Jurnal Penelitian dan Pengembangan Pendidikan
Volume 8, Number 3, Tahun 2024, pp. 632-642
P-ISSN: 1979-7109 E-ISSN: 2615-4498
Open Access: https://doi.org/10.23887/jppp.v8i3.65238

Academic, Technical and Skills, Adaptation and Social Abilities towards Student Achievement

Mochamad Rozikin[1], Vena Septiana[2*], Sujarwoto[3]

[1,2,3] Manajemen Pendidikan Tinggi, Universitas Brawijaya, Malang, Indonesia

ARTICLE INFO

Article history:
Received July 16, 2024
Accepted September 11, 2024
Available online October 25, 2024

Kata Kunci:
Kemampuan Akademik, Teknis dan Keterampilan, Adaptasi dan Sosial, Prestasi Murid, Minat dan Motivasi, Gaya Belajar

Keywords:
Academic Ability, Technical and Skills, Adaptability and Social Skills, Student Achievement, Interest and Motivation, Learning Style

This is an open access article under the CC BY-SA license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

ABSTRAK

Kebutuhan untuk memahami faktor-faktor yang mempengaruhi prestasi murid dalam konteks pendidikan, khususnya bagaimana menganalisis hubungan antara minat, motivasi dan gaya belajar dengan berbagai faktor lain seperti kemampuan akademik, teknis, keterampilan, adaptasi dan sosial yang berpengaruh terhadap prestasi murid. Tujuan utama penelitian ini adalah untuk menganalisis kemampuan akademik, teknis dan keterampilan, adaptasi dan sosial terhadap prestasi murid: peran minat, motivasi serta gaya belajar dalam menentukan hasil akademis. Jenis penelitian ini adalah penelitian kuantitatif dengan pendekatan metodologi Partial Least Squares (PLS), *menggunakan perangkat lunak SmartPLS 3.0 untuk analisis data. Subjek penelitian terdiri dari Populasi sebanyak 1.241 siswa SMK kelas X hingga XII. Pengambilan sampel dengan teknik proporsional* stratified random sampling *dengan formula Taro Yamana pada tingkat signifikansi 5% dan diperoleh sampel sebanyak 294 siswa. Model struktural menunjukkan pengaruh yang signifikan dari variabel eksogen (kemampuan akademik, teknis, sosial, dan adaptasi) terhadap minat dan motivasi (*R-square *sama dengan 0,774) serta gaya belajar (*R-square *sama dengan 0,822). Meskipun beberapa hipotesis tidak mencapai signifikansi statistik, tujuh hipotesis lainnya menunjukkan efek yang signifikan. Temuan ini menekankan peran minat, motivasi, dan gaya belajar sebagai mediator dan menyarankan perlunya kebijakan pendidikan yang lebih efektif untuk meningkatkan hasil akademis.*

ABSTRACT

There is a need to understand the factors that influence student achievement in education, especially how to analyze the relationship between interest, motivation and learning style with various other factors such as academic, technical, skills, adaptation and social abilities that affect student achievement. The main objective of this study is to analyze academic, technical skills, adaptation, and social abilities about student achievement, as well as the role of interest, motivation, and learning style in determining educational outcomes. This type of research is quantitative with a Partial Least Squares (PLS) methodology approach, using SmartPLS 3.0 software for data analysis. The subjects of the study consisted of a population of 1,241 vocational high school students from grades X to XII. Sampling was done using the proportional stratified random sampling technique with the Taro Yamana formula at a significance level of 5%, and a sample of 294 students was obtained. The structural model shows a significant influence of exogenous variables (academic, technical, social, and adaptation abilities) on interest and motivation (R-square equals 0.774) and learning style (R-square equals 0.822). Although some hypotheses did not reach statistical significance, seven others showed significant effects. These findings emphasize the role of interests, motivation, and learning styles as mediators and suggest the need for more effective educational policies to improve academic outcomes.

1. INTRODUCTION

Schools serve as the primary arena where the exchange of knowledge takes place between teachers and students. Here, teachers deliver subject matter and guidance, while students absorb knowledge and provide feedback to teachers. Education in Indonesia covers various levels, from kindergarten to university (Andryani Putri & Trianita Wilman, 2023; Kholik et al., 2022).The education system can be understood as an approach or method applied in the learning process to achieve goals that enable students to actively

*Corresponding author.
E-mail addresses: septianavena@student.ub.ac.id (Vena Septiana)

develop their potential (Kholik et al., 2022; Sintiawati et al., 2022) .This transformation can be seen from the evolution of the education system which includes aspects of learning, teaching, curriculum, student development, learning methods, learning aids, facilities and infrastructure, and graduate competencies from time to time. In the perspective of behaviorist learning theory, learning is understood as a change in behavior that can be observed directly, which occurs through the interaction between stimulus and response in accordance with mechanistic principles (Lubis et al., 2023). Education is an effort that is carried out consciously and planned to create a learning atmosphere and learning process that allows students to actively develop their potential, so that they have spiritual strength, self-control, personality, intelligence, good morals, and the skills needed for themselves, society, nation and state.

Schools are also places where parents expect their children to get the best education, which in turn is expected to make a positive contribution to the country and the world of work in the future. Interest, motivation and learning style are key factors that influence students' academic and non-academic achievements. Student achievement reflects their learning outcomes as measured through various parameters such as grades, understanding of the material and skills acquired (Amaliah et al., 2023; Octaviana et al., 2019; Yuriansa, 2019).The learning process aims to improve the quality of individuals who are able to adapt to the development of the times and think critically. The quality of learning is influenced by various aspects such as teaching methods, curriculum, evaluation, and facilities and infrastructure (Lubis et al., 2023; Ramanda & Sagita, 2020). Academic achievement reflects the actual results of students' learning achievements that can be measured through their level of adaptation to the education system. To produce quality learning, factors such as intelligence, motivation, attitudes and learning styles of students, and the surrounding environment must be optimized (Muflihah, 2021; Nengsih & Dafit, 2022; Susilowati et al., 2021). Students' learning styles influence how they interact with subject matter and can reflect how willing they are to learn (E. Damayanti et al., 2020; Magdalena & Luthfiyah, 2020). GLearning is a process that involves individual tendencies in learning knowledge. Learning outcomes are mental activities that result in changes in understanding, skills and attitudes. Various external factors such as social, economic and educational environments also play an important role in determining student learning outcomes. In Garut Regency, like many other schools in Indonesia, students come from various backgrounds with differences in family economic levels, access to informal education and social support.

In the era of ever-evolving education, the renewal of research on the influence of academic, technical and skill abilities, and social adaptation on student achievement, by considering the role of interest, motivation and learning style as intervening variables, becomes very relevant. This study integrates more sophisticated methodologies to provide a more comprehensive picture of the factors that influence student achievement in Garut Regency. By adopting advanced data analysis techniques such as Structural Equation Modeling (SEM), this study can evaluate the complex relationships between these variables, identifying both direct and indirect relationships that influence student achievement (Syafaruddin et al., 2020; Verawati et al., 2020). In addition, the use of digital technology in data collection, such as online questionnaires and mobile applications, speeds up the process and increases the accuracy of the data collected..This study also introduces a new approach to understanding the role of interest and motivation as intervening variables. Focusing on the differences between intrinsic and extrinsic motivation provides insight into how these two types of motivation modify the relationships between academic, technical and skill abilities and student achievement (Armo et al., 2019; Iriana & Armin, 2021; Tarkuni, 2021). Furthermore, the exploration of more integrated learning styles, such as visual, auditory and kinesthetic learning styles, as well as the development of new instruments to more accurately identify learning styles, provide new perspectives on how adjusting teaching methods can affect learning outcomes (Basir et al., 2022; E. Damayanti et al., 2020; Lestari & Djuhan, 2021).

In addition to the methodological aspects, this study emphasizes the importance of local context by analyzing specific factors that influence students in Garut Regency. This study evaluates how local and cultural influences can affect student achievement and how educational interventions can be adjusted to these conditions..Local education policies and new programs implemented at SMK 2 Garut are also the focus of analysis, to understand the interaction between policies and variables that influence student achievement. Previous research findings show significant changes in external factors such as social support, access to technology and family economic conditions, and their impact on student achievement (Ar-Rozaq et al., 2022). Recent data highlights variations in academic achievement between students from different economic backgrounds, as well as the need to tailor educational support..

This study also examines the role of technology in improving access to information and the quality of learning at SMK 2 Garut, showing how technology integration can expand educational resources and support more effective learning..As a result of these findings, this study proposes new strategies to improve the effectiveness of learning at SMK 2 Garut, including adjusting teaching methods according to students' learning styles, developing motivational programs, and improving technological support..Policy

recommendations at the school and regional levels are also expected to help formulate policies that are more responsive to student needs..Thus, the renewal in this study not only updates the methods and approaches, but also provides in-depth insights into the interactions between variables that affect student achievement in the local context. Thus, this study will focus on factors such as academic ability, technical skills, social adaptation, as well as students' interests, motivations, and learning styles as variables that affect their achievement. Data collection through in-depth surveys and analysis is expected to provide comprehensive insights into the factors that affect achievement at SMK 2 Garut, as well as assist in formulating more effective educational strategies. This study aims to analyze academic, technical and skills, adaptation and social abilities towards student achievement: the role of interests, motivations and learning styles in determining academic outcomes.

2. METHOD

This research is an explanatory quantitative approach research that aims to test the hypothesis that has been proposed. Explanatory research is used to explain the causal relationship between variables through hypothesis testing..Data collection using open and closed questionnaires as a tool in collecting data. The questionnaire distributed to respondents consisted of 30 question items. The population was 1,241 students of SMK 2 Garut from grades X to XII. Sampling using proportional techniques stratified random sampling with the Taro Yamana formula at a significance level of 5% and a sample of 294 students was obtained consisting of 91 class X students, 103 class XI students, and 100 class XII students. This technique was chosen because the population has members or elements that are not homogeneous and are proportionally stratified (Wijaya, 2018). Sample characteristics are presented in Table 1.

Table 1. The Sample Characteristics

Sample Characteristics	Man		Woman	
	Amount	Percentage	Amount	Percentage
Class X	54	59.34%	37	40.66%
Grade XI	56	54.37%	47	45.63
Grade XII	75	75%	25	25%
Total	**185**	**100%**	**109**	**100%**

Conceptual framework and hypotheses proposed in this study. Interest and motivation to learn and learning styles can be influenced by several factors including academic ability, technical ability and skills, social ability and adaptability. Interest and motivation to learn and learning styles can have an impact on student achievement.

3. RESULT AND DISCUSSION

Result

The results of this study were obtained from data analyzed using SmartPLS 3.0 software. The structural equation analysis (SEM) method used is Partial Least Squares (PLS), which focuses on variance and allows testing of measurement and structural models simultaneously. Evaluation of the measurement model is carried out through convergent validity and discriminant validity as well as composite reliability and Cronbach's alpha. The results of the measurement model testing can be seen in Table 2.

Table 2. The Evaluation of Measurement Model

Construction	Items	Loading Factor	AVE	Cronbach's Alpha	Composite Reliability	Discriminant Validity
Academic Ability	x1.1	0.274	0.724	0.871	0.913	Valid
	x1.2	0.277				
	x1.3	0.296				
	x1.4	0.339				
Technical Ability and Skills	x2.1	0.411	0.724	0.809	0.887	Valid
	x2.2	0.380				
	x2.3	0.384				
Adaptability	x3.1	0.343	0.721	0.807	0.886	Valid
	x3.2	0.426				
	x3.3	0.405				

Construction	Items	Loading Factor	AVE	Cronbach's Alpha	Composite Reliability	Discriminant Validity
Social Skills	x4.1	0.275	0.685	0.847	0.897	Valid
	x4.2	0.326				
	x4.3	0.324				
	x4.4	0.282				
Interest and Motivation	z1.1	0.329	0.717	0.869	0.910	Valid
	z1.2	0.260				
	z1.3	0.315				
	z1.4	0.274				
Learning Styles	z2.1	0.470	0.612	0.680	0.825	Valid
	z2.2	0.404				
	z2.3	0.403				
Performance	Y1	0.157	0.687	0.939	0.950	Valid
	Y2	0.082				
	Y3	0.164				
	Y4	0.079				
	Y5	0.081				
	Y6	0.166				
	Y7	0.086				
	Y8	0.174				
	Y9	0.167				

Based on Table 2, all constructs have an Average Variance Extracted (AVE) value above 0.5 so that they are declared valid where convergent validity can be confirmed with a loading factor value above 0.6 for each construct indicator and an Average Variance Extracted (AVE) value above 0.5. In addition, the composite reliability value is above 0.7 and Cronbach's alpha is above 0.6, confirming the reliability of all constructs. Reliability measurement can be done by looking at the composite reliability value and Cronbach's alpha above 0.7, but a value of 0.6 is still acceptable..The results show that the composite reliability and Cronbach's alpha values are greater than 0.6 so that all constructs are declared reliable. In this study, an evaluation was carried out on the structural model (inner model) to predict the relationship between latent variables..The structural model (inner model) is evaluated using R-square for dependent constructs, as well as p-values or t-values to test the significance between constructs in the structural model. The use of R-square values as a measuring tool helps in determining the contribution of exogenous variables to endogenous variables in the context of this study.

Table 3. The R-Square

Variable	R-Square
Interest and Motivation	0.774
Learning Styles	0.822
Performance	0.059

The results of the analysis show that the R-Square value for the interest and motivation variables is 0.774, which means that the exogenous variables, namelyacademic ability, technical ability and skills, social ability and adaptabilityinfluences interest and motivation by 77.4% while the remaining 22.6% is influenced by other variables not included in this research model. The R-Square value for the learning style variable is 0.822 which means that the variableacademic ability, technical ability and skills, social ability and adaptabilityinfluences learning style by 82.2%, while the remaining 17.3% is influenced by other variables not examined in this study. Hypothesis testing is a way to make decisions in evaluating research results against predetermined objectives. Table 4 shows the results of hypothesis testing in this study.

Table 4. The Path Coefficient

Exogenous Variable	Endogenous Variable	Path Coefficient	t-Statistic	p-Values	Information
Academic Ability	Interest and Motivation	0.076	2.490	0.013	(+) significant
Academic Ability	Learning Styles	0.081	4.771	0.000	(+) significant

Exogenous Variable	Endogenous Variable	Path Coefficient	t-Statistic	p-Values	Information
Technical Ability and Skills	Interest and Motivation	0.133	2.472	0.014	(+) significant
Technical Ability and Skills	Learning Styles	0.123	3.132	0.002	(+) significant
Adaptability	Interest and Motivation	0.131	1.682	0.093	(+) not significant
Adaptability	Learning Styles	0.128	3.334	0.001	(+) significant
Social Skills	Interest and Motivation	0.125	1.589	0.113	(+) not significant
Social Skills	Learning Styles	0.079	7.575	0.000	(+) significant
Interest and Motivation	Performance	0.102	3.091	0.002	(+) significant
Learning Styles	Performance	0.102	1.047	0.295	(+) not significant

Based on Table 4, three hypotheses are rejected, namely the effect of adaptability on interest and motivation (H5), social ability on interest and motivation (H7), and learning style on achievement (H10) because the p-value is 0.093, 0.113 and 0.295 in each hypothesis. Hypothesis testing can be seen from the p-value ≤ 0.05 indicating a significant effect and the p-value ≥ 0.05 indicating an insignificant effect. In addition, it can be done by looking at the t-value which is considered significant if the t-value> 1.96. The other seven hypotheses, namely H1; H2; H3; H4; H6; H8; and H9 have a significant effect with a p-value ≤ 0.05 & t-value> 1.96. The Smart PLS output is presented in Figure 1.

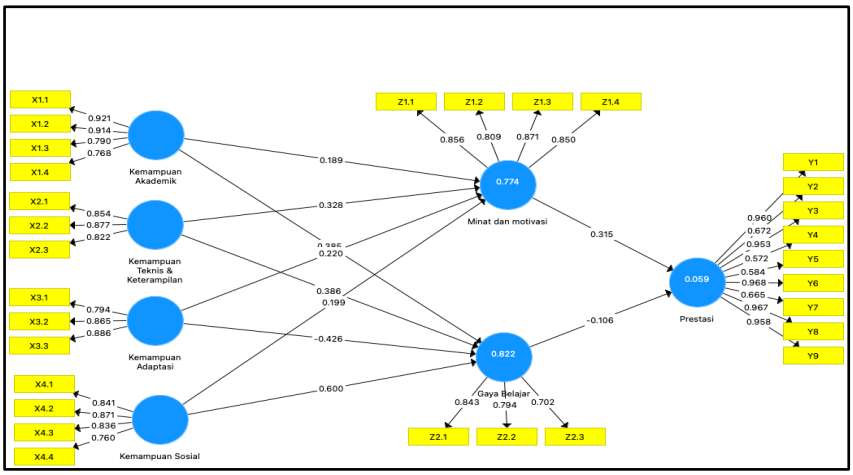

Figure 1. The Smart PLS Output

Discussion

The influence of academic ability on learning interest and motivation of 0.076 states that academic ability has a positive and significant effect on learning interest and motivation. This means that the better the academic ability, the more likely it is to increase learning interest and motivation. Students' academic ability has a significant effect on their learning motivation interests and styles. Factors such as subject interest, career aspirations, and the relationship between teachers and students also play a role in shaping learning motivation (Arianti, 2019; DLT et al., 2022). Students' academic beliefs are positively related to achievement, while interest in the subject shows a weaker relationship (Adegboyega et al., 2017; Estari, 2020; Lai & Ishizaka, 2020). Thus, academic ability creates a fundamental impact on students' learning motivation. Academic ability plays an important role in shaping students' motivational interests and learning styles, which in turn affect their competitiveness in the labor market. This is supported by research that highlights the correlation between academic ability, learning interests, and teacher characteristics on students' learning motivation (Ar-Rozaq et al., 2022).

The influence of academic ability on learning style of 0.081 states that academic ability has a positive and significant effect on learning style. This means that the better the academic ability, the more likely it is to improve learning style. Academic ability is one of the high-level thinking skills that is developed through learning activities involving students. Therefore, academic ability needs to be trained with a creative student learning style, opening up new insights and finding ideas that were never expected before (Purmadi, 2016; Sulasriani et al., 2023). Utilization of learning styles is the utilization of a person's activities

to facilitate the process of absorbing, organizing and processing information. By utilizing learning styles, students find it easier to absorb, organize and process information given by the teacher. Students will be able to learn well and will produce good learning achievements, if students can optimize the utilization of their learning styles (Akrim, 2020; Sati et al., 2022). Vocational high school students must have strong academic abilities. They must be able to understand the problem situations that occur and find solutions that suit their learning styles. In addition, they also need to have knowledge and skills that are relevant to the needs of the workforce. By utilizing the appropriate learning style, students can more easily understand the material taught by the teacher. This will help vocational high school students to improve their abilities, skills and knowledge, which will be reflected in optimal learning achievements.

The influence of technical ability and skills on learning interest and motivation of 0.133 states that technical ability and skills have a positive and significant effect on interest and motivation to learn. This means that the better the technical ability and skills, the more likely it is to increase interest and motivation to learn. Utilization of technical ability and skills, students become more confident, improve their learning skills, become more disciplined and increase interest and motivation to learn (Aryana Mahayasa et al., 2022). Technical ability and skills play a very important role in determining the direction of learning, interests, motivation to learn and the quality of education. In line with the development of the world today which is increasingly modern, everyone is required to have more creative technical abilities and skills. The influence of technical ability and skills on learning styles of 0.123 states that technical ability and skills have a positive and significant effect on learning styles. This means that the better the technical ability and skills, the more likely it is to improve learning styles. To be creative in learning styles, children must have good technical ability and skills and be able to take an active role in the learning process.Students' technical abilities and skills will increase along with the learning style used (Collie et al., 2017; E. Damayanti et al., 2020; Padliah & Pujiastuti, 2020). Students who participated in technical and skills-based learning showed significant improvements in learning styles compared to those who participated in learning with traditional strategies.

The influence of adaptability on learning interest and motivationof 0.131 states that technical ability and skills have a positive and insignificant effect on learning interest and motivation. This means that although adaptability has a positive effect on learning interest and motivation, its effect on students' learning interest and motivation is not significant. This means that variations in students' learning interest and motivation are not significantly influenced by their adaptability. In a statistical context, this shows that the relationship between adaptability and learning interest and motivation is not statistically strong enough to be stated as a significant relationship.Adaptability is associated with greater engagement in positive behaviors (persistence, planning, and task management) and lower engagement in negative behaviors (disengagement and self-inhibition) (Fitria, 2022). In addition, negative behavioral engagement was found to be inversely related to academic achievement in Semester 1, which predicted academic achievement in Semester 2. The role of demographic and socioeconomic factors in high school students' motivation, engagement, academic resilience, and adaptability (Collie et al., 2017). There was no significant interaction between demographics and socioeconomics, so the main effects of gender and parental education on motivation, engagement, and adaptability were relatively independent. Overall, this study has identified socio-demographic factors that play an important role in the educational process for the academic development of secondary school students in China.

The influence of adaptability on learning styles of 0.128 states that adaptability has a positive and significant effect on learning styles. This means that the better the adaptability, the more likely it is to improve learning styles. Students' adaptability functions to influence the choice of activities, goals, efforts and persistence in classroom activities. With high self-adaptive ability, students dare to choose difficult learning activities, become more active in class, try new tasks even though they are difficult to do, increase the quantity and quality of their efforts in learning and increase persistence or persistence when students face difficult tasks. The ability of a person to adapt to absorb and understand lessons is certainly different. Some are fast, some are moderate and some are slow in absorbing lessons. Therefore, students use different learning styles to understand the same information or lesson. Students who have high self-adaptive abilities find it easier to complete tasks, can manage their time well, increase their persistence in facing challenges, have lower levels of anxiety, show flexibility in using learning strategies and are able to adapt to different learning environments. These positive abilities and attitudes encourage students' interest and motivation in learning so that they can achieve good learning achievements (Collie et al., 2017; Theobald, 2021).

The influence of social skills on learning interest and motivationof 0.125 states that social skills have a positive and insignificant effect on interest and motivation to learn. Social skills have a positive effect, meaning that the better the students' social skills, the higher their interest and motivation to learn. This shows a positive relationship between these two variables. Not statistically significant, indicating that although there is a positive relationship, the effect of social skills on students' interest and motivation to

learn does not reach the expected level of significance in statistical analysis. In other words, the effect of social skills is not strong enough to be considered significant in influencing students' interest and motivation to learn. There is a positive relationship between students' social skills and their interest and motivation to learn. Although students' social skills are not the only factor in increasing interest and motivation to learn cognitive learning (Weldiani et al., 2022). Interest and motivation to learn are formulated as a mental or psychological activity, which takes place in active interaction with the environment, which results in changes in understanding, skills, values and attitudes (Wulandari & Nisrina, 2020). Social abilities always have a certain relationship with objects, in other words, attitudes are formed, learned or changed always with respect to a certain object that can be formulated clearly (C. Damayanti et al., 2017; Hartati et al., 2020). Social skills have motivational and emotional aspects, natural traits that differentiate attitudes, skills or knowledge that people have. Peer environmentis an interaction with people who are similar in age and status (Ayu et al., 2023; Sati et al., 2022). Peer environment can have both positive and negative impacts. The impact of a positive peer environment can make students more independent, more responsible, can increase knowledge, have positive social adaptation and positive behavior so that it can improve student learning achievement. Furthermore, the negative impact of a peer environment can shape children's attitudes to be aggressive, like committing acts of violence to being involved in juvenile delinquency. A positive peer environment is also needed by vocational high school students because it can provide a positive contribution to personality, skills, knowledge, behavior, perception and learning motivation. A good peer environment provides a sense of togetherness, provides stimulation, provides physical support, provides ego support, and can be used as a means of social comparison and intimacy/affection (Ayu et al., 2023; Rusnida et al., 2022). Students who can build good relationships with their peer environment will get motivational support, physical assistance, togetherness, familiarity, social skills and other positive support in carrying out learning activities. In addition, the peer environment becomes a benchmark for student self-comparison. Students who are in a smart peer environment tend to be motivated to be smart.

The influence of social skills on learning styles of 0.079 states that social skills have a positive and significant effect on learning styles. This means that the better the social skills, the more likely it is to improve learning styles. Maximum social skills are one of the goals of the learning process that students undergo at school. If a student interacts well, especially in learning, then they will be more easily accepted in the environmentschool especially in the classroom environment. Gifted children show extraordinary abilities in achievement, self-confidence, personality, self-concept, self-esteem, attitude, social skills values, and moral thinking that influence learning styles at school (Anugraheni & Adistana, 2023; Weldiani et al., 2022). In interaction there is always contact and a relationship is established between humans as individuals with other individuals. Social skills are relationships between people individually, between groups of people, and individuals with groups (Wahyuni, 2019). Social skills are relationships between individuals that influence each other and there is a reciprocal relationship. Reciprocal relationships also occur in the learning process and affect learning styles. Learning outcomes are the level of achievement of learning efforts, namely improvements and changes in individuals that are manifested in behavior and skills that are seen through learning outcomes achieved from school (Wihinda et al., 2020). Meanwhile, if the condition of inability to adapt is experienced by students and continues continuously in the learning process, it will certainly have a big impact on their learning style and damage their learning achievement (Sudianto, 2007: 15).

The influence of interest and learning motivation on achievement of 0.102 states that interest and motivation to learn have a positive and significant effect on achievement. This means that the better the interest and motivation to learn, the more likely it is to improve achievement. There is a positive effect of interest and motivation to learn on learning achievement (Verawati et al., 2020). There is a significant influence when the level of motivation is taken as a variable in academic achievement (Wulandari & Nisrina, 2020). Motivation is an energy that arises from within a person that drives them to behave or act in order to achieve a goal, whether consciously or not. While interest and motivation to learn is a process within students that guides, activates and encourages students to learn happily so that they are able to do better, achieve and be creative (Ar-Rozaq et al., 2022). Motivation to learn is very necessary to encourage someone to learn, so that learning outcomes generally increase if motivation to learn increases..Learning style and learning motivation are two things that exist in students. Learning style and learning motivation cannot be controlled by teachers and only students are able to control them. This is because both of these things are inherent in students and become a comfort in themselves to carry out the learning process. Teachers as educators should be able to vary learning and be motivators for students so that students are able to absorb information optimally and are able to increase learning motivation in students. If a student has the motivation to learn, then the student will carry out learning activities happily without any coercion from others. So that this will have a positive impact on improving student learning outcomes. Thus, the higher

the learning motivation, the students' Indonesian language learning outcomes will increase. Conversely, the lower the students' learning motivation, the lower the students' Indonesian language learning outcomes. This means that there is a significant relationship between learning motivation and the Indonesian language learning outcomes of fifth grade students of SD Negeri Ular.

The influence of learning styles on achievement of 0.102 states that learning style has a positive and insignificant effect on achievement. This means that learning style has a positive effect, meaning that there is a positive relationship between students' learning styles and their academic achievement. This shows that certain learning styles can contribute to improving student achievement. Although learning styles can affect the way students acquire knowledge, in this case, learning styles do not have a strong impact on students' academic achievement levels. Although learning styles vary among students, they do not contribute significantly to student achievement. The effect of learning styles on academic achievement among high school students. The results of the study indicate that learning styles do not have a consistent significant effect on student achievement, although there is variation in the learning styles measured (E. Damayanti et al., 2020; Purmadi, 2016). There is a significant influence of the use of learning media on science learning outcomes, there is a significant influence of interest in learning on science learning outcomes, there is an insignificant influence of learning style on science learning achievement (Aswin et al., 2020). Learning style is a combination of how someone absorbs and then organizes and processes information, if a student utilizes a learning style then he will realize which learning activities are suitable or not suitable for his learning style, helping to determine the right choice from several activities and preventing students from inappropriate learning experiences and a decrease in learning achievement. Students who are able to combine the three learning styles are better able to absorb information given by the teacher easily, so that student learning outcomes will be more optimal.

The implications of this study are that it contributes to the understanding of how factors such as academic, technical, adaptive, and social skills influence interest, motivation, and learning styles. The findings support the importance of academic and technical skills in enhancing motivation and learning styles, and highlight that adaptive and social skills do not always have a significant impact on motivation. This adds to the literature on the relationship between individual abilities and learning processes and provides insights for the development of more effective learning strategies. The results of the study can be used by educators to design better programs to enhance students' academic and technical skills. Strategies to enhance learning styles through academic and technical skills can be integrated into the curriculum. Educators can also consider different approaches in enhancing students' social and adaptive skills to support learning interests and motivation. The population and sample of the study may be limited to a sample that is not fully representative of the wider population, so the results cannot be generalized to the entire student population. Measurement and statistical analysis methods may affect the findings, especially in terms of the significance of the results. Some external factors such as family support, learning environment and students' personal experiences that were not measured may affect the results.

4. CONCLUSION

The results of the analysis indicate a deeper understanding of the factors influencing interest, motivation, and learning styles in the context of this study, with potential implications for the development of more effective and outcome-oriented educational policies and practices.The recommendation of this study is that future research can use a larger and more representative sample to ensure the generalizability of the findings. Additional variables, consider other variables that can affect learning interest and motivation, such as family support and learning experiences. Methodology, using a mixed research method that combines quantitative and qualitative to obtain a more holistic picture of the factors that affect students' interests, motivations, and learning styles. With this approach, further research can provide deeper and more applicable insights in the context of education.

5. REFERENCES

Adegboyega, L. O., Ibukunoluwa, A., & Ph, I. (2017). Relationship Between Emotional Intelligence and Attitude Towards Examination of Undergraduates at University of Ilorin. *Asia Pacific Journal of Multidisciplinary Research*, *5*(1), 85–93.

Akrim, E. S. (2020). Analisis Faktor-Faktor Yang Mempengaruhi Prestasi Belajar Siswa Ditinjau Dari Aspek Manajemen Belajar Siswa (Studi Pada Siswa SMP Gajah Mada Medan). *Jurnal Manajemen Pendidikan Dasar, Menengah Dan Tinggi*, *1*(1), 10–17. https://doi.org/http://dx.doi.org/10.30596%2Fjmp-dmt.v1i1.3920.

Amaliah, R. S., Solihat, A. N., & Widyaningrum, B. (2023). Analys of academic flow , digital literacy and self-

regulated learning on academic achievement. *Jurnal Ilmiah Pendidikan*, *2*(3). https://doi.org/10.55904/educenter.v2i3.925.

Andryani Putri, N., & Trianita Wilman, A. (2023). Perbandingan Antara Growth Mindset Dan Fixed Mindset Dampaknya Pada Prestasi Akademik. *MUNTAZAM*, *04*(01), 51–58. https://doi.org/10.35706/muntazam.v4i01.9497.

Anugraheni, N., & Adistana, G. agus Y. P. (2023). Kemampuan Berpikir Kritis Ditinjau Dari Self Regulated Learning Siswa Kelas X Dpib Smk Negeri 3 Surabaya. *Jurnal Kajian Pendidikan Teknik Bangunan (JKPTB)*, *9*(1).

Ar-Rozaq, M. N., Herlambang, A. D., & Wijoyo, S. H. (2022). Hubungan Gaya Belajar dan Motivasi Belajar terhadap Hasil Belajar Secara Daring pada Mata Pelajaran Teknologi Layanan Jaringan di SMK PGRI 1 Kota Pasuruan. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, *6*(7), 3462–3470. https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/11373.

Arianti, A. (2019). Peranan Guru Dalam Meningkatkan Motivasi Belajar Siswa. *DIDAKTIKA : Jurnal Kependidikan*, *12*(2), 117–134. https://doi.org/10.30863/didaktika.v12i2.181.

Armo, A., Jazuli, A., & Tanireja, T. (2019). Hubungan Sikap Sosial Dan Kecerdasan Emosional Terhadap Prestasi Belajar Siswa Sekolah Dasar Di Wilayah Kecamatan Gumelar Di Tinjau Dari Gender. *Dinamika Jurnal Ilmiah Pendidikan Dasar*, *11*(1), 58. https://doi.org/10.30595/dinamika.v11i1.5979.

Aryana Mahayasa, I. G., Komang Sumadi, N., Wayan Budi Satriya, I., Gusti Ayu Hari Prihantini Devi, I., & Wayan Yuniari, N. (2022). Pengaruh Pendidikan Kewirausahaan, Motivasi Dan Lingkungan Terhadap Minat Berwirausaha Mahasiswa Pada Universitas di Kota Denparsar. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *11*(5), 569–582. https://doi.org/10.24843/EEB.2022.v11.i05.p06.

Aswin, A., Djadir, D., & Rusli, R. (2020). Pengaruh Efikasi Diri, Kecerdasan Emosional, dan Motivasi Belajar Terhadap Prestasi Belajar Matematika Siswa SMA Kelas XI IPA. *Issues in Mathematics Education (IMED)*, *3*(2), 174. https://doi.org/10.35580/imed11053.

Ayu, P., Mahmud, N., & Aprisal. (2023). Pengaruh Interaksi Teman Sebaya Dan Regulasi Diri Terhadap Hasil Belajar Matematika Siswa Kelas Viii Smpn 2 Tinambung. *PEDAMATH: Journal on Pedagogical Mathematics*, *5*(1), 1–13. https://doi.org/10.31605/pedamath.v5i1.2338.

Basir, N. S., Jolianis, J., & Syahrul, A. R. (2022). Pengaruh Kecerdasan Emosional, Kemandirian Belajar, Gaya Belajar, Dukungan Orang Tua, Dan Lingkungan Belajar Terhadap Prestasi Belajar Akuntansi Pada Siswa Kelas X Smk Negeri 4 Sijunjung. *Horizon*, *2*(3), 257–276. https://doi.org/10.22202/horizon.v2i3.5950.

Collie, R. J., Holliman, A. J., & Martin, A. J. (2017). Adaptability, engagement and academic achievement at university. *Educational Psychology*, *37*(5), 632–647. https://doi.org/10.1080/01443410.2016.1231296.

Damayanti, C., Rusilowati, A., & Linuwih, S. (2017). Pengembangan Model Pembelajaran IPA Terintegrasi Etnosains. *Journal of Innovative Science Education*, *6*(1), 116–128.

Damayanti, E., Santosa, A. B., Zuhrie, M. S., & Rusimamto, P. W. (2020). Pengaruh Penggunaan Media Pembelajaran Berbasis Multimedia Interaktif Terhadap Hasil Belajar Siswa Berdasarkan Gaya Belajar. *Jurnal Pendidikan Teknik Elektro*, *9 No 03*, 639–645. https://doi.org/10.26740/jpte.v9n03.p639-645.

DLT, S. A., Hamidah, H., & Surawan, S. (2022). Self Regulated Learning Dalam Belajar Al-Qur'an Pada Remaja Di Sidomulyo Tumbang Tahai Palangka Raya. *Ilmuna: Jurnal Studi Pendidikan Agama Islam*, *4*(2), 117–130. https://doi.org/10.54437/ilmuna.v4i2.602.

Estari, A. W. (2020). Pentingnya Memahami Karakteristik Peserta Didik dalam Proses Pembelajaran. *Workshop Nasional Penguatan Kompetensi Guru Sekolah Dasar SHEs: Conference Series*, *3*(3), 1439–1444.

Fitria, Y. (2022). Kemampuan Adaptasi Psikososial dengan Kemunculan Perilaku bermasalah pada Siswa Sekolah Dasar. *Jurnal Riset Madrasah Ibtidaiyah*, *2*(2), 229–236. https://doi.org/10.32665/jurmia.v2i2.510.

Hartati, S. H., Koto, I. K., & Hambali, D. H. (2020). Penerapan Model Discovery Learning untuk Meningkatkan Kemampuan Berpikir Kritis dan Kecakapan Kerjasama pada Pembelajaran IPA Siswa Kelas V SD Negeri 32 Bengkulu Tengah. *Jurnal Pembelajaran Dan Pengajaran Pendidikan Dasar*, *3*(1), 98–112. https://doi.org/10.33369/dikdas.v3i1.12330.

Iriana, A., & Armin, A. (2021). Pengaruh Kecerdasan Emosional Terhadap Prestasi Belajar Matematika Siswa Kelas VII MTsN 1 Wakatobi. *Jurnal Akademik Pendidikan Matematika*, 1–8. https://doi.org/10.55340/japm.v7i1.384.

Kholik, A., Bisri, H., Lathifah, Z. K., Kartakusumah, B., Maufur, M., & Prasetyo, T. (2022). Impelementasi Kurikulum Merdeka Belajar Kampus Merdeka (MBKM) Berdasarkan Persepsi Dosen dan

Mahasiswa. *Jurnal Basicedu*, *6*(1). https://doi.org/10.31004/basicedu.v6i1.2045.

Lai, Y. L., & Ishizaka, A. (2020). The application of multi-criteria decision analysis methods into talent identification process: A social psychological perspective. *Journal of Business Research*, *109*(March), 637–647. https://doi.org/10.1016/j.jbusres.2019.08.027.

Lestari, S., & Djuhan, M. W. (2021). Analisis Gaya Belajar Visual, Audiotori dan Kinestetik dalam Pengembangan Prestasi Belajar Siswa. *Jurnal Ilmiah Ilmu Pengetahuan Sosial Indonesia*, *1*(1), 79–90. https://doi.org/10.21154/jiipsi.v1i2.250.

Lubis, R., Syafitri, N., Maylinda, R. N., Nurin Alyani, N., Anda, R., Zulfiyanti, N., & Surbakti, O. Z. (2023). Pendekatan Behavioristik untuk Anak Disabilitas Intelektual Sedang. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *7*(2), 1626–1638. https://doi.org/10.31004/obsesi.v7i2.4161.

Magdalena, I., & Luthfiyah, J. (2020). Strategi Guru Dalam Menghadapi Gaya Belajar Siswa Kelas 3 Di Sd Negeri Tangerang 5. *EDISI : Jurnal Edukasi Dan Sains*, *2*(1), 151–168.

Muflihah, A. (2021). Meningkatkan Motivasi dan Hasil Belajar Siswa Melalui Model Pembelajaran Index Card Match pada Pelajaran Matematika. *Jurnal Pendidikan Indonesia*, *2*(1), 152–160. https://doi.org/10.59141/japendi.v2i01.86.

Nengsih, M. S., & Dafit, F. (2022). Peran Orang Tua Dalam Meningkatkan Motivasi Belajar Siswa Di Masa Pandemi Covid-19. *MIMBAR PGSD Undiksha*, *10*(3), 476–482. https://doi.org/10.23887/jjpgsd.v10i3.50551.

Octaviana, S., Setiawan Jurusan PGSD, Y., Kristen Satya Wacana Salatiga, U., & Tengah, J. (2019). Meningkatkan Minat Belajar Kelas Iv Sekolah Dasar Menggunakan Media Powerpoint Berdasarkan Kerangka Kerja Tpack. *Jurnal Pendidikan Tambusai*, *3*(3), 1150–1159.

Padliah, M., & Pujiastuti, H. (2020). Pengaruh Kreativitas Dan Gaya Belajar Pada Mata Pelajaran Matematika Terhadap Hasil Belajar Matematika Siswa. *Delta: Jurnal Ilmiah Pendidikan Matematika*, *8*(2), 143. https://doi.org/10.31941/delta.v8i2.1003.

Purmadi. (2016). Pengembangan Bahan Ajar Berbasis Web Berdasarkan Gaya Belajar Siswa Untuk Mata Pelajaran Fisika. *Jurnal Inovasi Teknologi Pendidikan*, *3*(2), 151–165.

Ramanda, P., & Sagita, D. . (2020). Stres Akademik Mahasiswa dalam Menyusun Skripsi dimasa Pandemi Covid-19. *Jurnal KOPASTA: Jurnal Program Studi Bimbingan Konseling*, *7*(2), 94–100. https://doi.org/10.33373/kop.v7i2.2146.

Rusnida, B., Wahyuni, S., & Eprillison, V. (2022). Pengaruh Efikasi Diri, Aktivitas Belajar, Fasilitas Sekolah, Pendidikan Orang Tua dan Teman Sebaya Terhadap Prestasi Belajar Mata Pelajaran Ekonomi Siswa Kelas XI MAN 3 Kota Padang. *Horizon*, *2*(3), 236–245. https://doi.org/10.22202/horizon.v2i3.5939.

Sati, P. L., Amluis, D., & Ronald, J. (2022). Pengaruh Disiplin Belajar, Kecerdasan Emosional, Perhatian Orang Tua, Kemandirian Belajar dan Teman Sebaya Terhadap Prestasi Belajar Ekonomi Siswa Kelas XI SMA Pembangunan Laboratorium UNP. *Horizon*, *2*(3), 289–303. https://doi.org/10.22202/horizon.v2i3.5960.

Sintiawati, N., Fajarwati, S. R., Mulyanto, A., Muttaqien, K., & Suherman, M. (2022). Partisipasi Civitas Akademik dalam Implementasi Merdeka Belajar Kampus Merdeka (MBKM). *Jurnal Basicedu*, *6*(1). https://doi.org/10.31004/basicedu.v6i1.2036.

Sulasriani, D., Samawi, A., Sunarti, L., & Laksanawati, E. (2023). Penggunaan LKPD IPAS Berbasis Experiential Learning Untuk Meningkatkan Hasil Belajar Materi Pengaruh Gaya Terhadap Benda Peserta Didik Kelas IV SD. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, *8*(1), 5077–5092. https://doi.org/10.23969/jp.v8i1.8419.

Suryani, M., Jufri, L. H., & Putri, T. A. (2020). Analisis Kemampuan Pemecahan Masalah Siswa Berdasarkan Kemampuan Awal Matematika. *Mosharafa: Jurnal Pendidikan Matematika*, *9*(1), 119–130. https://doi.org/10.31980/mosharafa.v9i1.605.

Susilowati, A. Y., Sayekti, I. C., & Eryani, R. (2021). Penerapan Media Realia untuk Meningkatkan Motivasi Belajar Siswa Pada Siswa Sekolah Dasar. *Jurnal Basicedu*, *5*(4), 2090–2096. https://doi.org/10.31004/basicedu.v5i4.1160.

Syafaruddin, S., Meldianus, M., & Elihami, E. (2020). Strategi Pembelajaran Aktif Dalam Meningkatkan Motivasi Belajar Pkn Peserta Didik. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, *1*(1), 30–41. https://doi.org/10.33487/mgr.v1i1.326.

Tarkuni, T. (2021). Pengaruh Bimbingan Belajar Terhadap Prestasi Belajar Siswa Kelas V di Sekolah Dasar. *Pedagogi : Jurnal Pendidikan Dan Pembelajaran*, *1*(1), 18–23. https://doi.org/10.56393/pedagogi.v1i1.78.

Theobald, M. (2021). Self-regulated learning training programs enhance university students' academic performance, self-regulated learning strategies, and motivation: A meta-analysis. *Contemporary Educational Psychology*, *66*, 101976. https://doi.org/10.1016/j.cedpsych.2021.101976.

Verawati, N. K. R., Tegeh, M., & Antara, P. A. (2020). Hubungan antara Minat Baca dan Motivasi Berprestasi dengan Hasil Belajar Ilmu Pengetahuan Sosial Siswa. *Mimbar PGSD Undiskha*, *8*(3), 351–363. https://doi.org/10.23887/jjpgsd.v8i3.25518.

Wahyuni, S. (2019). Pengaruh Model Pembelajaran Project Based Learning terhadap Kemampuan Pemahaman Konsep Mahasiswa Mata Kuliah Kapita Selekta Matematika Pendidikan Dasar FKIP UMSU. *EduTech: Jurnal Ilmu Pendidikan Dan Ilmu Sosial*, *5*(1). https://doi.org/10.30596/edutech.v5i1.2982.

Weldiani, M., Sarwanto, A., & Sutanto, A. V. (2022). Gambaran Kemampuan Interaksi Sosial dan Turn Taking pada Anak Prasekolah. *Jurnal Terapi Wicara Dan Bahasa*, *1*(1), 113–126. https://doi.org/10.59686/jtwb.v1i1.26.

Wihinda, A., Laurens, T., & Palinussa, A. L. (2020). Peningkatan Hasil Belajar Peserta Didik Pada Materi Sistem Persamaan Linear Dua Variabel Melalui Model Pembelajaran Flipped Classroom Improving Student Learning Outcomes on the Material of Two-Variable Linear Equations System. *Peningkatan Hasil Belajar Peserta Didik*, *2*(2002), 21–27. https://doi.org/10.30598/jumadikavol2iss1year2020page21-27.

Wijaya, H. (2018). Analisis Data Kualitatif Model Spradley. *Research Gate*, *March*, 1–9. https://www.researchgate.net/publication/323557072.

Wulandari, H., & Nisrina, D. A. Z. (2020). Hubungan Kreativitas Dan Inovatif Guru Dalam Mengajar Di Kelas Terhadap Peningkatan Motivasi Dan Minat Belajar Peserta Didik Hayani Wulandari 1 , Dhena Agniya Zahra Nisrina 2 Universitas Pendidikan Indonesia Kampus Purwakarta. *Jurnal Ilmiah Wahana Pendidikan*, *9*(16). https://doi.org/10.5281/zenodo.8242365.

Yuriansa, A. (2019). Kemampuan Problem Solving Pada Anak Usia Dini Melalui Bermain Pola (Pattern) Di Paud Arrasyid Kajhu Kecamatan Baitussalam, Aceh Besar. *Teungku: Jurnal Islam Pesantren, Pendidikan Dan Sosial*, *1*(1), 69–102.