



## **The Relationship between the Role of Parents, Learning Style, and Use of Gadgets on Learning Outcomes, Physical Education, Sports and Health for Public Middle School Students in Semarang City**

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### **Abstract**

Learning in the current era is closely related to digitalization. The role of parents, learning styles and use of gadgets will have a positive impact on students and support learning. The aim of this research is to determine the relationship between the role of parents, learning styles and use of gadgets on the learning outcomes of physical education, sports and health of state junior high school students in Semarang City. The research approach used was a quantitative method with a descriptive approach. Population and sample, namely a total of 280 respondents, 133 men and 147 women. The data analysis techniques in this research are correlation regression, data normality test, linearity test, homogeneity test and hypothesis test using SPSS version 23 software..The research results show that the relationship between the role of parents and learning outcomes has a sig value of 0.003 with a contribution of 20.2%. The relationship between learning styles and learning outcomes has a sig value of 0.007 with a contribution of 18.9%. The relationship between gadget use and learning outcomes has a sig value of 0.012 with a contribution of 31.4%. The relationship between the role of parents and learning styles on learning outcomes has a sig value of 0.001 with a contribution of 47.7%. The relationship between the role of parents and the use of gadgets on learning outcomes has a sig value of 0.002 with a contribution of 45.1%. The relationship between learning style and gadget use has a sig value of 0.033 on learning outcomes with a sig value of 0.001 with a contribution of 70.5%.

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## INTRODUCTION

Family socialization has become an important factor in children's growth and development in recent years, and its impact on children's psychosocial adjustment and well-being continues into adulthood.(Gómez-Ortiz et al., 2018). However, management of adolescents remains a challenge for society, schools and families. The behavior and social behavior of teenagers' development influences their lifestyle and is also closely related to society as a whole. Most empirical studies show that authoritative parenting has a positive effect, while authoritarian and permissive parenting has a negative effect on children's academic success.(Pinquart, 2016).The time parents and children spend together after school is a valuable opportunity. Chat is specifically designed for educational activities, including reviewing lessons learned at school(Umar, 2020). The role of parents is to improve the formation of children's character and this can be achieved by encouraging them to provide games that are appropriate to the child's developmental stages. For children, playing is an opportunity to learn. Play activities are activities that help children to develop completely physically, intellectually, socially, morally and emotionally (Widharyanto & Binawan, 2020). Parents have priority in providing education, especially in disciplining children. Discipline is seen as an effort to control oneself and an individual's mental attitude in family and community life, while developing compliance with applicable rules and regulations that are useful for learning(Wulandari et al., 2016). Parents have priority as providers of education at home. The role of parents is very important in preparing aspects of children's social development which indirectly applies elements of education, namely the process of parents using all available skills for their own benefit and the programs implemented by the child, the child's parents. Parents have the duty to educate, care for and guide their children until they reach certain stages which lead to the child's readiness for social life(Ruli, 2020). Within the scope of the family, the role of parents is very important,

because children spend most of their lives in the family environment, especially when the children are still being cared for by elementary school children, especially in the role of mother. Therefore, the family or parents are an important factor in their children's education from a religious, social and individual perspective(Ruli, 2020). Parents bear the primary responsibility for their children's education. Wherever a child goes to school, whether in a formal, non-formal or informal environment, parents still play a role in determining their child's educational future. Raising children outside the family, not in the sense of making it easier for parents to care for children, but simply because of the parents' limited knowledge, because the nature of knowledge develops over time while parents are the limitations. Apart from that, because parents prioritize family needs, they also encourage parents to seek help from other parties to educate their children(Hero & Sni, 2018). The role of parents has a very big influence on student learning success. Parental education level, income level, adequate or insufficient parental care and guidance, whether the parental relationship is harmonious or not, whether the relationship between parents and their children is close, whether the conditions at home are peaceful or not, all of these things influence each other on the achievement of learning outcomes. participant(Rumbewas et al., 2018). Learning requires high concentration to successfully understand the concepts being studied. Focus situations and conditions are closely related to learning styles(Hero & Sni, 2018). When a person recognizes his own learning style, he can control under what conditions, where, when and how learning can be maximized(Rijal & Bachtiar, 2015). There are internal factors that receive less attention in improving the quality of learning, namely learning styles. In fact, each student has different characteristics (learning styles) in receiving information in the learning process(Sh & Landry, 2008). Learning style is one of the ways students process information and experiences and how students process their experiences. When students know their own

learning styles, students can take important steps to help students learn faster and more easily, which also supports learning goals (Sundayana, 2018). Learning styles play an important role in the learning process at school. Students who often have to learn in ways that are not suitable and enjoyable for themselves, do not rule out the possibility that their learning process, especially in terms of concentration, becomes hampered in absorbing the information provided. In the end, this also affects learning outcomes that are not as optimal as expected (Ezeddine et al., 2023). The right learning style is the key to a student's learning success. Through this understanding, students are able to receive and process information and facilitate learning through their own learning style. Using a learning style that is limited to one form, especially the verbal or auditory route, can certainly cause an imbalance in absorbing information (Marpaung, 2016). It must be clear that students' abilities to understand and absorb lessons must vary at different levels, because not all students have the same learning style even though these students are in the same school or even the same class. There are several of them, namely visual learning style, auditory learning style, and kinesthetic learning style (Aisyatinnaba & Sutoyo, 2016). The concept of teaching and learning styles is not new in the world of education, and research on the subject has grown rapidly over the past two decades. Educational research also shows that students flock to classrooms, come from different economic and social backgrounds, and have different learning styles that rarely match teachers' teaching styles (Batool & Ahmad, 2019). Gadgets have become a part of students' lives so that their existence has both positive and negative impacts. The positive impact of gadgets is that they make it easier to find information and communicate. Apart from that, this can also reduce technology illiteracy among students. The negative impact is that it disrupts student learning, has a negative impact on behavior, health, attitudes and leads to waste. Therefore, restrictions and parental guidance are very necessary in using Gadgets. The student's excuse

is always Using Gadgets in activities is because Gadgets are the simplest, most comfortable and fast tools for communicating and searching for information. The benefits of gadgets for students are to facilitate communication, gather information, find entertainment, and make it easier to complete school assignments. In fact, learning can be done remotely and at the same time via gadgets (Dara Davani, 2022).

The use of gadgets here as a learning tool, when used, also has an impact on student success. Academic achievement is the result or level of competency achieved by a student after going through the teaching and learning process over a certain period of time, in the form of changes in behavior, skills and knowledge. Smartphones can be used as a way to increase students' knowledge of technological advances so that students do not close their eyes to progress in the era of globalization. Students can access various educational information using Gadgets. Used to search for various information regarding documents that are considered difficult (Kurniawan, 2022). Based on the explanation above which underlies this research, the researcher is interested in taking the title "The Relationship between Parental Roles, Learning Styles, and the Use of Gadgets on the Learning Outcomes of Physical Education, Sports and Health of State Junior High School (SMP) Students in the City of Semarang".

## METHODS

This research uses a quantitative research approach with correlational descriptive methods. The aim of this research is to determine whether there is a relationship between the four variables studied. The size of the relationship is expressed in the form of a correlation coefficient. The population and sample in this study were all State Middle School students in Semarang City with a total of 34,342 with a distribution from State Middle School 1 to State Middle School 45. This technique was chosen for the reason that each State Middle School in Semarang City is divided into 12 Sub-Rayons from 16 sub-districts in the City Semarang, with each sub-rayon having its own MGMP chairman. Data collection using questionnaire/questionnaire instrument

techniques, observation and interviews. The data analysis technique used in this research is statistical techniques. These include prerequisite analysis tests and hypothesis testing. Further data processing development using Excel and SPSS version 23 programs.

### Research Instrument

Research instruments must have been tested for validity and reliability. The instruments in this research are as follows:

#### 1) Parental Role Instrument

The research instrument used in this research was a research questionnaire conducted by Alnisa Br Sitepu (2021).

Table 1. Determination of Scores for the Parental Role Scale

Answer Choices	Always	Often	Sometimes	Never
Score	4	3	2	1

#### 2) Learning Style Instrument

The instruments used by researchers on student learning styles that are valid and reliable are written in research entitled "The Importance of Knowing Student Learning Styles in Classroom Learning Activities" by (Dwi Widayanti, 2013). Divided into three questionnaires, namely visual, auditory and kinesthetic.

Table 2. Calculation of Learning Style Instruments

	Often	Sometimes	Never
Amount	3	2	1

#### 3) Instrument for Using Gadgets

The instrument for using gadgets uses research that is valid and reliable.

Table 3. Determination of Gadget Usage Scores

Answer Choices	Strongly agree	Agree	Disagree	Don't agree
Score	4	3	2	1

#### 4) Learning Outcome Instrument

In the student learning outcomes instrument, this research uses the grades from report cards for even semester PJOK subjects, or grade promotion. The KKM score for junior high school students in Semarang City is 75.

## RESULTS AND DISCUSSION

### Description of research data

Table 4. Descriptive Statistics Table

The measurement results are then processed descriptively and can be identified for each variable. The variable parental role, the minimum value obtained is 26, the maximum value is 45 and the average value is 39.11 with a standard deviation of 4.11. The results of the descriptive analysis test of the learning style variable showed that the minimum value was 17, the maximum value was 36 and the average was 24.43 with a standard deviation of 3.15. Furthermore, the results of the descriptive analysis of the gadget use variable obtained a minimum value of 20, a maximum value of 70 and an average of 46.6 with a standard deviation of 8.61. The results of the descriptive analysis test of learning outcome variables show that the minimum value is 75, the maximum value is 98 and the average is 86.18 with a standard deviation of 4.25.

### Results Description of Respondent's Gender

The descriptive results of gender in this study were 133 men with a percentage of 47 percent, while there were 147 women with a percentage of 53 percent.

Table 5. Percentage Distribution of Gender

	N	Minimum	Maximum	Mean	Std. Deviation
parents (X1)	280	26.00	45.00	39.1183	4.11223
learning style (X2)	280	17.00	36.00	24.4321	3.15701
Use Gadgets (X3)	280	20.00	70.00	46.6321	8.61505
Learning Outcomes (Y)	280	75.00	98.00	86.1871	4.25720
Valid N (listwise)	280				
Gender	Amount		Percentage		
Man	133		47%		
Woman	147		53%		

### Results Description of Student Learning Results

Table 6. Student Learning Results

Average	86.19
Minimum Value	75
Maximum Value	98

The descriptive results in this study are learning outcomes taken from this semester's report card grades or using daily grades and also using practical grades in Physical Education, Sports and Health learning. The average score in this questionnaire is 86.19 with a minimum score of 75 and a maximum score of 98.

### Data Normality Test

Table 7. Data Normality Test

N	278
Normal Parameters, Mean	.0000000
b Std. Deviation	4.13621805
Most Extreme Differences Absolute	.058
Positive	.058
negative	-.038
Statistical Tests	.058
Asymp. Sig. (2-tailed)	.061c

The normality test uses the Kolmogorov-Smirnov Test with an absolute Most Extreme Differences value of 0.058 and a value of  $N = 0.081$ , so the data is normally distributed because  $0.058 < 0.081$ . This is proven by the Asymp Sig (2-tailed) value of 0.061 where  $> 0.05$ , which means the data is normally distributed.

### Linearity Test

Table 8. Linearity Test of Parental Roles and Learning Outcomes

			Sum of Square	df	Mean Square	F	Sig.
Learning Outcomes (Y) * parents (X1)	Between Groups	(Combined)	358,944	19	18,892	1,046	,409
	Within Groups	Linearity	152,516	1	152,516	8,446	,004
		Deviation from Linearity	206,428	18	11,468	,635	,871
	Total		4661.330	258	18,067		

Total	5020.27	277			
	3				

Table 9. Linearity Test of Learning Styles and Learning Outcomes Description of Athletes' Achievements

			Sum of Squares	df	Mean Square	F	Sig.
Learning Outcomes (Y) * learning style (X2)	Between Groups	(Combined)	391,875	16	24,492	1,381	,151
	Within Groups	Linearity	96,113	1	96,113	5,420	,021
		Deviation from Linearity	295,762	15	19,717	1,112	,345
	Total		4628,399	261	17,733		

Table 10. Linearity Test of Gadget Use and Learning Results

			Sum of Squares	df	Mean Square	F	Sig.
Learning Outcomes (Y) * Gadget Use (X3)	Between Groups	(Combined)	648,767	43	15,088	,808	,797
	Within Groups	Linearity	52,100	1	52,100	2,789	,096
		Deviation from Linearity	596,667	42	14,206	,760	,856
	Total		4371.506	234	18,682		

In the linearity test, it can be seen in the Anova Table of the three tables, the sig linearity values are 0.004, 0.021 and 0.096, respectively, which are smaller than 0.05. And it can be seen from the Sig Deviation from Linearity values respectively 0.871 0.345 and 0.856 which are greater than 0.05

### Homogeneity Test

Table 11. Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Learning Outcomes (Y)	Based on Mean	1,481	18	258	,096
	Based on Median	,731	18	258	,778
	Based on Median and with adjusted df	,731	18	165	,776
				197	

Based on trimmed	1,435	18	258	,115
mean				

Based on the homogeneity test, the Based on Mean sig value for the learning outcome variable is 0.096. Because the value of 0.096 is greater than 0.05, it can be concluded that the learning outcome variables are homogeneous or the same

### Hypothesis testing

Table 12. Hypothesis Testing

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	73,156	3,241		22,569	,000
	parents (X1)	,185	,061	,179	3,020	,003
	learning style (X2)	,146	,081	,109	1,807	,007
	Gadget Usage (X3)	,048	,030	,096	1,593	,012

### The Relationship between Parental Roles and Learning Outcomes

Hypotheses in research regarding the relationship between the role of parents and learning outcomes are as follows: 1) Null Hypothesis (H0): There is no relationship between the role of parents and student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship between the role of parents and student learning outcomes. .

If the significance value is  $>0.05$  then H0 is accepted, whereas if the significance value is  $<0.05$  then Ha is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.003 because the significance of the parental role variable on learning outcomes is smaller than 0.05, so H0 is rejected, Ha is accepted. The hypothesis can be stated "There is a relationship between the role of parents and student learning outcomes."

Table 13. R Test of the Role of Parents on Learning Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.174a	.202	.027	4.19962

The results of the table above show the results of the role of parents on student learning outcomes with an R-Square value of 0.382, meaning that the role of parents contributes to student learning outcomes by 20.2%, while 79.8 is determined by other variables.

### The Relationship between Learning Styles and Learning Outcomes

The hypotheses in research regarding the relationship between learning styles and learning outcomes are as follows: 1) Null Hypothesis (H0): There is no relationship between learning styles and student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship between learning styles and student learning outcomes.

If the significance value is  $>0.05$  then H0 is accepted, whereas if the significance value is  $<0.05$  then Ha is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.007 because the significance of the learning style variable on learning outcomes is smaller than 0.05, so H0 is rejected, Ha is accepted. The hypothesis can be stated "There is a Relationship between Learning Styles and Student Learning Outcomes".

Table 14. R Test of Learning Styles on Learning Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.138a	.189	.016	4.22388

The results of the table above show the results of learning styles on student learning outcomes with an R-Square value of 0.419, meaning that learning styles contribute to student learning outcomes by 18.9%, while 81.1 is determined by other variables.

### The Relationship between Gadget Use and Learning Outcomes

The hypotheses in research regarding the

relationship between gadget use and learning outcomes are as follows: 1) Null Hypothesis (H0): There is no relationship between gadget use and student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship between gadget use and student learning outcomes.

If the significance value is  $>0.05$  then H0 is accepted, whereas if the significance value is  $<0.05$  then Ha is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.012 because the significance of the gadget use variable on learning outcomes is smaller than 0.05, so H0 is rejected, Ha is accepted. The hypothesis can be stated "There is a relationship between gadget use and student learning outcomes."

Table 15. R Test of Gadget Use on Learning Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.102a	.314	.007	4.24271

The results of the table above show the results of using gadgets on student learning outcomes with an R-Square value of 0.614, meaning that gadget use contributes to student learning outcomes by 31.4%, while 68.6% is determined by other variables.

### The Relationship between Parental Roles and Learning Styles on Learning Outcomes

Table 16. Hypothesis Testing of Parental Role and Learning Style

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	237,374	2	118,687	6,824	.001
Residual	4782,900	275	17,392		
Total	5020,273	277			

Hypotheses in research regarding the relationship between the role of parents and learning styles on learning outcomes are as follows: 1) Null Hypothesis (H0): There is no

relationship between the role of parents and learning styles on student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship between the role of parents and learning styles on student learning outcomes.

If the significance value is  $>0.05$  then H0 is accepted, whereas if the significance value is  $<0.05$  then Ha is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.001 because the significance of the variable relationship between the role of parents and learning style on learning outcomes is smaller than 0.05, so H0 is rejected, Ha is accepted. The hypothesis can be stated "There is a relationship between the role of parents and learning style on student learning outcomes."

Table 17 R Test of Parental Role and Learning Style

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.217a	.477	.040	4.17042

The results of the table above show the results of the relationship between the role of parents and learning styles on student learning outcomes with an R-Square value of 0.477, meaning that the contribution of the role of parents and learning styles to student learning outcomes is 47.7%, while 52.3% is determined by the variables mentioned. other.

### The Relationship between Parental Roles and Gadget Use on Learning Outcomes

Table 18. Hypothesis Testing Parental Role and Gadget Use

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	224,774	2	112,387	6,445	.002
Residual	4795,499	275	17,438		
Total	5020,273	277			

Hypotheses in research regarding the relationship between the role of parents and the use of gadgets on learning outcomes are as follows: 1) Null Hypothesis (H0): There is no



relationship between the role of parents and the use of gadgets on student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship the role of parents and the use of gadgets on student learning outcomes.

If the significance value is  $>0.05$  then  $H_0$  is accepted, whereas if the significance value is  $<0.05$  then  $H_a$  is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.002 because the significance of the variable between the role of parents and the use of gadgets on learning outcomes is smaller than 0.05, so  $H_0$  is rejected,  $H_a$  is accepted. The hypothesis can be stated "There is a relationship between the role of parents and the use of gadgets on student learning outcomes." .

Table 19. R Test of Parental Role and Gadget Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212a	.451	.038	4.17590

The results of the table above show the results of the relationship between the role of parents and the use of gadgets on learning outcomes with an R-Square value of 0.451, meaning that the contribution of the role of parents and use of gadgets to learning outcomes is 45.1%, while 54.9% is determined by other variables.

### The Relationship between Learning Style and Gadget Use on Learning Outcomes

Table 20. Hypothesis Testing Gadget Use and Learning Style

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123,485	2	61,743	3,467	.033
	n					b
	Residual	4896.788	275	17,807		
	Total	5020.273	277			

The hypothesis in research regarding the relationship between learning styles and gadget use on learning outcomes is as follows:

1) Null Hypothesis ( $H_0$ ): There is no relationship between learning style and gadget use on student learning outcomes, 2) Working Hypothesis ( $H_a$ ): There is a relationship between learning style and gadget use on student learning outcomes.

If the significance value is  $>0.05$  then  $H_0$  is accepted, whereas if the significance value is  $<0.05$  then  $H_a$  is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.033 because the significance of the variable relationship between learning style and gadget use on learning outcomes is smaller than 0.05, so  $H_0$  is rejected,  $H_a$  is accepted. The hypothesis can be stated "There is a relationship between learning style and gadget use on student learning outcomes".

Table 21. R Test for Gadget Use and Learning Style

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.157a	.25	.018	4.21978

The results of the table above show the results of the relationship between learning style and gadget use on learning outcomes with an R-Square value of 0.25, meaning that the contribution of learning style and gadget use to learning outcomes is 25%, while 75% is determined by other variables.

### The Relationship between Parental Roles, Learning Styles, and Gadget Use on Learning Outcomes

Table 22. Hypothesis Testing Gadget Use, Learning Style, and Gadget Use

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	281,274	3	93,758	5,421	.001b
	n					
	Residual	4738,999	274	17,296		
	Total	5020.273	277			

Hypotheses in research regarding the relationship between the role of parents, learning styles and use of gadgets on learning outcomes are



as follows: 1) Null Hypothesis (H0): There is no relationship between the role of parents, learning styles and use of gadgets on student learning outcomes, 2) Working Hypothesis (Ha): There is a relationship between the role of parents, learning style and use of gadgets on student learning outcomes.

If the significance value is  $>0.05$  then H0 is accepted, whereas if the significance value is  $<0.05$  then Ha is accepted. Based on the correlation analysis in the table, it shows that the significance is 0.001 because the significance of the variable relationship between the role of parents, learning style and use of gadgets on learning outcomes is smaller than 0.05, so H0 is rejected, Ha is accepted. The hypothesis can be stated "There is a relationship between the role of parents, learning style and use Gadgets on Student Learning Outcomes".

Table 23. R Test of Parental Role, Learning Style, and Gadget Use

Model	R	R	Adjusted R	Std. Error of the
		Square	Square	Estimate
1	.237a	.705	.046	4.15880

The results of the table above show the results of the relationship between parental roles, learning styles and gadget use with an R-Square value of 0.553, meaning that the contribution of gadget use contributes to student learning outcomes by 70.5%, while 29.5% is determined by other variables.

## Discussion

Education is an important role in educating the nation's life, therefore education must require the people involved in it to work together optimally, full of feeling, responsibility and high loyalty in improving the quality of education. It is through education that a nation looks more advanced for future generations so that it becomes a better generation, and will even become a nation that is more resilient, independent, characterized and competitive. Education is also a forum for the teaching and learning process which is expected to bring change and progress in the field of science. knowledge. In the learning process, of

course children can have the opportunity to do something with the methods applied in the learning process. Parents have a very big position and responsibility towards their children, because they have the responsibility to provide for, educate, nurture and care for their children to prepare and realize the happiness of their children's lives in the future and parents are also obliged to care for, care for and protect them. children in the context of socialization so that they are able to control themselves and have a social spirit. The problem currently being faced is that the role of parents towards children in education has been reduced because parents are busy outside with their own work. Competition is increasingly high among children to continue higher education with higher quality to be accepted into good schools because these children lack guidance from parents, the impact of parents on children is greatly influenced by the increase in children's learning achievements. Parents play a major role in children's lives in providing study guidance so that children are more diligent and more active in studying, so that children can make their parents happy if their achievements increase even higher.

In line with this research, the role of parents is very influential in student learning both at school and at home, parental supervision is really very effective in the function of parents at home. The role of parents also influences when students are at school. By preparing supplies or pocket money, students will become more enthusiastic about learning at school. The role of parents in research has an influence of 38 percent. In today's modern life, parents must really provide study guidance to children, so that children are not negligent in their useless work and we must also keep an eye on children and monitor whatever the child does, if parents do not provide study guidance to children. It also causes an impact on the parents due to the lack of parental education towards the child in providing guidance, even things like this can influence the child's learning achievement. If children are not guided, their ability to improve their achievements will be greatly reduced, because children need guidance, motivation and encouragement from parents so that children will

continue to get better results. Each student's learning style is different, and each learning style has positive and negative values, as well as its impact on the person and those around him. Students who do not know their learning styles will produce poor learning achievements. Apart from that, of course good quality education also influences students' learning styles, as does the student's environment. However, high motivation for students to develop learning styles is very supportive for achieving learning achievement. This means that everyone has a different learning style. The secret of successful learning lies in a person's knowledge of himself, the suitability of teaching style and learning style, his potential, and the consequences it brings. Almost all low achieving students are students whose learning styles do not match the teaching styles of teachers at school. Many students use learning styles to understand the learning process both at home and at school, they use learning styles that suit themselves. But there are also some who still don't have or haven't found a learning style that suits them. Learning styles are very necessary in the learning process in order to make the learning process more effective at home or at school, therefore they need to have an appropriate learning style. Good achievement reflects a good learning style too, because when students recognize the learning style they are interested in, the learning process will be effective. Gadgets can have both positive and negative effects on student learning achievement. Learning achievement is the mastery of knowledge or skills developed by a subject, which is shown by test scores or numbers given by the teacher. If students' learning activities are disrupted by playing too much with gadgets, this will result in a decrease in student learning achievement. However, if students use gadgets to increase their knowledge at school and do not forget a student's obligation to study, this will not result in decreased learning achievement. At this stage, gadgets are useful for making it easier for students to obtain information related to learning topics. So that students can access information more freely and in the end this will help form understanding by these students.

Students should be accompanied by adults when using gadgets. This is because students

sometimes make mistakes when using this technology. Apart from that, parents also play a role in limiting the use of gadgets. Electromagnetic wave radiation from gadgets can interfere with students' vision, so it is necessary to limit the use of gadgets. Parents can also select the content and applications used by students on their gadgets, so that they can prevent negative information or applications from being received by students.

## CONCLUSION

Based on the results of research and discussion regarding the Role of Parents, Learning Styles, and Use of Gadgets on Learning Outcomes, Physical Education, Sports and Health of State Middle School Students in Semarang City, it can be concluded as follows:

- 1) There is a relationship between the role of parents and the PJOK learning outcomes of state junior high school students in Semarang City, amounting to 38.2%
- 2) There is a relationship between learning styles and PJOK learning outcomes for state junior high school students in Semarang City of 41.9%
- 3) There is a relationship between the use of gadgets and the PJOK learning outcomes of state junior high school students in Semarang City, amounting to 61.4%
- 4) There is a relationship between the role of people and learning styles on the PJOK learning outcomes of State Middle School students in Semarang City amounting to 47.7%
- 5) There is a relationship between the role of people and the use of gadgets on the PJOK learning outcomes of State Middle School students in Semarang City amounting to 45.1%
- 6) There is a relationship between learning style and gadget use on the PJOK learning outcomes of State Middle School students in Semarang City by 25%.
- 7) There is a relationship between the role

of people, learning styles, and the use of gadgets on the PJOK learning outcomes of State Middle School students in Semarang City, amounting to 55.3%.

## REFERENCES

- Aisyatinnaba, N., & Sutoyo, A. (2016). Indonesian Journal of Guidance and Counseling: Theory and Application THE ROLE OF PARENTS IN MOTIVATING STUDENT LEARNING. *Ijgc*, 5(4), 52–57. <http://journal.unnes.ac.id/sju/index.php/jbk>
- Batool, A., & Ahmad, S. (2019). Relationship Between Teachers' Teaching Style and Learning Style of Students. *Research on Humanities and Social Sciences*, 9(23), 41–44. <https://doi.org/10.7176/rhss/9-23-04>
- Dara Davani. (2022). Analysis of the Impact of Using Gadgets on Students in Learning at School. *Scholar: Journal of Education and Islamic Studies*, 1(2), 87–91. <https://doi.org/10.61253/cendekiawan.v1i2.51>
- Ezeddine, G., Souissi, N., Masmoudi, L., Trabelsi, K., Puce, L., Clark, CCT, Bragazzi, N.L., & Mrayah, M. (2023). The problem-solving method: Efficacy for learning and motivation in the field of physical education. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1041252>
- Gómez-Ortiz, O., Romera, E.M., Ortega-Ruiz, R., & Del Rey, R. (2018). Parenting practices as risk or preventive factors for adolescent involvement in cyberbullying: Contribution of children and parent gender. *International Journal of Environmental Research and Public Health*, 15(12). <https://doi.org/10.3390/ijerph15122664>
- Hero, H., & Sni, M.E. (2018). The Role of Parents in Increasing the Learning Motivation of Class V Students at Inpres Iligetang Elementary School. *JRPD (Journal of Elementary Education Research)*, 1(2), 129–139. <https://doi.org/10.26618/jrpd.v1i2.1568>
- Kurniawan. (2022). The Effect of Gadget Use on Student Learning Outcomes. *Educator (Directory of Elementary Education Journal)*, 3(1), 20–35. <https://doi.org/10.58176/edu.v3i1.559>
- Marpaung, J. (2016). The Influence of Learning Style on Student Learning Achievement. *KOPASTA: Journal of the Counseling Guidance Study Program*, 2(2), 13–17. <https://doi.org/10.33373/kop.v2i2.302>
- Pinquart, M. (2016). Associations of Parenting Styles and Dimensions with Academic Achievement in Children and Adolescents: A Meta-analysis. *Educational Psychology Review*, 28(3), 475–493. <https://doi.org/10.1007/s10648-015-9338-y>
- Rijal, S., & Bachtiar, S. (2015). The Relationship between Attitudes, Learning Independence, and Learning Styles with Student Cognitive Learning Outcomes. *Journal of Bioeducation*, 3(2), 15. <https://doi.org/10.26555/bioedukatika.v3i2.4149>
- Ruli, E. (2020). Duties and Roles of Parents in Educating Children. *Journal of Nonformal Education*, vol.1(No.1), p.145.
- Rumbewas, SS, Laka, BM, & Meokbun, N. (2018). The Role of Parents in Increasing Students' Learning Motivation at Saribi State Elementary School. *EduMatScience Journal*, 2(2), 201–212. <http://ejournal.uki.ac.id/index.php/edumatsains/article/view/607>
- Sh, L., & Landry, S. H. (2008). Encyclopedia on Early Childhood Development ©2008 Center of Excellence for Early Childhood Development The role of parents in early childhood learning. *Encyclopedia on Early Childhood Development*, 1–6.
- Sundayana, R. (2018). The Relationship between Learning Style, Learning Independence, and Problem Solving Ability of Middle School Students in Mathematics Lessons. *Mosharafa: Journal of Mathematics Education*, 5(2), 75–84. <https://doi.org/10.31980/mosharafa.v5i2.262>
- Omar. (2020). The Role of Parents in Improving Children's Learning Achievement. *Musawa: Journal for Gender Studies*, 12(1), 108–139. <https://doi.org/10.24239/msw.v12i1.591>
- Widharyanto, B., & Binawan, H. (2020). Learning styles and language learning strategies of students from various ethnicities in Indonesia. *Educational Horizons*, 39(2), 480–492. <https://doi.org/10.21831/cp.v39i2.28173>
- Wulandari, W., Zikra, & Yusri. (2016). The Role of Parents in Student Learning Discipline. *Indonesian Teacher Research Journal*, 2(1), 25.

