



Does Effect of Time Management with Motivation Level and Learning Achievement Students of Vocational High School?

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Article Info

Article history:

Received Jul 15, 2023

Revised Aug 21, 2023

Accepted Sep 29, 2023

OnlineFirst Oct 30, 2023

Keywords:

Time Management

Motivation Level Students

Learning Achievement Students

ABSTRACT

Purpose of the study: This study aims to determine the relationship between time management so that motivation and learning achievement of vocational students can increase.

Methodology: This research uses descriptive analysis. The research was held at Malang 6 Vocational High School with a population of class XII DPIB totaling 64 people and samples were taken from the entire population. Data collection using questionnaire distribution. This instrument adopts previous research with validity and reliability values that have fulfilled the criteria.

Main Findings: The results of descriptive analysis of time management get an average score of 29.02 or if the percentage is equal to 72.55% and has a meaning in the level of variable development, which is at a fairly high level. The effect of time management has an r square of 4.6%, although the variable is weak against the variables of motivation and learning achievement of vocational students but still has a positive effect.

Novelty/Originality of this study: This study is to determine if time management has an effect on increasing the motivation and achievement of vocational students. The impact of this research is as a reference for future researchers to conduct research further. Then this research has an impact on schools and related agencies regarding time management arrangements in schools.

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1. INTRODUCTION

The attitude of students who receive lessons in the morning and afternoon has a difference in motivation to participate in learning [1]. As many as 93.2% of students experience being bored or tired because of the busy learning and activities carried out from morning to evening [2]. Learning activities carried out during the day make a person look passive and make classroom activities uninteresting [1]. A student is more concentrated to focus on receiving lessons when conducted in the morning because their brain is still fresh to receive lessons [3]. A good study time management for a student in learning is in the morning because students find it easier to focus and concentrate so their interest in learning is higher than students during the day because they are tired and sleepy [1], [3], [4].

Increasing student motivation and achievement is influenced by several factors such as individual and external factors [4]. Individual factors themselves arise from physical and psychological factors experienced by students such as student interest in receiving lessons [5]. In addition to individual factors from within students,

external factors such as time management at school and learning facilities obtained can have an impact on learning outcomes [6].

The opinion is supported by [7] that effective learning is done in the morning rather than any other time. Students with good time management will be more focused and precise in determining their priorities [8]. Significant differences were seen between time management and facilities obtained by students in East Java vocational schools [9], [10]. However, time management does not explain the factors and influences that result when students receive lessons during the day in addition to the activities carried out during the day at school. Significant differences can be seen when time management is obtained by students in East Java vocational schools [9], [10]. This difference will later affect the increase in student motivation and achievement [11]. The application of good time management in the learning process is a solution to encourage the achievement of learning achievements [8]. Student motivation is more developed when carrying out learning from 7 am to 11 pm [12], [13]. In addition, student achievement can also increase along with effective learning conditions and classroom atmosphere conditions to support student learning comfort [14], [15]. Therefore, this research will focus on the relationship between time management so that the motivation and learning achievement of vocational students can increase. Surely there will be differences in the results of motivation and learning achievement of vocational high school students who get different study times.

2. RESEARCH METHOD

This research utilizes descriptive research. This research used populations or samples, collected data, conducted instruments and tested hypotheses in the study [16]. Before doing descriptive analysis, an analysis requirement test has been carried out such as the normality test with the value obtained, namely $0.062 > 0.05$, multicollinearity test with a tolerance value of $0.990 > 10$ and a VIF value of $1.01 < 10$ which means there is no multicollinearity and the last before doing descriptive analysis, namely the heteroscedasticity test by getting a significance value of $0.589 > 0.05$. The process in this quantitative research is to answer the formulation of the problem obtained so that a hypothesis can be formulated [18]. The research was held at Malang 6 Vocational High School and the population used was class XII DPIB with a total of 64 students. The sample used is taking from the entire existing population, if the sample subject is less than 100 people, the sample should be taken all of the entire population to be sampled [19]. The research was collected by taking documentation during learning and distributing closed questionnaires.

The research instrument used is adopting from previous research with a certain validity and reliability value. The validity test for the time management (X) variable is 0.5, motivation and learning achievement variables of high school students (Y) get a validity value of 0.6. However, the reliability test was conducted again after the research and obtained for the time management variable with a value of 0.634 and the motivation and learning achievement variables of vocational students with a value of 0.644. The reliability value obtained after the research is said to be reliable because it is more than the Cronbach alpha value, which is ≥ 0.6 . The data analysis technique used in this research is descriptive analysis and multiple linear regression. In addition, there is also a hypothesis test in this study.

3. RESULTS AND DISCUSSION

In this research, the data analysis technique before hypothesis testing is to conduct multiple regression analysis and the regression coefficient obtained is $Y = 47,235$ and $X = 0.309$. The equation from the regression results indicates that the regression coefficient decreases in the time management variable, which means that this variable can reduce the motivation and learning achievement variables of vocational high school students.

Table 2. Results of Multiple Regression Analysis

Model	Unstandardized Coefficients		sig
	B		
1	(Constant)	47,235	0,000
	Time Management (X)	0,309	0,089

a. Dependent Variable: Motivation and Learning Achievement of Vocational High School Students (Y)

In addition, this study uses descriptive analysis of the variables of time management (X). Time management itself includes data from the results of the questionnaire which will be grouped based on indicators.

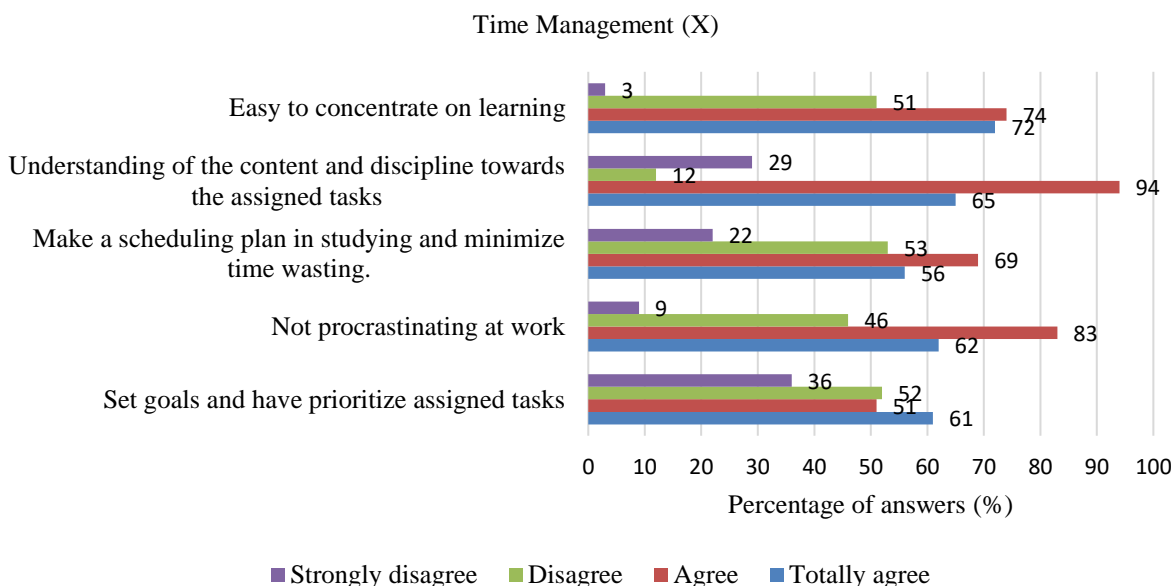


Figure 1. Time Management Indicators (X1)

Based on Figure 1, these results will be carried out data description by processing using the SPSS application with a sample size of 64 students and getting a mean value of 29.02 and a standard of means of 0.571. Considering the average Time Management score of 29.02 with $29.02 : 40 \times 100\% = 72.55\%$ and is at a fairly high level in accordance with the criteria for the level of variable development. The results of the descriptive analysis of time management obtained an average score of 29.02 or if in percentage equal to 72.55%. The percentage obtained has meaning in the level of variable development, which is at a fairly high level so it is concluded that time management in schools needs to be improved in order to increase the motivation and learning achievement of vocational high school students [17]. Furthermore, based on the partial test (t test), the tcount value of the study time management variable is 1.728 with a significance value of $0.089 > 0.05$ and it is concluded that time management has no influence on the motivation and learning achievement of vocational high school students. Then it is also proven by the simultaneous test (f test) to get an fcount value of $2.985 < f_{table} 4.00$ with a significance value of $0.089 > 0.05$.

This contrasts with previous research by [18], [19] because the time management they did at the time of the study had an effect on learning achievement with a significance value of $0.005 < 0.05$. In this study, it was found that students feel that the time management obtained at school has no effect on them in increasing motivation and learning achievement because the partial test conducted obtained a significance value < 0.05 . The results of this study are not in accordance with the theory which states that the management of lesson time received by students in the morning and afternoon is certainly not the same because students' minds in the morning are still fresh without any disturbance from the surrounding conditions and students who are tired due to daily activities can reduce concentration so that the lessons received are not perfectly absorbed [4], [20]. Study time can also be a factor that affects learning achievement [21]. Effective student hours are a good study time for students. Effective hours themselves are the time needed by students in the classroom learning process so that students learn more than to play [22].

Schools in Indonesia divide learning time into two, namely between morning and afternoon. The morning hours start at 6:30 am to 10:00 am, while the afternoon hours start at 11:00 am to 4:00 pm. Student learning time until the afternoon and evening because of the implementation of the 2013 curriculum. The Minister of Education and Culture at the time, Muhammad Nuh in [23] said that the lesson hours at each level increased by 35-45 minutes per day. School time management in Indonesia, especially in vocational high schools, is 45 minutes in units of meeting hours because it adheres to the Curriculum Guidelines (Decree of the Minister of Education Culture Research and Technology of the Republic of Indonesia, 2022). In addition, learning time in schools in Indonesia is differentiated between morning and afternoon because there are factors behind it such as the lack of space in schools and the small number of teachers who teach these subjects as well as the schedule set by the school [22].

The lesson time that the students receive in the morning and afternoon is certainly not the same because in the morning is a good time when receiving lessons because it still feels cool and students' minds are still clear and there is no distraction from the situation [20]. In addition, in the morning the air still feels fresh because it has not been mixed by vehicle fumes and the body condition is ready and effective for learning. Meanwhile, the

lesson hours received by students during the day the body is tired of doing activities in the morning so that the lessons received by students cannot run effectively and cannot be absorbed into the brain [4]. In addition, during the day students have done a lot of strenuous activities in the morning and can increase stress in students because they cannot attend lessons properly, this stress is called academic stress [24].

Furthermore, the coefficient of determination itself gets an r square value of 4.6%, where the effect of time management on student motivation and learning achievement is weakened. The effect of motivation and learning achievement is influenced by 95.4% by variables that are not in this study. Although the r square value is weakened by 10.8%, it still shows that time management has a positive influence on the motivation and learning achievement of vocational high school students. In Table 1, it can be seen that the multiple linear regression analysis on the time management variable gets a number with a beta amount of 0.309 which means that the motivation and learning achievement of vocational students will be constant or if there is an increase of 47.235 regarding understanding of time management. Based on the calculation of the analysis that has been carried out, there is a positive relationship between time management and learning facilities on the motivation and learning achievement of vocational students. Based on the calculation of the analysis that has been carried out, there is a positive relationship between time management and learning facilities on the motivation and learning achievement of vocational high school students. This factor can later make students more aware of increasing their motivation and learning achievement. Indicators of increasing student motivation and learning achievement as mentioned by [25], [26] are (1) having intention and diligence in doing tasks, (2) having enthusiasm in fulfilling learning needs and (3) having hopes and ideals in the future. The results of the analysis of the grouping of indicators of time management variables (X) in Figure 1 show that there are still many students who do not carry out good time management, such as often postponing the assignments given in the indicator of not procrastinating work and having difficulty concentrating when studying when they have been active all day in the indicator of easy concentration in learning. Whereas [27]–[29] mention that aspects of the importance of time management are not procrastinating work and having targets in managing the passage of good time. In addition, students are also tired or difficult to concentrate after doing a lot of activities all day at school compared to students who have not done activities so that the learning is more effective [4]. Ineffective learning will cause students not to engage in learning so that the learning objectives are not achieved [30].

4. CONCLUSION

The effect of time management on motivation and learning achievement of vocational high school students does not have a significant effect because it gets the value of $F_{hitung} < F_{table}$, which is $2.985 < 4.00$. For the coefficient of determination, the r square value is 4.6% and the other 95.4% is influenced by other variables not examined. The magnitude of this influence is influenced by one independent variable with one dependent variable. Although the r square value is weakened, there is a positive relationship between the time management variable and the motivation and achievement of vocational high school students.

ACKNOWLEDGEMENTS

The researcher would like to thank my thesis supervisors, Mr. Muhammad Aris Ichwanto and Mrs. Cynthia Permata Dewi, for helping in the preparation of this article and Malang 6 Vocational High School for allowing research.

REFERENCES

- [1] A. Agus, "Analisis Pengaruh Perbedaan waktu Belajar Terhadap hasil Belajar Bahasa Inggris mahasiswa," *J. Ilm. Bina Edukasi*, vol. 1, no. November, hal. 10–19, 2021, [Daring]. Tersedia pada: <http://dx.doi.org/10.30587/tamaddun.v0i0.66%0Ahttp://journal.umg.ac.id/index.php/tamaddun/article/view/66>.
- [2] R. Wahyuli dan I. Ifdil, "Perbedaan Kejenuhan Belajar Siswa Full Day School dan Non Full Day School," *J. Apl. IPTEK Indones.*, vol. 4, no. 3, hal. 188–194, 2020, doi: 10.24036/4.34380.
- [3] A. Azis dan S. Ali, "Pengaruh Jam Belajar Pada Mata pelajaran Matematika terhadap Prestasi Belajar Siswa Kelas XI SMA Negeri 1 Batauga," *J. Akad. Pendidik. Mat.*, vol. 5, no. November, hal. 94–101, 2020, doi: 10.55340/japm.v5i2.179.
- [4] I. Lestari, "Pengaruh Waktu Belajar dan Minat Belajar terhadap Hasil Belajar Matematika," *Form. J. Ilm. Pendidik. MIPA*, 2015, doi: 10.30998/formatif.v3i2.118.
- [5] B. Mesra, "Pengaruh Minat Belajar Dan Jam Belajar Terhadap Prestasi Belajar Siswa (Studi Kasus: SMAN 1 Pangururan)," *Manaj. Tools*, vol. 10, no. 2, hal. 8, 2018.
- [6] S. Movva dan Syamwil, "Pengaruh Waktu Belajar, Lingkungan Sekolah dan Cara Belajar Terhadap Hasil Belajar Akuntansi Dasar Siswa Kelas X Akuntansi dan Keuangan Lembaga SMK Negeri 3 Padang," *EcoGen*, vol. 3, no. 2, hal. 312–318, 2020.
- [7] E. . Giovanni, "Pengaruh Waktu Belajar Terhadap Minat, Keaktifan Dan Hasil Belajar Siswa Dalam Pembelajaran Fisika Pada Siswa Kelas XI MIPA SMA BOPKRI 1 Yogyakarta Tahun Pelajaran 2017/2018 Pada Materi Gelombang Bunyi," Universitas Sanata Dharma Yogyakarta, 2018.

- [8] F. Maria dan D. Afandi, "Analisis Pencapaian Prestasi Akademik Melalui Perilaku Manajemen Waktu," *EKOMABIS J. Ekon. Manaj. Bisnis*, vol. 2, no. 01, hal. 71–78, 2021, doi: 10.37366/ekomabis.v2i01.125.
- [9] E. H. Andriansyah dan P. U. Kamalia, "National Standards of Education affect the employment opportunities of vocational high school graduates," *J. Pendidik. Vokasi*, vol. 11, no. 2, hal. 112–124, 2021, doi: 10.21831/jpv.v11i2.40791.
- [10] Suyanta *et al.*, "Facility standards of vocational schools: Comparison of existing and modern facility designs," 2019, doi: 10.1088/1742-6596/1273/1/012048.
- [11] A. D. Rahmawati, F. Fakhriyah, dan D. Ermawati, "Pengaruh Fasilitas Belajar Terhadap Prestasi Belajar Siswa Kelas III SDN Tambaharjo 02," *Syntax Lit. J. Ilm. Indones.*, vol. 6, no. 8, hal. 51–60, 2021.
- [12] R. Dwijuliani, T. Rijanto, Munoto, L. Nurlaela, I. Basuki, dan Maspiyah, "Increasing student achievement motivation during online learning activities," 2021, doi: 10.1088/1742-6596/1810/1/012072.
- [13] F. Zulfikar, "Kapan Waktu Terbaik bagi Otak untuk Belajar dan Beristirahat?," 2021. <https://www.detik.com/edu/detikpedia/d-5782322/kapan-waktu-terbaik-bagi-otak-untuk-belajar-dan-beristirahat> (diakses Nov 04, 2022).
- [14] J. Andrianto, N. Helmi, Purwantono, dan E. Indrawan, "Pengaruh Kondisi Ruang Kelas Terhadap Konsentrasi Belajar the Influence of Classroom Conditions on Learning Concentration of Pdtm Students At Smk Negeri 5 Padang," *Vokasi Mek.*, vol. 2, no. 4, hal. 147–153, 2020.
- [15] F. Angraini dan S. Nas, "The effect of Learning Facility, Attention of Parents, and Learning Motivation on Student Achievement at State Senior High School 2 Kampar District," *Int. J. Econ. BUSINESS, Appl. Int. J. Econ. Bus. Appl.*, vol. 3, no. 2, hal. 12–23, 2022.
- [16] Ridwan dan I. Bangsawan, *Konsep Metodologi Penelitian Bagi Pemula*. 2021.
- [17] D. D. Nurhidayati, "Peningkatan Pemahaman Manajemen Waktu Melalui Bimbingan Kelompok Dengan Teknik Problem Solving pada Siswa," *PSIKOPEDAGOGIA J. Bimbing. dan Konseling*, 2016, doi: 10.12928/psikopedagogia.v5i1.4592.
- [18] A. Eudya, I. Prihatin, dan M. Saputro, "Pengaruh Motivasi, Minat, Dan Manajemen Waktu Terhadap Prestasi Belajar Matematika Siswa Kelas Vii Smp," *Prima Magistra J. Ilm. Kependidikan*, vol. 2, no. 1, hal. 50–57, 2021, doi: 10.37478/jpm.v2i1.812.
- [19] M. S. Hasan dan K. T. Sari, "Pengaruh Manajemen Waktu terhadap Hasil Belajar Peserta Didik Mata Pelajaran Fiqih Di Mts Al-As'ad Brambang Diwek Jombang," *Al-Idaroh J. Stud. Manaj. Pendidik. Islam*, vol. 5, no. 1, hal. 93–117, 2021, doi: 10.54437/alidaroh.v5i1.247.
- [20] Asriyadin dan Fatkhulloh, "Pengaruh Moving Class Dan Belajar Di Pagi Hari Terhadap Hasil Belajar Fisika," Universitas Ahmad Dahlan Yogyakarta, 2017.
- [21] R. Ridwan, M. Ardi, dan Rahmansah, "Pengaruh Waktu, Minat Dan Motivasi Belajar Terhadap Prestasi Belajar Pada Mata Kuliahkonstruksi Bangunan I Jurusan Pendidikan Teknik Sipil Dan Perencanaan FT-UNM," Universitas Negeri Makassar, 2018.
- [22] D. Imanuel, "Peran Jam Belajar Efektif Siswa Di Sekolah Dalam Memoderatori Motivasi Dalam Meningkatkan Hasil Belajar Siswa," *Sch. J. Pendidik. dan Kebud.*, vol. 7, no. 1, hal. 10, 2017, doi: 10.24246/j.scholaria.2017.v7.i1.p10-16.
- [23] Kompas.com, "Mendikbud: Jam Belajar Hanya Bertambah 35-45 Menit Per Hari!," *Kompas.com*, 2014. <https://edukasi.kompas.com/read/2014/08/15/1540110/Mendikbud.Jam.Belajar.Hanya.Bertambah.35-45.Menit.Per.Hari> (diakses Nov 21, 2022).
- [24] M. J. A. Heru, A. Jatimi, F. N. Fiddaroini, dan A. Syamsudin, "Relationship Between the Application of a Full Day School System and Stress Levels in Junior High School," *J. Ners*, vol. 14, no. 3, hal. 374–377, 2020, doi: 10.20473/jn.v14i3.17217.
- [25] Nasrah dan Muafia, "Analisis Motivasi Belajar dan Hasil Belajar Daring Mahasiswa pada Masa Pandemi Covid-19," *Ris. Pendidik. Dasar*, 2020.
- [26] Sardiman, *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: Rajawali Pers, 2016.
- [27] V. Luthfiana, "Kontribusi Manajemen Waktu Terhadap Produktivitas Kerja Wartawan," Universitas Gunadarma, 2010.
- [28] N. K. Nisa, H. Mukhlis, D. A. Wahyudi, dan R. H. Putri, "Manajemen Waktu dengan Prokrastinasi Akademik Pada Mahasiswa Keperawatan," *J. Psychol. Perspect.*, vol. 1, no. 1, hal. 29–34, 2019, doi: 10.47679/jopp.1172019.
- [29] N. A. Sukino, "Hubungan Motivasi Berprestasi dengan Manajemen Waktu pada Mahasiswa yang Bekerja," Universitas Medan Area, 2017.
- [30] A. S. Munna dan M. A. Kalam, "Teaching and learning process to enhance teaching effectiveness: literature review," *Int. J. Humanit. Innov.*, 2021, doi: 10.33750/ijhi.v4i1.102.