

The Relationship between The Big Five Personality and Student's Time Management

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Abstract

This study aims to determine whether there is the relationship between The Big Five Personality on students' time management. This study also explores The Big Five Personality each traits, which consists of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness on student's time management. The approach used is quantitative method. The data collection tool uses The Time Management Scale and The Big Five Factor Inventory. The population in this study were college students of Universitas Muria Kudus. The number of samples collected was 59 college students in their sixth semester. The data analysis method consisted of normality test, homogeneity test, and hypothesis testing with Pearson Correlation. The results of the analysis revealed a significant and positive relationships between The Big Five Personality on students' time management. However, further correlation and regression analysis revealed neuroticism as the most predictive student's time management but revealed a non-significant relationship. Additionally, only conscientiousness trait showed a significant relationship with student's time management.

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1. INTRODUCTION

Students who are studying at university will certainly face problems. The problems between freshman, sophomore, junior, and senior year are surely different. As for middle-year students, they are usually faced with quite a lot of lecture assignment problems and challenges in managing time properly between the lecture process and activities outside the lecture (Salim & Fakhurrozi, 2020).

Time management is one of the internal factors. It is a process of managing oneself (Asmariyani, 2018). Time management is the effort and action of an individual in managing himself by using time as effectively and efficiently as possible by setting goals and priorities, planning and scheduling, controlling time, and the ability to be organized in both professional and personal life to achieve clear goals (Asmariyani, 2018). Time management is a type of skill related to all forms of one's efforts and actions that are carried out in a planned manner so that individuals can make the best use of their time (Bela dkk, 2023).

Having the ability to manage time and to use time efficiently is the most important thing in managing the study period and managing one's entire life (Asmariyani, 2018). If a student is able to manage his study time by making a schedule of activities and carrying it out with discipline, then automatically the student will study regularly and will better to master the concept (Asmariyani, 2018). If a student has mastered a particular concept or lesson material, then that student will have a greater chance of obtaining better learning outcomes compared to students who are less able to manage their study time (Asmariyani, 2018).

Many studies related to time management have been carried out such as research Adams & Blair (2019) which looks at the impact of time management on student

performance. Similar research was conducted by Trentepoh, dkk (2022) which looked at the effect of students' knowledge of time management and time management practices on improving student academic performance. The results show an increase in the academic performance of students who apply time management.

The Big Five Personality is one of the descriptions of personality forms which are grouped into five personalities. They are neuroticism, extraversion, conscientiousness, agreeableness, and openness. The Big Five Personality is widely used in analyzing a person's personality in one thing. The research conducted by Bazkiaie, dkk (2020) aimed to know the the relationship between entrepreneurial levels of students using The Big Five Personality. Then the research by Shahzad et al (2020) purposed to know the person's level of leadership based on The Big Five Personality. Furthermore, Mahmoud, et al (2020) examined the relationship between The Big Five Personality and intrapreneurial behavior and individual performance which showed that the three personalities of conscientiousness, disagreeableness, and emotional stability were related to intrapreneurial behavior.

However, researchers have not found recent literature that examines the relationship between The Big Five Personality and time management. So researchers use research gaps in looking at the relationship between time management and The Big Five Personality. The research question is whether there is a difference between The Five Personality and time management in the sixth semester psychology students.

2. METHOD

The sampling technique used a convenience sampling method. The samples of research were collected from members of the population that are easy to obtain and able to provide that information (Sekaran, 2017). The respondents were the sixth semester students of the Faculty of Psychology, Universitas Muria Kudus whom were available to fill the questioner. The sixth semester students as respondents actually became the most fit respondents to know their time management between another student. This is they got the most many subjects than students in the second, forth, and eight semester.

3. RESULTS AND DISCUSSION

Table 1. Description of Gender of Research Participants (N=59)

Gender	Frequency (N)	Percentage (%)
Male	13	22%
Female	46	78%
Total	59	100%

The respondents of this research were 59 students. The male students were 13 students or 22%. While the female students were 46 students or 78% from total percentage. In Faculty of Psychology Universitas Muria Kudus, the number of female students are bigger than male students.

Table 2. Descriptive Statistics of Big Five Personality Traits
Descriptive Statistics

	Mean	Std. Deviation	N
Time	62.66	10.527	59

Extra	15.17	2.842	59
Agre	20.20	2.148	59
Cons	18.44	2.824	59
Neur	11.92	3.213	59
Open	16.85	2.815	59

Based on the results of descriptive data analysis, it was found that the highest average value of The Big Five Personality trait of the research participants was the agreeableness trait with an average or mean value of 20.20. The second highest average value of The Big Five Personality trait, was conscientiousness, with an average or mean value of 20.20of 18.44. Trait openness and extraversion have average values with slight differences, namely 16.85 and 15.17. The Big Five Personality trait with the smallest average value of the participants in this study is neuroticism. The results of the descriptive statistical data can be seen in the following table below.

The description of the results of the descriptive statistics above is consistent with the results of a systematic review conducted by Vendel (2016). Students majoring in psychology tend to have higher agreeableness values than other The Big Five Personality traits (Vedel, 2016). Likewise, the high value of agreeableness found in the characteristics of research participants who were generally female also in line with the findings of previous studies. Students with female gender showed higher scores of agreeableness than males (Rubinstein, 2005; Vedel, et al., 2015., Jones, 2021). Meanwhile, the neuroticism trait had the lowest average value in the participants of this study. This result was in line with previous research conducted by Clariana (2013) and research conducted by Jones, et al (2021) on their campus, that their psychology students have a lower neuroticism score than other The Big Five Personality traits.

The researcher also categorized the participants' The Big Five Personality traits into percentages. A total of 31 participants out of a total of 59 participants or 52.54% had the highest agreeableness trait compared to other The Big Five Personality traits (openness, conscientiousness, extraversion, and neuroticism). There were 10 people out of a total of 59 participants or 16.95% had the highest conscientiousness trait. Participants who had the openness trait of 10.17% or 6 people out of 59 participants. Participants who had the highest neuroticism trait tended to consist of only 1.69% or 1 person out of a total of 59 participants. The interesting thing was that none of the participants had the highest or most prominent extraversion trait of The Big Five Personality. However, there was 1 participant or 1.69% who had the dominant extraversion and conscientiousness traits. Likewise, there were 6 participants or 10.17% with the dominant trait both of agreeableness and conscientiousness. As many as 3 participants or 5.08% of the total participants had a balanced dominant trait between agreeableness and openness. Finally, there is 1 participant or 1.69% who has 3 traits of The Big Five Personality, namely agreeableness, openness, and conscientiousness which are equally dominant. These descriptions can be seen in the table below.

Table 3. An overview of the Big Five Dominant Personality Traits

Trait Big Five Personality	Frequency (N)	Percentage (%)
Openness	6	10,17%
Conscientiousness	10	16,95%
Extraversion	0	0%

Agreeableness	31	52,54%
Neuroticism	1	1,69%
Extraversion & Conscientiousness	1	1,69%
Agreeableness & Conscientiousness	6	10,17%
Agreeableness & Openness	3	5,08%
Agreeableness, Openness, & Conscientiousness	1	1,69%
Total	59	100%

The researcher tried to map the categories of each of The Big Five Personality traits of the participants by using a range formula based on the standard deviation and the empirical mean seen from the normal curve (Azwar, 2000). The categorization carried out by the researcher is divided into 5 categories, namely very low, low, medium, high, and very high categories.

Through the formula used to categorize from Azwar (2000), researchers then categorize the variables of time management and The Big Five Personality into five categories. The categorization of the variable score of time management is listed in the table below:

Table 4. Time Management Score Categorization

Variable	Value Range	Categories Score	Frequency	Percentage
Time Management	$x > 78.4505$	Very High	4	6.78%
	$67.9235 < x \leq 78.4505$	High	12	20.34%
	$57.3965 < x \leq 67.9235$	Moderate	22	37.29%
	$46.8695 < x \leq 57.3965$	Low	18	30.51%
	$x \leq 46.8695$	Very Low	3	5.08%

From the score categorization carried out by the researcher, the greatest time management category was found in the medium score category. There were 22 students or 37.29% of all participants had moderate category time management. The smallest percentage is found in the very low score category. As many as 3 students out of 59 research participants or 5.08% had time management in a very low category.

Meanwhile, the normality test was carried out as one of the assumption tests in this study. This study conducted a normality test using the One Sample Kolmogorov-Smirnov test. If the significance value is > 0.05 , the data used in the study has a normal distribution.

Table 5. Normality test
One-Sample Kolmogorov-Smirnov Test

		Big	Time
N		59	59
Normal Parameter ^{a,b}	Mean	82.58	62.66
	Std. Deviation	8.581	10.527
Most Extreme Differences	Absolute	.069	.109
	Positive	.049	.107
	Negative	-.069	-.109
Kolmogorov-Smirnov Z		.529	.837
Asymp. Sig. (2-tailed)		.943	.486

- a. Test distribution is Normal
- b. Calculated from data

Based on the results of the normality test, The Big Five Personality variable had a p value of 0.943. The time management variable has a p value of 0.486. Both numbers indicate a p value greater than 0.05. Based on these results, it can be concluded that the two variables in this study have normal data distribution.

The second assumption test conducted in this study is the linearity test. The linearity test in this study used the SPSS ANOVA table. Through the ANOVA table in SPSS you can see the value of Sig. linearity and Sig. deviation. from dependent and independent variable. If the value of Sig. linearity is smaller than the level of significance (α), then linear regression can be used to explain the influence between existing research variables. If the value of Sig. deviation from linearity is greater than the level of significance (α), then the linear regression can be used to explain the influence between existing research variables.

Table 6. Linearity Test

ANOVA Table				
		Mean Square	F	Sig.
Time*Big	Between	114.170	1.062	.436
	Groups	688.365	6.406	.017
	With	93.663	.872	.641
	Groups Total	107.459		

The significance level (α) was determined to be 5%. Based on the results of the linearity test in the table, the sig. linearity is 0.017 (smaller than 0.05). Sig. Value Deviation from Linearity is 0.641 (greater than 0.05). Thus it can be concluded that the data used can be explained by linear regression quite well and that the linearity test can be said to be fulfilled.

The linearity test can also be seen from the Measure of Association table. If it has the value Eta $>$ Eta Square, then the right model is linear.

Table 7. Linearity Test
Measures of Association

	R	R Squared	Eta	Eta Squared
Time*Big	.327	.107	.718	.515

It can be seen from the table above that the value of Eta is 0.718 > Eta Squared is 0.515. This suggests that there is a linear relationship between The Big Five Personality and Time Management. With a normal and linear distribution of data, the correlation test can be performed.

To test the correlation that measures the closeness of the relationship between the two variables, Pearson's correlation is used, where the independent variable is The Big Five Personality and the dependent variable is time management.

Table 8. Correlation Test
Correlation

		Big	Time
Big	Pearson Correlation	1	.327**
	Sig. (1-tailed)		.006
	N	59	59
Time	Pearson Correlation	.327**	1
	Sig. (1-tailed)	.006	
	N	59	59

**Correlation is significant at the 0.01 level

In Table 8, The results of correlation showed that there was a very significant correlation between The Big Five Personality and time management. The p-value obtained in this study was 0.006, which is less than 0.01 so that the effect obtained was very significant. Meanwhile, the correlation value obtained is 0.327. According to Sarwono (2016), the correlation value between 0.25 – 0.50 is classified as moderate correlation. Thus in this study, The Big Five Personality can be said to have sufficient influence on one's time management. A positive correlation value means that the relationship is unidirectional, meaning that the stronger the personality of The Big Five Personality, the greater the influence on one's time management.

This research also wants to examine the relationship between time management as the dependent variable and each personality trait of The Big Five Personality as an independent variable. For this reason, a regression test was carried out with multiple linear regression models.

Table. Regression Test
Pearson Correlation

Person	Time	Exstra	Agre	Cons	Neur	Open
Corr.						
Time	1.000	.232	.153	.375	0.78	.182
Extra	.232	1.000	.178	.244	.351	.122
Agre	.153	.178	1.000	.357	-.007	.139
Cons	.375	.244	.357	1.000	.234	.405
Neur	.078	.351	-.007	.234	1.000	.203
Open	.182	.122	.139	.405	.203	1.000
Sig. (1-tailed)	Time	Exstra	Agre	Cons	Neur	Open
Time	.	.039	.124	.002	.278	.084

Extra	.039	.	.089	.031	.003	.179
Agre	.124	.089	.	.003	.478	.146
Cons	.002	.031	.003	.	.037	.001
Neur	.278	.003	.478	.037	.	.062
Open	.084	.179	.146	.001	.062	.

Based on the regression test table above, it turned out that only the extraversion and conscientiousness traits had a correlation with time management with p values of 0.039 and 0.002 respectively. This showed that there was a significant relationship between The Big Five Personality traits, namely extraversion and time management. There was a very significant relationship between The Big Five Personality traits, which were conscientiousness and time management. According to Sarwono (2016), the strength of the correlation between $> 0 - 0.25$ was classified as a very weak correlation. The strength of the relationship between extraversion and time management is 0.232, so it was classified as very weak. The strength of the relationship between conscientiousness and time management was quite strong ($p = 0.375$). The other Big Five Personality Traits, which were openness, agreeableness, and neuroticism had no relationship with time management.

The results of this study were in line with previous research conducted by Douglas (2015). In his research, he stated that time management behavior in students is positively influenced by the trait of conscientiousness. Students who had conscientiousness trait values were indicated to use more effective time management strategies to complete assignments. The results of this study also further strengthened the results of previous studies regarding the existence of a positive relationship between time management and aspects of conscientiousness in various research samples (Bajec, 2019; Douglas et al, 2016; Munro, 2016; Mohall, 2015; Liu et al, 2009, Feig, 1995). Conscientiousness itself had a stronger influence on the student sample than the adult sample, which in this case is the physical education teacher. Furthermore, Bajec (2019) stated that conscientiousness was positively correlated with all aspects of the time management behaviors, especially preference for organization and perceived control of time.

However, the results of this study had slightly different results from the previous research conducted by Douglas (2015). In his research, time management behavior had no relationship with the extraversion trait, either assertiveness and enthusiasm. Whereas in this study, it showed that there was a relationship between the extraversion trait in psychology students. The result of this study was in line with the results of previous studies which state that there was a positive relationship between time management and the extraversion trait (Bajec, 2019; Douglas et al, 2016; Munro, 2016; Mohall, 2015; Liu et al, 2009, Feig, 1995). Furthermore, in his research, Bajec (2019) wrote that the extraversion trait was positively correlated with aspects of time management, namely the perception of control over time, setting goals, prioritizing and using different techniques to structure activities.

4. CONCLUSION

Based on the research results, we can conclude that there is a positive and very significant relationship between The Big Five Personality and time management in psychology student, mainly in the sixth semestere ($p = 0.006$ and $r = 0.327$) So that, the stronger the The Big Five Personality that student have, the more higher their time management. Furthermore, we find that the participants have moderate time management score (37.29%), however there are many students do not have good time management or there are 30.51% get low time management score. While the importance of student having a good time management is prominent, for example it impacts the academic performance.

5. SUGGESTION

Thus the researcher suggests the faculty can hold a time management training for their student, in order to help them managing their time, activities, and even planning and organizing their entire life better. Nonetheless this study has many limitations. For the further research, the greater number for participants can be added with different sampling method, and can combine the research with another variables to enrich the finding in psychological research.

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