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The Influence of Teacher Interaction Patterns in Learning on Student Learning Motivation in the Office Management and Business Services Department of YAPMI Makassar Vocational School

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ABSTRACT

This study aims to identify the interaction patterns of teachers in the Office Management and Business Services department at SMK YAPMI Makassar and their influence on student learning motivation. This study is quantitative with a focus on two main variables, namely teacher interaction patterns and student learning motivation. A questionnaire consisting of two main parts, namely teacher interaction patterns in education and student learning motivation, was used to collect data. The results of the study indicate that there is a positive relationship between teacher interaction patterns and student learning motivation at SMK YAPMI Makassar. However, this relationship is relatively weak with a correlation coefficient value close to zero, namely r squared of 0.088. This means that only 8.8% of the variation in the dependent variable (student learning motivation) can be explained by teacher interaction patterns, while 91.2% of the dependence is influenced by other factors not included in this study. The level of student learning motivation at SMK YAPMI Makassar is classified as excellent, with a percentage reaching 82.93%. Student learning motivation is measured through three main indicators: (1) persistence in completing tasks, (2) persistence in facing challenges during the learning process, and (3) the ability to express and defend opinions actively during the learning process. These findings indicate that teacher interaction is not the only determining factor, but it still plays an important role in shaping student learning motivation. Therefore, improving the quality of interaction between teachers and students needs to receive more attention in an effort to improve learning outcomes and active student participation in class. This study also opens up opportunities for further research that can explore other factors that influence student learning motivation more comprehensively, such as classroom environment, teaching methods, and peer interactions.

Keywords: teacher interaction patterns, learning motivation, students

INTRODUCTION

Education plays a fundamental role in human life, as it serves as the primary means of shaping individual development and determining future trajectories. At the national level, education holds a strategic position in advancing societal progress by fostering individuals who are knowledgeable, morally grounded, and competitive. This aligns with the perspective of John Dewey, who viewed education as a continuous reconstruction of experience that enhances individual and social quality. Education is not merely a process of knowledge transmission but also a process of shaping values, attitudes, and behaviors. This view is supported by Émile Durkheim, who emphasized education as a social mechanism for aligning individuals with societal norms. The primary goal of education is to develop learners' potential holistically, as reflected in the taxonomy of Benjamin Bloom, which encompasses cognitive, affective, and psychomotor domains. Therefore, education plays a critical role in enhancing human quality, both in terms of character and competence, enabling individuals to contribute meaningfully to society and national development.

"Teachers play a crucial role in the learning process because they are the medium for transforming knowledge to students" (Hasyim, Arfiani, & Saleh, 2024; Nasrullah & Arhas, 2025; Sari, Nasrullah, & Nasir, 2024). Teachers can be likened to tour guides in the field of education. Their job is to use their skills to ensure that students' learning journeys are headed in the right direction. The teaching methods applied by teachers are closely related to students throughout the educational process and play a role that cannot be underestimated. Educators must master various learning resources, media, and methodologies.

Interaction patterns between teachers and students play a crucial role in increasing student motivation to learn. Good, supportive, and responsive interactions can create a safe and comfortable learning environment, so students feel valued, listened to, and increasingly motivated to actively participate in learning activities. This process aims to create conditions that encourage students to feel motivated and willing to participate in certain activities. Teacher interaction patterns are a structured approach to the learning process, designed to create effectiveness in the learning process at school. This pattern guarantees the efficient achievement of learning objectives. These interaction patterns encompass various communication methods and strategies between teachers and students, such as providing direction, monitoring, and managing learning activities. Teacher-student interaction patterns aim to create a conducive learning environment, encourage student activity, and motivate students to engage in the learning process.

Although motivation can be influenced by various external factors, the primary drive to learn still comes from within the individual. The home environment is one external factor that plays a role in fostering enthusiasm for learning. Furthermore, teacher interaction patterns during the learning process also play a crucial role in shaping student motivation. Supportive interactions, such as providing rewards, feedback, and fostering two-way communication, can increase student confidence, participation, and motivation. Conversely, unsupportive interaction patterns can weaken enthusiasm for learning and hinder student academic progress. The teaching methods used by teachers, as well as their ability to capture students' attention and actively engage them in learning activities, are also important factors in shaping learning motivation. A positive relationship between teachers and students is highly influential in fostering a high enthusiasm for learning, encouraging students to strive harder, and fostering a positive attitude toward achieving academic success.

In a previous study entitled "The Relationship Between Social Interaction Patterns and Student Learning Motivation", the research employed a quantitative approach. The descriptive analysis results indicate that approximately 25% of the total respondents (17 of 68 samples) considered communication between teachers and students to be in the "high" category. Meanwhile, the majority of respondents, approximately 55.9% (38 of 68 samples), placed the learning interaction pattern in the "moderate" category. The remaining 19.1% or 13 respondents stated that the interaction pattern in learning was in the "low" category.

METHODS

The study, entitled "The Influence of Teacher Interaction Patterns in Learning on Student Learning Motivation in the Office Management and Business Services Department of SMK YAPMI Makassar", uses a quantitative approach. Quantitative research is a type of research that is conducted systematically, planned, and structured in detail from the beginning to the development of the research design. The quantitative approach used in this study is to measure the extent to which the independent variables influence the dependent variable. (Ismail, Kallow, Gati, Al-Bayati, & Butsenko, 2024; Mcleod, 2023; Sardana, Shekoohi, Cornett,

& Kaye, 2023), The sampling process employed a saturated sampling technique. This technique is used when the entire population is sampled, especially if the population size is relatively small or does not exceed 100 people.

Data collection was conducted through the systematic distribution of a prepared questionnaire. Data analysis employed a quantitative statistical approach focused on describing the data and testing the research hypotheses. The research location was SMK Yapmi Makassar, located at Jalan Perintis Kemerdekaan KM 9, Tamalanrea Indah, Tamalanrea District, Makassar City, South Sulawesi. The population in this study was 30 students. Because the population was less than 100, all students were selected as respondents without any additional sample selection process.

The research method used was descriptive, focusing on two main variables: Teacher Interaction Patterns (as the independent variable/X) and Student Learning Motivation (as the dependent variable/Y). The independent variable is understood as an element that can influence the dependent variable. To obtain relevant data, all respondents were asked to complete a prepared questionnaire. The questionnaire's feasibility was tested using validity and reliability analysis. The analysis techniques used included descriptive and inferential analysis. In descriptive analysis, the relationship between variables is explained through calculations of percentages, mean values, and standard deviations.

RESULT AND DISCUSSION

Descriptive statistical analysis was used to describe the situation or characteristics of each variable, namely the influence of teacher interaction patterns on learning (X) and student learning motivation (Y). The data obtained was then classified based on the level of success, which was divided into categories of excellent, good, sufficient, and poor.

Teacher Interaction Patterns

To obtain a comprehensive answer regarding the influence of teacher interaction patterns on student learning outcomes, the researcher compiled the observed indicators. These indicators were then compiled and analyzed using the following achievement score table:

Table 1: Results of Descriptive Analysis Per Indicator of the Influence of Teacher Interaction Patterns on Learning Variables (X)

No	Indicator	n	N	%	Category
1	Have a Goal	900	723	80,33	Good
2	There is a Planned Procedures	600	517	86,17	Excellent
3	Discipline	450	384	85,33	Excellent
4	There is Activity	750	599	79,87	Good
Total		**2700**	**2223**	**82,93%**	Excellent

Source: Results of data processing using SPSS 24

Based on the data presented in the table, it can be inferred that the overall performance of the measured indicators falls within the "excellent" category. A total of 18 assessment items were evaluated, yielding a cumulative score of 2,223 out of the maximum possible score of 2,700. This corresponds to an achievement level of 82% for the variable X indicator.

This result suggests that the measured aspects have been implemented effectively and reflect a high level of attainment relative to the established criteria. In the context of quantitative evaluation, a percentage above 80% is commonly interpreted as indicating strong performance, thereby reinforcing the conclusion that the indicator achievement is categorized as excellent.

a. Have a goal

Interaction patterns in the learning process should have clear objectives so that each activity can provide maximum benefits for students' academic development and skills. In this process, teachers and students need to implement specific strategies that are systematically and purposefully designed to achieve results in accordance with predetermined learning objectives. These strategies can include various teaching methods, effective communication techniques, and approaches tailored to students' characteristics and learning needs.

By having a purposeful learning interaction pattern, teachers can more effectively guide students toward achieving maximum learning outcomes through various participatory activities, such as discussions, question-and-answer sessions, group work, and reflection activities on the material learned. Students can also better understand the direction and purpose of each learning activity, so they are more motivated and enthusiastic in the teaching and learning process. This statement is in line with the views expressed by Aldalur and Perez, (2023); Barron and Whitford, (2004); Mathur et al., (2024) "Interaction in the teaching and learning process has a purpose, namely to assist children in their specific development. Teacher–student interaction patterns within the learning process must be purposefully designed to achieve specific instructional objectives. Such intentionality is essential to ensure that teaching and learning activities proceed effectively, foster active student engagement, and facilitate optimal competency development. A clearly defined instructional purpose serves as a guiding framework for organizing classroom interactions, thereby enhancing the overall quality of the learning environment.

Based on the data presented, the indicator of "presence of purpose" within the variable of teacher interaction patterns achieved a score of 723 out of a maximum of 900, equivalent to 80.33%. This percentage shows a high level of achievement, which means that teachers have mostly used purposeful interaction strategies in the classroom. Furthermore, the findings imply that well-structured interaction patterns contribute to the creation of a conducive learning environment, which in turn plays a significant role in increasing students' motivation and participation. This reinforces the notion that purposeful teacher–student interaction is a critical component in supporting effective and meaningful learning experiences.

b. The Existence of a Planned Procedure

Having a planned procedure in teacher interaction patterns not only helps make learning more organized and structured but also ensures that each stage of the teaching and learning process is systematic and aligned with predetermined objectives. Furthermore, systematically designed procedures also play a role in creating a more conducive learning environment, where students feel comfortable, motivated, and encouraged to actively participate in each learning activity. This conducive learning environment encompasses various aspects, such as good classroom management, the use of engaging teaching methods, and an approach that takes into account the diverse needs and learning styles of students. Dynamic and communicative interactions between teachers and students create a more lively learning atmosphere, encouraging direct student involvement in discussions, group work, and deeper exploration of the material. To achieve these goals optimally, systematic and relevant procedures or steps are required to carry out these well-planned interactions.(Aziz et al., 2023; Obispo et al., 2021; Stunell, 2021).

Based on the results obtained, the teacher interaction pattern on the indicator of the existence of a planned procedure showed achievement in the excellent category, with a percentage level of 86.17%. This result indicates that in the learning process, teachers have implemented procedures that have been systematically designed to ensure that each stage of learning runs in a directed, effective, and in accordance with the established objectives. With clear procedures, teachers can better manage the class, arrange learning steps sequentially, and implement strategies that make it easier for students to understand the material. In addition, these planned procedures also play a role in creating a more conducive learning atmosphere, increasing student involvement in various academic activities. Furthermore, well-designed procedures also play a role in helping students develop critical thinking and analytical skills. During the interaction process between teachers and students in learning, the implementation of well-structured procedures allows for more effective communication. This not only facilitates the delivery of material systematically, but also encourages students to be more active in asking questions, discussing, and deepening their understanding of the material being taught. Thus, learning becomes more focused, not only focusing on achieving academic results, but also on developing students' thinking skills. and increasing student learning motivation.

c. Discipline

Disciplined teacher–student interaction patterns play a pivotal role in maintaining students' focus during the learning process, fostering a structured classroom environment, and ensuring the attainment of instructional objectives. Discipline in this context reflects the consistency and orderliness of interactions that guide learning activities toward predetermined goals.

Based on the data presented, the discipline indicator within the variable of teacher interaction patterns in learning achieved a percentage of 79.87%, with a total score of 2,223 out of the ideal score of 2,700. This level of achievement indicates a strong performance, suggesting that disciplined interaction practices have been effectively implemented in the learning process.

The findings further demonstrate that disciplined interaction patterns contribute to the establishment of an orderly and conducive learning environment, enhance the consistency of instructional delivery, and encourage students to remain focused and actively engaged. These results underline the importance of discipline as a key component in optimizing the effectiveness of teacher–student interactions. Accordingly, the descriptive analysis of this variable supports the conclusion that disciplined interaction patterns significantly influence the quality and outcomes of the learning process.

When teachers consistently apply discipline, students will also learn to follow rules, respect time, and take responsibility for their academic tasks and obligations. This not only increases the effectiveness of classroom learning but also shapes student character in terms of independence, perseverance, and a strong work ethic. Discipline in Teaching and Learning Interactions Discipline is an attitude of obedience to rules and regulations to obtain new behavioral changes as a result of one's own experience in interacting with the environment. (Annisa et al., 2025; Hidayah et al., 2021; Rini et al., 2023).

d. There is Activity

Interactive learning processes inherently involve dynamic activities characterized by active communication between teachers and students. Within this context, both parties engage in meaningful discussions aimed at exchanging information, deepening conceptual understanding, and collaboratively addressing problems related to the learning material. Such

interactions reflect a dialogical approach to learning, where knowledge is constructed through continuous engagement rather than transmitted in a one-directional manner.

The discussion process within classroom interactions extends beyond the mere delivery of content from teacher to student. It provides opportunities for learners to actively construct their own understanding by exploring diverse perspectives and integrating new information with their prior knowledge and experiences. This perspective aligns with constructivist learning theory, which emphasizes that learning occurs through active cognitive engagement and social interaction.

Furthermore, active teacher–student interaction contributes significantly to the creation of a more dynamic, participatory, and engaging learning environment. It shifts the role of students from passive recipients of information to active participants in the learning process, thereby enhancing their critical thinking and problem-solving abilities.

Empirical findings indicate that 79.87% of respondents evaluated these interactive activities as good, suggesting that the implementation of such interaction patterns is relatively effective and positively received by the majority of participants. This result underscores the importance of interactive communication in supporting meaningful and student-centered learning experiences.

With high-quality interactions between teachers and students, the learning process becomes more lively, thereby increasing student engagement and motivation. Furthermore, an interactive classroom atmosphere also allows for closer collaboration among students, allowing them to share insights, work together on group assignments, and learn to respect differences of opinion that arise during discussions. This, of course, has a positive impact on the development of students' social skills, such as effective communication, teamwork, and collaborative problem-solving skills. With these learning activities, students are expected to improve their learning outcomes. Therefore, in order to increase student activity (Alayont, 2014; Liu et al., 2023; Munoz et al., 2016).

Student Learning Motivation

Researchers combined the identified indicators to provide a general answer about students' learning motivation. Achievement score level tables were then used to summarize and analyze the indicators, as shown below:

Table 2: Student Learning Motivation

No	Indicator	n	N	%	Category
1	Persevering in Facing Assignments	900	662	73,56	Good
2	Persistence in the Face of Adversity	900	711	79,00	Good
3	Can Defend His Opinion	900	727	80,78	Good
Total		**2700**	**2100**	**77,78**	Good

Source: Data processing results using SPSS 24

The overall score for the assessed indicators is considered good, ranging between 61% and 80%, according to Table 4.3. A total of 18 items were evaluated, and the score obtained was 2100 out of an ideal 2700, resulting in an average percentage of 77.78%. This percentage indicates excellent overall performance.

a. Diligent in Facing Tasks

Students' motivation to learn is clearly evident in their perseverance in completing each assignment assigned by the teacher, both individual and group assignments. This perseverance reflects a high level of dedication, demonstrating a persistent willingness to give up despite challenges or difficulties in understanding the material. The enthusiasm they demonstrate in completing assignments also demonstrates a strong internal drive to continue learning, striving to improve their understanding, and achieving optimal academic results in line with their expectations. Furthermore, persistence in completing assignments reflects students' good time management, discipline, and responsibility for their learning process.

With strong internal motivation, students will be more focused on achieving their desired learning goals, less easily influenced by distractions, and a desire to continuously improve. High motivation also helps students develop a never-give-up attitude, enabling them to bounce back after experiencing failure or difficulty and to persevere in improving their learning outcomes. Therefore, it is important for teachers and the surrounding community to continue providing support, whether in the form of guidance, appreciation, or adequate learning facilities, so that students' motivation to learn remains strong and develops over time. In line with the opinion Alsadoon, (2022); Hariri et al., (2020); Sosiady and Ermansyah, (2023) “"The ideal motivation for achieving student self-development is persistence in completing assignments." Based on the results obtained, student motivation in learning, based on the persistence indicator in facing assignments, was in the good category, with a percentage reaching 73.56%. This score can measure the level of student learning motivation, characterized by their persistence in completing assignments.

b. Persistence in the Face of Adversity

Students with adequate motivation certainly have high tenacity in facing various difficulties that arise during the learning process. They do not give up easily when encountering obstacles, whether in understanding the material, completing assignments, or facing exams or other academic challenges. Instead, they continue to strive diligently to identify solutions to each problem they encounter, using various effective learning strategies, and striving to improve their understanding through various means, such as asking teachers, discussing with friends, or seeking additional references from books or digital learning resources. Typically, students with high motivation also demonstrate a strong perseverance, where they not only strive to understand the material in depth but also dare to try various learning methods to find the one that best suits their learning style.

With perseverance and high enthusiasm, well-motivated students succeed in understanding the learning material and develop sharper critical thinking skills. They are able to analyze a problem from various perspectives, find logical and innovative solutions, and make better decisions when facing academic and daily life challenges. Their tenacity in the face of difficulties also contributes to increased self-confidence, because they realize that every effort they make brings them closer to success. The motivation that exists in every person is tenacious in the face of difficulties (not easily giving up), and does not require external encouragement to achieve their best. (Han & Yin, 2016; Urdan & Schoenfelder, 2006; Vo, Tuliao, & Chen, 2022). Based on the results obtained, learning motivation according to the indicator of persistence in facing difficulties is in the good category with a percentage level of 79.00%. Therefore, the level of student learning motivation has a persistent spirit in doing assignments and it is difficult to give up when facing obstacles in learning.

c. Can Defend His Opinion

A student's ability to defend their opinion is an important indicator of strong learning motivation, where students feel confident in their understanding of a concept and are able to

convey and defend their arguments or opinions with confidence. When students are confident in what they are learning, they go beyond memorizing information to understanding, analyzing, and connecting the material to prior experiences or knowledge. This attitude reflects a strong internal drive to learn, also known as intrinsic motivation. They are driven to learn not by external factors such as grades or praise, but by curiosity, satisfaction in understanding the material, and a desire to continue developing.

Being able to defend one's opinion demonstrates a student's courage and confidence in conveying their ideas or arguments. This trait demonstrates strong internal motivation, a thorough understanding of the subject matter, and the ability to reason logically, which encourages students to actively participate in class discussions and the learning process. Being able to defend one's opinion is an indicator of the student learning motivation variable, with a percentage of 80.78%. The total achievement score obtained was 727 out of a total score of 900. Based on the data in the table, it was found that being able to defend one's opinion on the student learning motivation indicator shows the level of student confidence in expressing their ideas or arguments during the learning process. Factors such as teacher support, a conducive learning environment, and effective learning strategies also influence students' success in defending their opinions, which in turn affects their overall academic performance and engagement in classroom discussions. Thus, this indicator is an important aspect in assessing the extent to which student motivation can encourage independent thinking skills and active involvement in the learning process.

The Influence of Teacher Interaction Patterns in Learning

To ensure that the information collected through the survey is normally distributed, a normality test is essential. Before proceeding to regression analysis, the normality test in this study primarily examined the variables of student learning motivation (Y) and instructor interaction patterns in learning (X). The purpose of this test was to ensure that the current data met the prerequisites for further analysis. This normality test used the Kolmogorov-Smirnov approach. The results of the normality test for the variables of student learning motivation and instructor interaction patterns in learning are as follows:

Table 3: Results of the Normality Test for Variables X and Y One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters[ab]	Mean	.0000000
	Std. Deviation	856992164
Most Extreme Differences	Absolute	.122
	Positive	.094
	Negative	-.112
Test Statistic		·112
Arymp Sig. (2-tailed)		.200[cd]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Results of data processing using SPSS 24

Based on the results of the normality test using the One-Sample Kolmogorov-Smirnov Test method, the residual data has an average value of 0 with a standard deviation of 8.57. From this test, a statistical value of 0.112 was obtained with a significance level of . Because the value is greater than 0.05, it is concluded that the data on variables X and Y are normally distributed, because the significance value obtained is > 0.05.

Table 4: Results of Homoscedasticity Test

Coefficientsa					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std.Error	Beta	T	Sig.1
1 (Constang)	-1.988	8.591		-231	.81
					9
Teacher Interaction Patterns	.115	.115	.186	1.000	.32
					6

a. Dependent Variable: ABS RES

Source: Results of data processing using SPSS 24

Based on the results of the homoscedasticity test with a 95% confidence level and an alpha value of 0.05, a significance value of 0.326 was obtained. This value is greater than the alpha value of 0.05, indicating that there is insufficient evidence to conclude that the residual variance has changed. In other words, the residual variance can be assumed to remain constant. Therefore, the assumption of homoscedasticity can be declared met.

CONCLUSION

The findings indicate that teacher interaction patterns in the learning process achieved a "good" category, with an overall percentage of 77.78%. This variable was measured through four key indicators: goal orientation, the presence of structured procedures, discipline, and the existence of active learning activities. These components collectively reflect the extent to which teachers organize and implement effective interaction strategies in the classroom.

In contrast, students' learning motivation at SMK YAPMI Makassar was categorized as "excellent," with a percentage of 82.93%. This variable was assessed based on three primary indicators, namely perseverance in completing tasks, resilience in overcoming challenges, and the ability to express as well as defend opinions. These findings suggest that students demonstrate a relatively high level of engagement and intrinsic motivation in the learning process.

Furthermore, the results reveal that teacher interaction patterns have a positive influence on students' learning motivation. However, the strength of this relationship is relatively weak, as indicated by an R^2 value of 0.088. This implies that teacher interaction patterns account for only 8.8% of the variance in student learning motivation, while the remaining 91.2% is influenced by other factors beyond the scope of this study. These findings highlight the need to consider additional variables, such as learning environment, teaching methods, and individual student characteristics, in order to obtain a more comprehensive understanding of the determinants of learning motivation.

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