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An analysis of business students learning styles to improve the effectiveness of teaching methods

Shuvo Kumar Mallik ^{1,*} and M Abeedur Rahman ²

¹ Department of Economics, Southeast University, Dhaka, Bangladesh.

² Assistant Professor, Department of Economics, Southeast university, Dhaka, Bangladesh.

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Abstract

The study's goal is to assess the students' learning styles and analyze the impact of the lecturer's teaching methods in the business study program. The quasi-experimental approach was adopted in this investigation. This investigation used a non-equivalent control group design, with 552 undergraduate business students participating. Every respondent completed a questionnaire about their own learning style (pre-test and post-test) and rated the learning style that the lecturer had provided. After that, an independent sample t-test was used to determine the association between students' learning styles and the lecturer's teaching approaches. According to the findings of this study, the majority of students in the business program used a passive rather than active learning approach.

Furthermore, the study discovered that active teaching methods were more beneficial for pupils with active learning styles than passive teaching methods for passive learners. There was no difference in learning styles between active and passive students under either teaching approach since the student groups had not previously been split based on learning styles. Understanding students' learning styles is critical for improving the accuracy of lecturers' teaching approaches during the teaching and learning process, especially in accounting. Other disciplines have conducted extensive research on evaluating students' learning styles and their relationship with lecturers' teaching approaches, but not in business in Indonesia. It has the potential to shed new light on business education and behavior.

Keywords: Learning style; Business students; Learning method

1. Introduction

In today's educational environment, scholars routinely examine learning styles and the creation of various teaching methods. Identifying and creating learning style preferences helps build a strong educational system (Paulraj et al., 2013; Cekiso et al., 2015). Grouping students based on their learning styles is critical because each student has unique preferences (Cameron et al., 2015). Thus, variations in teaching methods can provide maximum benefits in engaging students in the learning process and creating an environment that supports various learning styles, thereby increasing the effectiveness of accounting education, which is aimed at improving the competencies of accountants who will face the professional world (Dai and Zhang, 2019; Zakaria and Abdul Malek, 2019; Jamaluddin et al., 2020).

The present professional challenge is acquiring technology-based competences and managerial abilities aimed at improving human judgment in order to adapt to a rapidly changing business environment. Changes in the business environment have a substantial impact on the accounting profession. In response, higher education institutions must equip future accountants to handle these issues (Alshurafat et al., 2020; Yusof et al., 2020; Murthy and Talluri, 2022). Instead of expecting students to graduate with skills that meet industry needs, the current academic model, which lacks

* Corresponding author: Shuvo kumar mallik

relevance to professional accounting practices, frequently leaves students struggling to fully comprehend their coursework and materials (Cameron et al., 2015; Alshurafat et al., 2020; Murthy and 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 and Talluri, 2022).

Nowadays, educational institutions should focus on the lecture technique and their students' learning styles (Jamaluddin et al., 2020; Alshurafat et al., 2020; Yusof et al., 2020; Murthy and Talluri, 2022). The learning method is the lecturer's way of presenting material to students in order to boost comprehension and make them more knowledgeable about any subject. It is consistent with learning theory, which states that an individual's learning preferences influence their communication and learning efficacy (O'Leary and Stewart, 2013; Bracci et al., 2020). In practice, students demonstrate several approaches to learning that are more modern and practical. However, the lecturer is more involved in the learning-teaching process than the students are. In the classroom, the teacher places a greater emphasis on teacher-centered learning.

As a result, 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 and 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 and 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 and Talluri, 2022).

Furthermore, some studies found discrepancies in Kolb's model approach to analyzing students' learning styles (Cekiso et al., 2015; Mccarthy, 2016; Yusof et al., 2020). According to research on learning styles based on Kolb's Experiential Learning Model (ELM), the change from passive to active learning style occurred significantly as the class went until the end of the semester. The Kolb model is most commonly used to investigate pupils' preferred learning styles. The goal of doing this research was to assess accounting students' interest in attending lectures, particularly those tested on professional exams that would be used in the job after graduation. 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 studies have also extensively examined teaching approaches, introducing novel learning methods to accounting students (Miza et al., 2018; Dai and Zhang, 2019; Yusof et al., 2020; Rajeevan, 2020; Murthy and Talluri, 2022). The majority of these research suggest that teaching approaches can benefit students by improving learning, making them important for accounting programs. For example, Jamaluddin et al. (2020) used Accounting on The Block (AOTB), a "financial accounting game" structure. They suggested a better comprehension of 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.

According to the preceding description, the interaction between learning styles and teaching approaches has the potential to become a complicated pedagogical area. As a result, analyzing learning style preferences is critical for future study to ensure that course lecturers use teaching approaches effectively (O'Leary and Stewart, 2013; Cameron et al., 2015; Jamaluddin et al., 2020; Alshurafat et al., 2020). Furthermore, the efficiency of teaching methods improves when lecturers examine their link with students' learning style preferences, since diverse learning models that prioritize students, known as Student-Centered Learning (SCL), are supported by active teaching methods. 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 and Zhang, 2019; Jamaluddin et al., 2020; Alshurafat et al., 2020; Murthy and 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 study provides insights for teachers into their students' learning styles, notably in accounting. The data will also help them better understand the effectiveness of teaching approaches that take into account students' learning styles. It is critical because modern accountants must understand the technical parts of accounting (hard skills) and combine them with soft skills like teamwork and good communication. These abilities are supported by active teaching approaches that take a participatory approach.

2. Literature Review and Hypothesis Development

2.1. Theoretical Framework

This study is founded on the behaviorist learning theory developed by Bandura (1977) and Gage and Berliner (1984). This theory is linked to the study of human behavior through feedback between input in the form of stimulus (S) and output in reaction (R), also known as S-R psychology (Bandura, 1977; Gage and Berliner, 1992). According to this idea, the environment's incentives or reinforcements affect human learning behavior, and this interaction shapes students' cognitive schema. The approach also emphasizes that all learners are passive (Bandura, 1977; Gage and Berliner, 1992).

In exploring this theory, lecturers' teaching methods can influence the teaching-learning process, assuming that lecturers have a thorough understanding of students' learning styles in order to improve the effectiveness of the teaching-learning process in the classroom (Cameron et al., 2015; Zakaria and Abdul Malek, 2019; Bracci et al., 2020; Jamaluddin et al., 2020). As a result, there is a link between behaviorist theory and the study of students' learning style preferences. Identifying students' learning styles allows lecturers to provide effective stimuli to evoke positive responses in the classroom, mostly through the right use of teaching methods (Cameron et al., 2015; Alshurafat et al., 2020; Murthy and Talluri, 2022).

2.2. Learning Style

Students' learning styles correspond to their preferences during the teaching-learning process (Keefe, 1979; Cekiso et al., 2015; Bracci et al., 2020; Natoli et al., 2020). Previous research divided learning style preferences into active and passive categories. Some researchers have found that accounting students are more active (Cameron et al., 2015; Miza et al., 2018; Yusof et al., 2020). It is based on numerous studies using Kolb's (2014) Learning Style Inventory (LSI), which show that students have a convergent learning style, focusing on abstract conceptualization and being interested 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, past study shows that certain students continue to use passive learning strategies (Mattar and El Khoury, 2013; Kutluk et al., 2015; Miza et al., 2018). It is ascribed to the traditional teaching methods still used in accounting schools, which emphasize problem-based learning (O'Leary and Stewart, 2013; Cameron et al., 2015; Zakaria and Abdul Malek, 2019). Furthermore, the Visual, Aural, Read/Write, and Kinesthetic (VARK) model identifies that students are passive in the teaching-learning process, particularly when examined using visual modalities (Miza et al., 2018; Zakaria and 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 and 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.*

2.3. Learning Method

In education, lecturers use a variety of teaching strategies, which can be broadly classified into two types: active and passive (Cameron et al., 2015; Bracci et al., 2020; Alshurafat et al., 2020; Murthy and Talluri, 2022). Active learning approaches place students at the center of the teaching-learning process, encouraging them to actively participate in educational activities (Cameron et al., 2015; Natoli et al., 2020; Yusof et al., 2020). These modern teaching methods emphasize students as engaged 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 and 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 and Talluri, 2022).

Lecturers employ a variety of teaching approaches to assist students, particularly in accounting degrees, to become active learners. It may be seen in several teaching approaches that use technology and gamification to improve visualization in the learning process based on time efficiency, allowing for a more comprehensive comprehension in a shorter period of time (Alshurafat et al., 2020).

Some past research indicates that active teaching approaches are now more effective than passive methods in applied accounting. However, passive methods are still very effective in educating on key accounting theories, making both ways useful for accounting programs. Alshurafat et al. (2020) discovered that blended teaching pedagogies are highly effective in case study models that emphasize student interaction through supportive media and seek to shift away from traditional (passive) teaching approaches. 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 and 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 earlier research found no difference between student groups based on their learning styles during classroom instruction, whether utilizing individual teaching methods or a combination of active and passive methods. As a result, accounting students in the classes could not be classified as active or passive learners (Cameron et al., 2015; Dai and Zhang, 2019; Zakaria and Abdul Malek, 2019; Natoli et al., 2020; Alshurafat et al., 2020). As a result, it is impossible to determine if accounting students' learning styles have an impact on teaching approaches. So, the fourth hypothesis is offered as follows:

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

3. Research Method

This study used a quantitative technique. According to earlier research, the model employed is an experimental study using a quasi-experimental design. This kind was chosen since external variables impacting respondents' responses could not be controlled during the experiment, resulting in a quasi-experiment (O'Leary and Stewart, 2013; Cameron et al., 2015; Creswell and Creswell, 2017; Hartono, 2018). Because this study is correlational, neither of the two variables (teaching methods nor learning styles) can be changed. This study used a non-equivalent control group design, in which the control and experimental (intervention) groups are split to generate research results (Creswell and Creswell, 2017). Quasiexperimental data, also known as ex-post-facto data, is derived from previously occurring behaviors that have not been altered by the researcher.

3.1. Population and Sample

The population for this study was all students enrolled in the accounting program at Sekolah Tinggi Ilmu Ekonomi Enam-Enam Kendari (STIE 66 Kendari). Purposive sampling was used, with the selection criteria being accounting students from STIE 66 Kendari who are currently enrolled in classes from the first to the seventh semester. The

responders are students enrolled in one of the seven courses covered by the Chartered Accountant (CA) proficiency 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

3.2. Data Collection Technique and Experimental

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)

The pair-matching method was used to compare the results of the two treatments. The questionnaire was based on a survey instrument previously established by O'Leary and Stewart (2013) and Cameron et al. (2015), and it had been tested for validity and reliability. The poll was separated into two sections: pre-test and post-test. Before the lectures began, the course teachers offered detailed information on the teaching methods (treatment) employed. Prior to the

first lecture, participants were invited to complete a learning type evaluation. Before taking the categorized courses, respondents chose answers that described their preferred learning style.

To compare the outcomes of the two treatments (pre-test and post-test), the data gathering strategy employed the pair-matching method. The questionnaire was based on a survey instrument previously produced by O'Leary and Stewart (2013) and Cameron et al. (2015), which had been validated and reliable. The survey instrument was broken down into two sections: pre-test and post-test. Before the lectures began, the course teachers offered detailed instructions for the instructional methods employed (treatment). Prior to the first lecture, respondents were invited to complete a learning style evaluation. Prior to taking the categorized courses, respondents selected answers expressing their preferred learning style.

Table 2 contains the operational definitions of the variables used to explain active and passive learning styles, as well as active and passive teaching approaches. O'Leary and Stewart (2013) and Cameron et al. (2015) conducted research that served as the foundation for the development of variable indicators and measurement tools. The second edition requested students to reassess their learning styles after the course (post-test), as well as appraise the course instructors' teaching approaches (active and passive).

3.3. Data Analysis

The experimental data was then descriptively evaluated for each test group using the quasi-experimental model's data analysis tool, SPSS version 25. Descriptive statistical tests were used to determine students' learning style preferences. An independent sample t-test was also utilized to investigate the relationship between each student's learning style and the lecturer's teaching approach, as well as to ensure that there was no difference in the teaching methods employed for both learning styles of students.

4. Result and Discussion

This study seeks to determine whether accounting students preferred an active learning method over a passive one. It explored which teaching techniques accounting students respond to base on their learning style preferences, as well as whether their learning styles were consistent when presented with multiple teaching methods among accounting students in the Accounting Program at STIE 66 Kendari. According to hypothesis 1, students are expected to have a passive learning style, given that previous research has shown accounting students to have a concurrent learning style (both active and passive), with lecturers continuing to stimulate students during the teaching and learning process. Table 3 shows that 52% of students favored a passive learning style, 40% classified as active learners, and 8% were unsure how to determine their learning type 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)	%	N552)	%
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 1 understands the information.	288	52	283	5
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 <u>has changed</u> 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 usually believed that their learning styles were prone to change, with the majority favoring a passive approach. As a consequence, Hypothesis 1 was confirmed based on the findings in Tables 3 and 4, as well as descriptive statistical testing. Despite the reduction, the data showed that the passive learning style still outperformed the active one. This finding was consistent with previous research (Cameron et al., 2015, Zakaria and Abdul Malek, 2019, Natoli et al., 2020, and Alshurafat et al., 2020), which found that accounting students still preferred passive learning styles over active ones, despite the fact that teaching has remained centered on the lecturer in recent decades (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 Combined	Active	246	7.76	1.393	0.089	0.573 0.036* 0.721
	Passive	283	7.82	0.997	0.059	
	Active	246	7.87	1.326	0.085	
	Passive	283	7.64	1.195	0.071	
	Active	246	7.89	1.375	0.088	
	Passive	283	7.93	1.058	0.063	
*P-value 0.05						

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>	Active Method	7.87	1.326	0.014 *	7.64	1.195	0.039*
<i>Pair-1</i>	Passive Method	7.76	1.393		7.82	0.997	
<i>Pair-1</i>	Combined Method	7.89	1.375	0.694	7.93	1.058	0.000*
*P-	Active Method	7.87	1.326		7.64	1.195	
VALUE	Combined Method	7.89	1.375	0.5	7.93	1.058	

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.

4.1. Active Learning Style

In Hypothesis 2, there was a substantial difference in scores between the two learning type groups (active and passive) when assessing the effectiveness of instructional methods. As shown in Table 5, there was a difference in scores between the active and passive teaching methods, with the passive learning style group having an average of 7.64. In comparison, the active learning style group achieved a higher average score of 7.87. The independent sample t-test resulted in a Sig. (2-tailed) value of 0.036 (p -value < 0.05), supporting the hypothesis.

Similar results were seen in Pair-1 for the within-group evaluation (based on teaching technique), with the average score of the passive-to-active teaching method inside the active learning style group being (7.76-7.87) and the Sig. (2-tailed) value being 0.043 (p -value < 0.05). According to these findings, there was a difference in average scores between active and passive learning styles in response to the active teaching approach.

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 shows that students with an active learning style responded more positively to active teaching approaches than passive students, which supports Hypothesis 2. This is consistent with the findings of Cameron et al. (2015), Tahir et al. (2018), Yusof et al. (2020), and Alshurafat et al. (2020), who found that active teaching methods can foster philosophical thinking in student groups and improve students' understanding not only in technical and theoretical dimensions, but also in ethical dimensions for students with an active learning style.

4.2. Passive Learning Style

Hypothesis 3 investigates whether passive pupils will respond better to passive teaching methods than active ones. In the inter-group examination, students with a passive learning style had a higher average score of 7.82, compared to the active learning style group, which had an average score of 7.76. However, the Sig. (2-tailed) value of 0.573 (p -value > 0.05) indicated that the findings 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 and 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 and 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.

4.3. Learning Style Comparison

In the final section of addressing Hypothesis 4, no difference between active and passive learning styles was discovered across all teaching methods employed during the course. Table 5, Pair-3, shows that students with a passive learning style regarded the combined technique as more effective, scoring higher 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 received an average score of 7.89, with a Sig. (2-tailed) value of 0.721 (p -value > 0.05). Thus, there is no substantial difference between the two learning styles (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 and 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 study discovered that accounting students continue to have a passive learning style rather than an engaged one. This finding is corroborated by earlier research in numerous countries, which shows that modern accounting students still consider themselves passive learners during the learning process (Cameron et al., 2015; Alshurafat et al., 2020). Furthermore, this study's findings emphasize 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 and 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.

5. Conclusion

This study assessed student learning styles and investigated the relationship between these types and the teaching methods employed by lecturers in the accounting department at STIE 66 Kendari. Based on the debate, the majority of accounting students chose a passive learning method over an active one. Furthermore, several students need clarification on their learning style, accounting for 8% before and 4% after the session.

For students with an active learning style, comparisons were done between teaching technique groups and within them. The active learning type group performed better in courses utilizing active teaching methods, whereas passive students considered passive teaching methods less effective. Passive students rated the combination teaching technique as more effective than the passive strategy. Specifically, there was no significant difference between active and passive learning styles among students. Previous research indicates that accounting students were not separated based on their learning styles, regardless of whether active, passive, or combination teaching approaches were utilized.

The study's shortcomings include its concentration on respondents from only one campus in one region, STIE 66 in Kendari, which means the results may only represent a subset of Indonesia's accounting program population. To enhance the conclusions of this study, similar research might be undertaken across multiple campuses and locations. Differences in learning experiences among respondents, as determined by their semester level, should be acknowledged. Students in their first semester may continue to adopt a passive learning style when they transition from high school, whereas students who have been in college for more than a year (more than two semesters) may be more likely to convert their learning preferences to active. Future research could divide students into semesters to compare these response groups. Aside from semester, gender and academic level could be included in comparative exams to produce more reliable findings when identifying student learning styles.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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