style was 51%, while those identifying as active learners increased to 45%. Meanwhile, 4% of students still needed to determine their learning style preference.

Table 3 Analysis of Students' Learning Styles

Learning Style	Pre-test		Post-test	
	N (552)	%	N (552)	%
I am a student who is highly interested in accounting (active) and enjoys working on tasks individually or in groups, as well as finding materials to learn from.	221	40	246	45
I am a student who learns accounting from lecturers, textbooks, and others (passive), then reflects on and understands the information.	288	52	283	51
I am unsure of which learning style best describes me (non-experiential).	43	8	23	4

Table 4 explains the percentage results from a separate question designed to assess the consistency of respondents' answers. It examined whether students had changed their self-assessment of their learning style after the course (post-test). The majority of

respondents, 52%, felt a change in their learning style, while 34% believed that there was no change in their learning style during the course, and their assessment remained the same as when the course first started. Additionally, 14% were still determining whether their learning style had definitely changed over the semester.

Table 4 Analysis of the Swift of Learning Style

Statements	N (552)	%
I think my answer regarding the type of learning style that suits me has changed since I took this course.	288	52
I think my answer regarding the type of learning style that suits me has not changed since I took this course.	188	34
I am not sure whether my answer regarding the type of learning style that suits me has changed since I took this course.	76	14

Students generally believed there was a tendency for changes in their learning style, with most tending toward a passive style. Therefore, based on the results from Tables 3 and 4, supported by descriptive statistical testing, Hypothesis 1 was confirmed. Although there was a decline, the results still showed that the passive learning style dominates the active one. This finding aligned with research by (Cameron et al., 2015, Zakaria & Abdul Malek, 2019, Natoli et al., 2020 and Alshurafat et al., 2020), indicating that accounting students still tended to prefer passive learning styles over active ones, given that in recent decades, teaching had continued to be centered on the lecturer (PBD).

Hypothesis 2 states that active students will respond more positively to active teaching methods, while Hypothesis 3 predicts that students with a passive learning style will respond better to passive teaching methods. According to the second version of the questionnaire, three groups of teaching methods were applied: active methods, passive methods, and a combined approach. Additionally, to measure the effectiveness of these teaching methods, students rated the usefulness of each method used by the lecturer over the semester on a nine-point scale. A score of 1 represents "not useful," 5 represents "somewhat useful," and nine represents "very useful," with 5 being the median between "not useful" and "very useful."

Table 5 Inter-Group Assessment of Teaching Method Effectiveness

Teaching Method	Learning Style	N	Mean	S.D.	S.E. Mean	Sig.
Passive	Active	246	7.76	1.393	0.089	0.573
	Passive	283	7.82	0.997	0.059	
Active	Active	246	7.87	1.326	0.085	0.036*
	Passive	283	7.64	1.195	0.071	
Combined	Active	246	7.89	1.375	0.088	0.721
	Passive	283	7.93	1.058	0.063	

*P-value 0.05

Based on the post-test questionnaire, responses were divided into two categories for the analysis of learning styles: active and passive. The variables were tested using independent sample t-tests and paired sample t-tests. Results were divided based on comparisons between groups in Table 5, which showed evaluations based on students'

learning styles, and within-group evaluations are presented in Table 6, which details assessments of each teaching method individually and the combined effect.

Table 6 Assessment in Group on Learning Method Effectivity

		Active Students (n=246)			Passive Students (n=283)		
		Mean	SD	Sig.	Mean	SD	Sig.
<i>Pair-1</i>	Passive Method	7.76	1.393	0.043*	7.82	0.997	0.011*
	Active Method	7.87	1.326		7.64	1.195	
<i>Pair-2</i>	Passive Method	7.76	1.393	0.014*	7.82	0.997	0.039*
	Combined Method	7.89	1.375		7.93	1.058	
<i>Pair-3</i>	Active Method	7.87	1.326	0.694	7.64	1.195	0.000*
	Combined Method	7.89	1.375		7.93	1.058	

*P-value 0.05

Active Learning Style

In Hypothesis 2, for the inter-group assessment (based on learning style) of the effectiveness of teaching methods, there was a significant difference in scores between the two learning style groups (active and passive). As seen in Table 5, the active teaching method showed a difference in scores compared to the passive teaching method, where the passive learning style group had an average score of 7.64. In contrast, the active learning style group gave a higher average score of 7.87. It was supported by the independent sample t-test output, which yielded a Sig. (2-tailed) value of 0.036 (p-value < 0.05).

For the within-group assessment (based on teaching method), as seen in Pair-1, similar results are shown, with the average score of the passive-to-active teaching method within the active learning style group being (7.76-7.87) and the Sig. (2-tailed) the value being 0.043 (p-value < 0.05). Based on these results, there was a difference in the average scores between active and passive learning styles in response to the active teaching method.

However, the opposite result was found in Pair-3, which compares the active method with the combined method within the active learning style group. This comparison indicates that the combined method was less effective, with the active method scoring an average of 7.87, the combined method scoring 7.89, and a Sig. Value of 0.694. Thus, these results cannot be compared with the combined teaching method.

It indicates that students with an active learning style responded more positively to active teaching methods than passive students, supporting the results of Hypothesis 2. This is consistent with research conducted by Cameron et al. (2015), Tahir et al. (2018), Yusof et al. (2020), and Alshurafat et al. (2020), which suggests that active teaching methods can foster philosophical thinking in student groups and enhance students' understanding not only in technical and theoretical dimensions but also in ethical dimensions for students with an active learning style.

Passive Learning Style

Conversely, Hypothesis 3 tests whether passive students would respond more positively to passive teaching methods than active ones. In the inter-group assessment, the average score was higher for students with a passive learning style, with an average of 7.82, while the active learning style group gave an average score of 7.76. However, the Sig. (2-tailed) value was 0.573 (p-value > 0.05), indicating that the results did not support the proposed hypothesis.

In contrast, the within-group assessment shows supporting results, with a significant difference in average scores in Pair 1, where passive learners rated the passive teaching method as more beneficial than the active method, with an average score of 7.82 compared to the active learning style's score of 7.64, and a significance level of 0.11 (p-value < 0.05). Although the passive learning style was rated higher than the active style, the combined teaching method was rated much more beneficial than the passive teaching method, with a score of 7.93 compared to 7.82 for the passive method and a significance level of 0.039 (p-value > 0.05).

When comparing within-group scores, students were receptive to various teaching methods and did not exclusively favor one, even when the outcome was oriented toward passive teaching methods. As a result, these findings need to establish a consistent preference for one teaching method among students. Students with a passive learning style do not fully respond positively to passive teaching methods compared to combined teaching methods. Thus, Hypothesis 3 in this study needed support, as passive learners felt that passive teaching methods were still less effective in lectures.

Several studies support these findings, including those by O'Leary & Stewart, (2013) and Cameron et al., (2015) Passive students are not interested in passive teaching methods because most students who were in their final semesters felt that courses in this stage were designed to enhance classroom activity, with verbal presentations and final projects emphasizing practical group or individual tasks to encourage active participation in lectures. Additionally, Mattar & El Khoury (2013) and Kutluk et al., (2015) indicated that lecturers who use passive teaching methods are far more effective when using multimedia, especially PowerPoint, which can increase the interest of passive students in the subject matter compared to traditional methods.

Learning Style Comparison

In the final part of addressing Hypothesis 4, no difference between active and passive learning styles across all teaching methods used during the course was found. Table 5, Pair-3, indicates that students with a passive learning style rated the combined method as more effective, giving it a higher score than those with an active learning style. The passive learning style group had an average score of 7.93, while the active learning style group had an average score of 7.89, with a Sig. (2-tailed) value of 0.721 (p-value > 0.05). Thus, this result indicates no significant difference between the two learning style groups (active and passive). Therefore, Hypothesis 4 is supported.

Students are not strictly categorized as having either an active or passive learning style, leading to no significant differences when participating in lectures using different teaching methods (O'Leary & Stewart, 2013; Kutluk et al., 2015; Bracci et al., 2020; Alshurafat et al., 2020. Cameron et al., (2015) previously classified students as having either an active or passive learning style. That study found differences when students with different learning styles participated in a combined teaching method. The limitation of differing learning styles is that instructors may only effectively reach students with specific learning styles, making it less effective for classes with diverse learning styles.

This research found that accounting students still tend to have a passive learning style rather than an active one. This finding is supported by previous research in several countries, indicating that current accounting students still perceive themselves as passive learners during the learning process (Cameron et al., 2015; Alshurafat et al., 2020). Additionally, another finding from this study emphasizes that accounting students (both active and passive) will respond more positively to active teaching methods, driven by students' desire to comprehensively understand accounting material through active learning approaches that support soft skills, such as communication proficiency and quick and accurate problem-solving abilities (Cameron et al., 2015; Zakaria & Abdul Malek, 2019; (Yusof et al., 2020). These results align with behaviorist theory, which suggests that accounting students will respond positively to stimuli provided by their instructors when given teaching methods relevant to their learning styles.

Conclusion

This study evaluated student learning styles and examined the relationship between students' learning styles and the teaching methods used by lecturers in the accounting program at STIE 66 Kendari. Based on the discussion, most accounting students preferred a passive learning style over an active one. Additionally, some students needed clarification on their learning style, accounting for 8% before and 4% after the course.

For students with an active learning style, comparisons were made between groups of teaching methods and within groups. The active learning style group was more effective in courses with active teaching methods, while passive students found passive teaching methods less effective. Passive students found the combined teaching method more effective than the passive method. Explicitly, there was no significant difference between active and passive learning styles among students. Previous research suggests that accounting students were not segregated based on learning styles, regardless of whether active, passive, or combined teaching methods were used.

The limitations of this study include its focus on respondents from only one campus in one region, namely STIE 66 in Kendari, meaning the results may only represent part of the accounting program population in Indonesia. Therefore, similar research could be conducted by including multiple campuses and regions to strengthen the findings of this

study. Differences in learning experiences among respondents, as seen from their semester level, should be considered. First-semester students may still use a passive learning style as they adapt from high school, while students who have been in college for more than a year (over two semesters) might be more likely to shift their learning preferences to active. Future research could group students by semester to compare these respondent groups. Besides semester, gender and academic level could also be considered in comparative tests to obtain more accurate results in categorizing student learning styles.

References

- Alshurafat, H., Beattie, C., Jones, G., & Sands, J. (2020). Perceptions of the usefulness of various teaching methods in forensic accounting education. *Accounting Education*, 29(2), 177–204. <https://doi.org/10.1080/09639284.2020.1719425>
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bracci, E., Tallaki, M., & Castellini, M. (2020). Learning preferences in accounting education: a focus on the role of visualization. *Meditari Accountancy Research*, 28(2), 391–412. <https://doi.org/10.1108/MEDAR-02-2018-0286>
- Cameron, R., Clark, P., De Zwaan, L., English, D., Lamminmaki, D., O'Leary, C., Rae, K., & Sands, J. (2015). The Importance of Understanding Student Learning Styles in Accounting Degree Programs. *Australian Accounting Review*, 25(3), 218–231. <https://doi.org/10.1111/auar.12065>
- Cekiso, M., Arends, J., & Mkabile, B. (2015). Exploring the Learning Style Preferences Used by Accounting Students in a University of Technology in South Africa. *Journal of Social Sciences*, 43(3), 237–244. <https://doi.org/10.1080/09718923.2015.11893441>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Dai, S., & Zhang, L. (2019). ARS interactive teaching mode for financial accounting course based on Smart Classroom. *International Journal of Emerging Technologies in Learning*, 14(3), 38–50. <https://doi.org/10.3991/ijet.v14i03.10104>
- Gage, N. L., & Berliner, D. C. (1992). Educational psychology, 5th ed. In *Educational psychology, 5th ed.* Houghton, Mifflin and Company.
- Hartono, J. (2018). *Metoda pengumpulan dan teknik analisis data*. Penerbit Andi.
- Jamaluddin, J., Mahali, M., Mohd Din, N., Nias Ahmad, M. A., Mohamad Fadzillah, N. S., & Abdul Jabar, F. (2020). Students' Motivation Level in Gamification of Accounting Teaching and Learning – A Case of 'Accounting on the Block.' *Social and Management Research Journal*, 17(1), 17. <https://doi.org/10.24191/smri.v17i1.8140>
- Keefe, J. W. (1979). Learning style overview: Student learning styles. *Diagnosing and Prescribing Programs*. Reston, VA: National Association of Secondary School Principals.
- Kolb, D. A. (2014). *Experiential Learning: Experience as the Source of Learning and Development*. Pearson Education. <https://books.google.co.id/books?id=ipbeBQAAQBAJ>
- Kutluk, F. A., Donmez, A., & Gülmez, M. (2015). Opinions of University Students about Teaching Techniques in Accounting Lessons. *Procedia - Social and Behavioral Sciences*, 191, 1682–1689. <https://doi.org/10.1016/j.sbspro.2015.04.155>
- Mattar, D. M., & El Khoury, R. M. (2013). Identical instructor, different teaching methodologies: Contrasting outcomes. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 14, 193–212. <https://doi.org/10.1108/S1085->

[4622\(2013\)0000014015](https://doi.org/10.1108/ARJ-09-2018-0142)

- McCarthy, M. (2016). Experiential Learning Theory: From Theory To Practice. *Journal of Business & Economics Research (JBER)*, 14(3), 91–100. <https://doi.org/10.19030/jber.v14i3.9749>
- Miza, W. M., Tahir, W., Haryanti, I., Noor, M., Daud, D., & Hussin, A. H. (2018). *Towards Interactive Learning Style in Accounting: The Game Approach*.
- Murthy, K. V. R., & Talluri, V. (2022). Acquainting with accounting an experiential and empirical study on the methods to teach basics of accounting. *Journal of Positive School Psychology*, 6(8), 1398-1406. <https://journalppw.com/index.php/jpsp/article/view/9923>
- Natoli, R., Wei, Z., & Jackling, B. (2020). Teaching IFRS: evidence from course experience and approaches to learning in China. *Accounting Research Journal*, 33(1), 234–251. <https://doi.org/10.1108/ARJ-09-2018-0142>
- O'Leary, C., & Stewart, J. (2013). The Interaction of Learning Styles and Teaching Methodologies in Accounting Ethical Instruction. *Journal of Business Ethics*, 113(2), 225–241. <https://doi.org/10.1007/s10551-012-1291-9>
- Paulraj, S., Ali, A. R., & Vetrayan, J. (2013). Learning style preferences among diploma students of occupational therapy in University Technology MARA (UiTM). *Middle East Journal of Scientific Research*, 14(5), 603–609.
- Permendiknas (2007). *Permendiknas No 14 Tahun 2007 tentang Standar Proses untuk Satuan Pendidikan Dasar dan Menengah*.
- Rajeevan, S. (2020). Accounting: the teaching, the practice and what is missing. *Vilakshan - XIMB Journal of Management*, 17(1/2), 15–37. <https://doi.org/10.1108/xjm-06-2020-0001>
- Yusof, R., Yin, K. Y., Norwani, N. M., Ismail, Z., Ahmad, A. S., & Salleh, S. (2020). Teaching through experiential learning cycle to enhance student engagement in principles of accounting. *International Journal of Learning, Teaching and Educational Research*, 19(10), 323–337. <https://doi.org/10.26803/IJLTER.19.10.18>
- Zakaria, M., & Abdul Malek, N. A. (2019). Effect of learning and teaching preference approaches on academic performance among Malaysian accounting students. *Universal Journal of Educational Research*, 7(11), 2384–2396. <https://doi.org/10.13189/ujer.2019.071116>
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Conceptualisation, N.I.; Methodology, N.I and K.I.; Investigation, N.I. and J.D.; Analysis, N.I., J.D. and K.I.; Original draft preparation, N.I.; Review and editing, N.I., J.D. and K.I.; Visualization, N.I., J.D. and K.I.

Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



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