THE EFFECT OF ENVIRONMENT AND LEARNING STYLE ON STUDENTS' PERFORMANCE THROUGH MOTIVATION AS A MODERATOR VARIABLE

Charisma Firadiba, Wildan Isna Asyhar

ABSTRACT

This research aims to interpret the research analysis: (1) to know the simultaneous effect of environment, learning style, and motivation on students' performance; (2) to know the partial effect of environment, learning style, and motivation on students' performance; (3) to know the significant effect of environment and learning style partially on students' performance through motivation as a moderator variable. This research used the quantitative approach as the research design and involved 218 students of the tenth grade of MAN 1 Mojokerto as a sample. The data was collected by using a questionnaire. These results showed that: (1) There is a simultaneous effect of environment, learning style, and motivation on students' performance which f- count is 53,333 > f- table 3,177. (2) There is a partial effect of environment, learning style, and motivation on students' performance (3) The indirect effect of environment and learning style is more significant than the direct effect. The conclusion is that the Ho of each hypothesis is rejected.

Keywords: Students' performance, motivation, environment, learning style

INTRODUCTION

English performance has several skills and components that should be known as the central core of this subject. Those skills and components, namely: speaking, listening, reading, writing, grammar, and vocabulary. Those accomplishments and abilities are the bottom lines in increasing language capacity. One of the factors that can make students achieve their performance better is when they have a supportive environment. The environment that is closed to the students is a family environment.

Karsidi (2005) states that the family factor became the first environment as the first education because the student will get knowledge and guidance from the family. According to Slameto (2013), the family environment has the indicators as follows; How the family technique provides education, Relationship family harmony, family circumstances, Family economic conditions, and Understanding

of both parents. That is why family environment can affect the student's English learning performance. Not only can the family environment affect the student's performance, but also the students can improve their English skills to get a better English learning outcome.

How students learn can be interpreted as a learning style in which everyone has their own style. According to Henrick (1992), learning style is a consolidation of how a person learns and then constructs and deals with the information. The factors affecting the person's learning style can be physical, emotional, sociological, and environmental (Indianti et al., 2006).

Learning style carried out by modalities correspondent to Deporter et al. (2006). They are classified into three types, those are: (1) visual learning style, that students are more susceptible to the senses of sight; (2) auditory learning style, that students are over-sensitive against the senses of hearing; and (3) kinesthetic learning style, that students are more delicate with move, work, and touch. The person possesses the learning styles to learn, but everyone is biased to stand in one learning style to absorb the lesson quickly. When the person realizes their learning style and knows how to apply the learning strategy in the study, the student's learning activities are further influenced by the motivation of the students to achieve their learning performance.

Motivation is the other crucial component in the world of education. Learning motivation aims to encourage someone who does the learning process to become even more active in learning to gain even better performance (Prawira 2013). Uno (2002) adds that motivation consists of internal and external drives from within each individual. While according to Deci and Rian (2002), motivation is divided into three kinds: intrinsic, extrinsic, and motivation. This research is only focused on extrinsic and intrinsic motivation.

Intrinsic motivation comes from the student's internal, which affects the student's learning behavior. According to Suwatno (2011), intrinsic motivation is the thing that becomes active, or the emergence of the urge not influenced by external factors, because basically, every individual has had the urge to do something. Based on Lepper (1988), Intrinsic motivation encourages students to

activity for pleasure, hope, and the emergence of a feeling of perfection. In contrast, extrinsic motivation encourages students to work to get rewards, interest in learning activities, and avoid punishment. In this regard, Burton (2006) claimed that extrinsic and intrinsic motivation must be incorporated to help students reach their goals in learning performance.

In this research, MAN 1 Mojokerto will be the object of this research. That is because this school is a pilot senior Islamic high school. It has already achieved academic and non-academic competitions. However, not all the students of MAN 1 Mojokerto can achieve their performance. Some of them indicated a lack of motivation, an unsupportive environment, and does not know how to learn. From the explanation above, this research wants to determine the effect that affects their achievement in learning. As the problem raised in the class, this study decides, the title "The Effect of Family Environment and Learning Style on Students' Performance through Motivation as a Moderator Variable," was conducted in the first grade of MAN 1 Mojokerto.

RESEARCH METHOD

Research Design

A quantitative approach employs this research method. This research design is a survey because it relates to the research question and the instrument used, in which the questionnaire is a data collection method. Then, the Likert scale is measured to determine the attitude, opinion, and perception based on a particular object or phenomenon in this research. The population in this study was all the tenth grade of MAN 1 Mojokerto. The sample of this research used the solving formula to determine the student as a subject in this research. After counting by the solving formula, the sample from the science major was 98 students. Then the sample of social class were 82 students and 38 from *Bahasa and Agama* class. Finally, the total sample in this research was 2018 students.

Research Instrument

The questionnaire is the research instrument for gaining information from the respondent about their knowledge. The questionnaire used the Likert's Scale Type, which this questionnaire used five alternatives (Wade, 2006). The Likert's Scale consisted of: strongly agree was scored 5, agree was scored 4, reasonably was scored 3, less agree was 2, and disagree was scored 1. The questionnaire consisted of 52 statements that covered the knowledge of the environment, learning style, motivation, and student performance. The researchers used validity, reliability, normality, linearity, multicollinearity, and heteroscedasticity to find the instrument quality.

1. **Validity of instrument**

Ghozali (2009) stated that the validity test is used to measure the validity or validity of a questionnaire. The validity instrument was analyzed by SPSS.25. As a result, the variables which carried out by this research were valid at significant 0.01 with the symbol (**).

2. **Reliability of instrument**

The data was using quantitative description. The researcher used Likert's scale to score the questionnaire. The reliability of the questionnaire has been analyzed by using SPSS 25. This tested was using the *Chronbach's Alpha* to analyze the questionnaire. According to Suorapta (2004), the value of the instruments was reliable it was higher than (>.6)), but if the result is lower is lower than (>.6) it was not reliable. In this result, the reliable value was higher than (>.6) then it can conclude that the data was reliable.

3. **Normality**

According Gozali (2011) the normality qualification should have a significancy at (>.05) or when the data using a histogram should have a peak curve. The normality for the data is shown in histogram the data can be claimed normal curve if the histogram has a peak. In the instrument, it was proven that the family environment, learning style motivation and Students' performance of the

data variable was in normal distribution.

4. Linearity

Linearity tests according to Susanto (2015) to find out a linear or insignificant relationship between variable X and variable Y, using a linearity test. A data can be known to be linear when it has a significance value > .05, which means that there is a linear relationship between the dependent variable and the independent variable. Meanwhile, if the effective value is "linear" <.05, then the variable is declared to have a linear relationship. For each correlation of variable X on Y of this research was linear.

5. Multicollinearity

This test was used the IBM SPSS Statistic 25 program with the regression test. This kind of test will focus on the VIF (Variant Inflation Factor) and the correlation coefficient between independent variables. the criteria of VIF value must be < 10.00 and the value of correlation coefficient must be > .1, so the data declared that the data does not occur multicollinearity (Ghozali, 2001). Then from the output of this research has no multicollinearity problem.

6. Heteroskedasticity

This data used the Glejser test, which, according to it, used for regressing the independent variables towards absolute residual. Following Ghozali (2011), the value of significance should be more significant than (>.05). Meanwhile, in this research finding, there is no heteroscedasticity problem.

RESULT FINDING AND DISCUSSION

This part clarifies the finding and discusses the effect of environment and learning style on students' performance through motivation as a moderator variable. It consists of the descriptive statistic and the hypothesis result.

Descriptive statistic

1. The descriptive statistic of the environment. The descriptive analysis showed

that the Mean of the environment variable was 34.51. Std. Error of Mean was .715. The median was 37.00. The mode was 39. The Std. Deviation was 10.551. The variance was 111.320. The range was 40. The minimum was 10. The maximum was 50. The sum was 7524. The last were percentiles (25.50, and 75). Those were 27.00, 37.00 and 43.00

2. The descriptive statistic of Learning style. The descriptive analysis showed that the Mean of learning style variable was 62.62. The Std. Error of Mean was 2.62. then the median was 62.00. The mode was 62. Followed by the Std. Deviation was 14.110. The Variance was 199.093. The range was 78. The minimum was 22 and the maximum was 100. Then the sum was 13652. The last ware percentiles (25, 50, 75). Those are 55.00, 62.00, and 70.00.

3. The descriptive statistic of motivation. The descriptive statistic showed that the Mean of motivation variable was 36.85. The Std. Error of Mean was .697. then the median was 38. The mode was 41. The Std. Deviation was 10.286. Followed by range was 40. The minimum was 10. The maximum was 50. Then the sum was 7852. The last was percentiles (25, 50, and 75). Those were 30.00, 38.00 and 44.00.

4. The descriptive statistic of Students' performance. The result of the descriptive statistic showed that the Mean of the variable Students' performance was 36.39. The Std. Error of Mean was .0717. the Median was 35.00. Then the mode was 36. The Std Deviation was 10.579. The variance and range were 111.925 and 48. Then the minimum and maximum were 12 and 60. The sum was 7932. The last were percentiles (25, 50, 75). Besides that, those were 29.75, 35.00 and 42.00.

Hypothesis test

After doing the requirement of prerequisite and descriptive statistic test, the data is processed using simple and double regression to answer the hypothesis in this study.

1. The simultaneous effect of environment, learning style, and motivation on students performance. The first hypothesis stated, "there is the simultaneous

effect of environment and learning style and motivation on students' performance." The test used double regression assisted by IBM SPSS Statistic 25 program to know the correlation among the variables that exist. Then the researcher interprets f-test to know if the independent variable affects students' performance simultaneously. Based on the table summary, the environment, learning style, and motivation contributed 42.8% to student performance.Then the result of double regression showed that the f- count is 53.333 > f- table 3.177. So, from the result, Ho is rejected, which means that environment, learning style, and motivation simultaneously affect the students' performance.

2. The partial effect of environment on students' performance. The second hypothesis stated, "there is a partial effect of environment on students' performance." The test used simple regression assisted by IBM SPSS Statistic 25 program to determine the correlation between the existing variables. Then the researcher interprets t- test to know the environment partially affects students' performance. Based on the table above it can be known that the value of R square is .032. It means that the environment has contribution of 32% on students' performance. Then the result of t- count is 2.686 > t- table 2.257. So, from the result it can be concluded that Ho is rejected, it means that environment partially affect the students' performance.

3. The partial effect of learning style on students' performance. The third hypothesis stated, "there is the partial effect of learning style on students' performance." The test used simple regression assisted by IBM SPSS Statistic 25 program to know the correlation between independent and dependent variables. Then the researcher interprets t- test to know the learning style partially affects students' performance. Based on the table above it can be known that the value of R square is .389. It means that the learning style contributes 38.9% to students' performance. Then the result of t- count is 11.737 > t- table 2.257. So, from the result it can be concluded that Ho is rejected, it means that learning style partially affect the students' performance.

4. The partial effect of motivation on students' performance. The fourth hypothesis stated, "there is the partial effect of motivation on students'

performance." The test used simple regression assisted by the IBM SPSS Statistic 25 program to know the correlation between variable motivation and students' performance. Then the researcher interprets t-test to know the motivation partially affects students' performance. Based on the table above it can be known that the value of R square is .084. It means that motivation contributes 8.4% to students' performance. Then the result of t- count is 4,450 > t- table 2.257. So, from the result, it can be concluded that Ho is rejected, it means that motivation partially affects the students' performance.
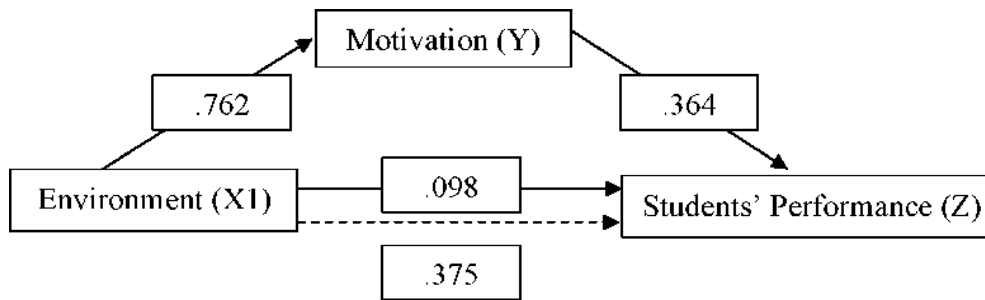
5. The effect of environment on students' performance through motivation as a moderator variable. The fifth hypothesis stated, "there is the effective effect of environment on students' performance through motivation as a moderator variable." To know the correlation between variable motivation and students' performance, the test used double regression assisted by the IBM SPSS Statistic 25 program. Then the researcher interprets f-test to know the motivation partially affects students' performance. Then the result presents below:

   a. The effect of the Environment on Motivation. Based on the model summary table, it can be known that the value of R square is .579. It means that motivation contributes 57.9% to the motivation. Then the Then t- count is 17.290 > t- table 2.257. So, from the result, Ho is rejected, meaning that environment partially affects the students' motivation.

   b. The Practical Effect of the Environment on Students' Performance through Motivation. After calculating the partial effect of environment on motivation, then it can be analyzed the effect of environment on students' performance through motivation by using double regression. Based on the model summary table, it can be known that the value of R square is .088. It means that the environment contributes 8.8% to the students' performance through motivation. According to the coefficients table, it can be seen that the constant (a) is 26.337. If the environment is 0, thus the value, so the value of students' performance is 26.337. The coefficient regression (b) is .98, and the score of t- count is .972. It means that the environment has

whole increased students' performance .098. Meanwhile, if the coefficient regression of motivation is 0, the student's performance is 26.337. It means that motivation increases students' performance by about .364, and the score of t- count is .622. The result of the analysis can be drawn in the figure below:
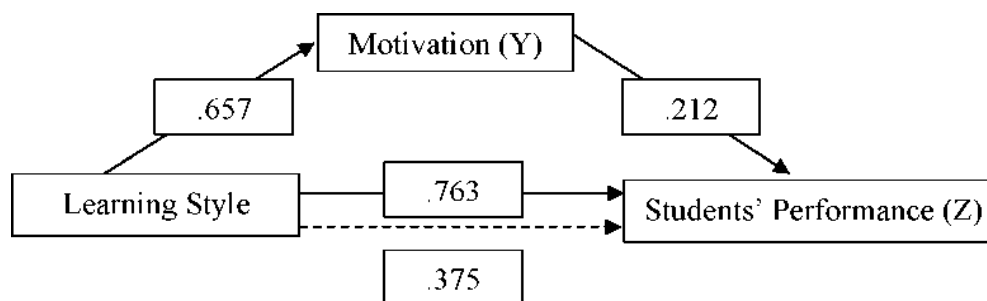

According to the concept mapping above, the direct effect of environment (X1) on motivation (Y) was .762. In comparison, the effect of motivation on students' performance is .364. The direct effect is .098. Then the indirect effect X1 on Y is the multiplication between beta value X1 on Y and Yon Z (.762 x .364 = .375). According to the analysis above, the value of direct effect was .762, and then the indirect value was .375. It means that the indirect effect is greater than the direct effect.

6. The effect of learning style on students' performance through motivation as a moderator variable. The sixth hypothesis stated, "there is an effective effect of learning style on students' performance through motivation as a moderator variable." The test used double regression assisted by IBM SPSS Statistic 25 program to determine the correlation between variable motivation and students' performance. Then the researcher interprets F- the test to know the motivation partially affects students' performance. The analysis of the result is shown below:

a. The Partial Effect of Learning Style on Students' Performance on Motivation. Based on the table model summary, it can be known that the value of R square is .429. It means that the learning style contributes 57.9% to the motivation. Then the t- count is 12.818 > t- table 2.257. So, from the

result, it can be concluded that Ho is rejected, which means that learning style partially affects the students' motivation.

b. The practical Effect of the Environment on Students' Performance through Motivation. After calculating the partial effect of learning style on motivation, then it can be analyzed the effect of learning style on students' performance through motivation by using double regression. Based on the model summary, it can be known that the value of R square is .415. It means that the learning style contributes 41.5% to the student's performance through motivation. Meanwhile, according to the coefficients above, the constant (a) is 8.359. If the learning style is 0, thus the value so the value of students' performance is 8.359. The coefficient regression (b) is .572 and the score of t- count is 11.027. It means that learning style has whole increases students' performance .763. Meanwhile, if the coefficient regression of motivation is 0, the students' performance is 8.359. It means that the motivation increases students' performance about 0, and the score of t- count is 3.062. Then the result of the analysis can be done bellow:

According to the concept mapping above, the direct effect of learning style (X2) on motivation (Y) was .657. While the motivation (Y) on students' performance (Z) is .212. The direct effect is .763. Then the indirect effect of X2 on Y is the multiplication between beta value X2 on Y and Y on Z (.657 x .212 = .139). According to the analysis above, the value of the direct effect was .763, and the indirect value was .139. It means that the direct effect is more remarkable than the indirect effect.

CONCLUSION AND SUGGESTION

Conclusion

1. Environment, learning style, and motivation simultaneously affect students' performance.

2. Environment partially affects the students' performance.

3. Learning style partially affects the students' performance.

4. Motivation partially affects the students' performance.

5. The indirect effect is more significant than the direct effect.

6. The direct effect is more significant than the indirect effect.

Suggestion

Based on the research that has been stated that there was the effect of the environment and learning style on students' performance through motivation as an intervening variable in the tenth grade of MAN 1 Mojokerto. The researcher hopefully that this research can give the contribution to others. Then the result of the suggestion will be stated bellow:

1. Teacher. Teachers should create a comfortable and pleasant atmosphere for students to learn so that they can be enthusiastic in learning. In addition, teachers should give a test about learning styles before carrying out the learning process so that teachers will more easily understand the learning styles that are owned by students.

2. Parents. Parents should pay more attention to their children learning activities, both material and non-material in the form of attention on their children learning performance. The parents should motivate them by giving gifts or praise if students get good grades or performances and treat them better in learning activities.

3. Further researcher. As an result, the researcher suggests to the other researcher who wants to use the same variable as their research about how to determine the family environment learning style, motivation related to the students' performance, the researcher hopes that this paper could become one of the references to help the researcher to complete their study.

REFERENCES

Abbas, S. (2006). *Pembelajaran Bahasa Indonesia Yang Efektif Disekolah Dasar.* Jakarta: departemen pendidikan nasional dierktorat jendral pendidikan tinggi direktorat ketenagaan.

Abdul, S. (2009). *Pengantar Ilmu Pendidikan. Semarang* : UNNES Pres.

Ahmad, Susanto. (2015). *Teori Belajar Dan Pembelajaran Disekolah Dasar.* Jakarta: Prenada Media.

Alderfer, C. (2004). *Peranan Motivasi dan Kemampuan Awal dalam Kegiatan. Pembelajaran.* Jakarta: Prenada Media.

Anas, S. (2008). *Pengantar Evaluasi Pendidikan.* Jakarta: Raja Grafindo Persada.

Arikunto, S. (2014). *Prosedur Penelitian Suatu Pendekatan Praktik.* Jakarta : Rineka Cipta.

David. Lori. Shannon. (2019). *Learning Styles in Problem-based Learning Environments Impacts on Student Achievement and Professional Preparation in University Level Physical Therapy Courses*. International Journal of Higher Education. 8(3), 206-208.

Deci, E. L & Ryan R.M. (2001). *Handbook Of Self-Determination Research*. Oxford Universy.

DePorter, Bobbi & Hernacki, Mike. (2006). *Quantum Learning: Membiasakan Belajar Nyaman & Menyenangkan.* Bandung: PT.Mizah Pustaka

Ekşi, H. Özgenel, M. Metlilo, E. (2020). *The Effect of Motivation of Success of University Students on Personal-Professional Competence: Mediation Role of Lifelong Learning Tendency.* International Journal of Evaluation and Research in Education. 9(3), 584.

Fitri, Y. (2020). *The Effect of Learning Motivation and Visual Aids on Student Learning Achievement.* Research Paper. (7), 200-212.

Ghozali, I. (2005). *Aplikasi Analisis Multivariate dengan program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.

H. Dalman, (2014). *Keterampilan Menulis*. Jakarta: PT. Raja Grafindo Persada

Hadikusumo, Kunaryo. (2000). *Pengantar Pendidikan*. Semarang: IKIP Semarang Press

Hamalik, O. (2007). *Proses Belajar Mengajar*. Jakarta: Bumi Aksara

Hanna, R.M. (*2011*). *Pengaruh Lingkungan Keluargandan Lingkungan Sekolah Terhadap Motivasi Belajar Siswa Kelas X Madrasah Aliyah Negeri Ngawi.*

Harmer. (2007). *The Practice of English Language Teaching, Fourth Edition.* Pearson Longman: Harlow.

Hendrick, S & Hendrick, C. (1992). *Liking, loving & relating (2nd ed).* California: Brooks/ Cole. Publishing Company Pacific Grove.

Hernawati, H. H. (2020). *Relationship Between Students' Learning Interest And Learning Motivation Towards English Learning Performances Of Students In Class V Sd Negeri Cibuluh 6 City Of Bogor*. Jurnal Teknologi Pendidikan, 11-15.

Irawan, D. (2016). *The Effect Of English Speaking Habits And Students' Motivation On Students' English Learning Achievement.* Faktor Jurnal Ilmiah Kependidikan , 185-196.

Irwan, A. Umamah, A. Ismiatun. (2020). *The Correlation Between Classroom Environment and Students' English Achievement*. (7), 1-3.

Ivana, C. (2018). *The Effect of Learning Styles on Academic Achievement in Different Forms of Teaching.* (11) 219-220.

Khadijah. (2016). *Pengembangan Kognitif Anak Usia Dini*. Medan: Perdana Publishing.

Lepper, M. r. & Hodell, M. (1989). *Intrinsic motivation in the classroom.* New York. In C. Ames & R. Ames (Eds.).

Margono. (2004). *Metodologi Penelitian Pendidikan*. Jakarta: Rineka Cipta

Mohamad, A. & Ansori. (2012). *Psikologi Remaja: Perkembangan Peserta Didik.* Jakarta : Bumi Aksara.

Orhan, S. (2017). *The Effect of Motivation on Student Achievement.* Springer International Publishing (35).

Prawira. (2013). *Psikologi Pendidikan dalam Prespektif Baru*. Jogjakarta: Ar-Ruzz Media.

Priyanto, Dwi. (2014). SPSS 22: *Pengolahan Data Terpraktis.* Yogyakarta : ANDI OFFSET.

Putri, N.J. (2020). *Influence of Social Economic Status, Family Environment, and Parenting Patterns on Development of Children Education.* (16), 2-5.

Ramli, N. (2018). *Faktor-Faktor Yang Berpengaruh Terhadap Self Directed Learning Readiness Dan Prestasi Akademik .*2(1). 153-166

Ray, K.M. (2019) . *The Effect Of Learning Motivation on the Students' English Learning Achievement at MTs Hifzhil Qur'an Islamic Centre Foundation Medan.* UIN. Medan.

Ryan, R. M. & Deci, E. L. (2000). *Self-Determination Theory and the Facilitation of Intrinsic Motivation, Sosial Development, and Well-Being.* Ney York: Pantice Hall

Singgih D. Gunarsa. (2008). *Psikologi Perkembangan Anak dan Remaja.* BPK Gunung Mulia, Jakarta.

Slameto. (2013). *Belajar dan Faktor-faktor yang Mempengaruhinya.* Jakarta: Rineka Cipta. Depdiknas.

Sugihartono. (2013). *Psikologi pendidikan.* UNY Press.

Sugiyono. (2015). *Metode Penelitian Kombinasi (Mix Methods).* Bandung: Alfabeta

Sutriayu. Makhdalena. Sumarno. (2019). *Effect of Family Environment and Education Costs on Student Achievement with Interest in Reading as an Intervening Variable.* (175), 165.

Tirtaraharja, La Sulo. (2005). *Pengantar Pendidikan.* Jakarta: Rineka Cipta

Uno, Hamzah B. (2010). *Model Pembelajaran Menciptakan Proses Belajar Mengajar yang Kreatif dan Efektif.* Jakarta: Bumi Aksara

Wade. (2006). *Organic Chemistry. 6th ed.* Pearson Education Inyernational: New jersey

Yuhaitno. (2010). *Keajaiban Belajar.* Pontianak: Pustaka Jenius Publishing.

Yulinar, D. (2018*). The Effect of Motivation on English Ability of Non Pend Students. B. English In The Faculty of Teaching And Educational Sciences (Fkip) At Abulyataman University.* Repository.