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## The Relationship between Introvert and Extrovert Personality Types and Stress Levels in the Class of 2020 Students, Faculty of Medicine, Universitas Prima Indonesia

Zakiyyah Qurrota'aini<sup>1</sup>, Wika Hanida<sup>1</sup>, Rahmad Isnanta<sup>1\*</sup>

<sup>1</sup>Universitas Prima Indonesia, Medan, Indonesia

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#### \*Corresponding author:

Rahmad Isnanta

#### E-mail address:

[rahmadisnanta@unprimdn.ac.id](mailto:rahmadisnanta@unprimdn.ac.id)

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### ABSTRACT

Personality is defined as the overall pattern of thoughts, feelings, and behavior that is often used in terms of adaptation to life. So that certain people can handle stress problems they have experienced for years by resolving threatening problems and situations, both behaviorally and cognitively. This study aims to determine the relationship between introvert and extrovert personality types and stress levels in students in the class of 2020, Faculty of Medicine, Universitas Prima Indonesia. The research was conducted in July-September 2023. The type of research is descriptive observational. The population covered in the study were students from the 2020 class of the Faculty of Medicine, Universitas Prima Indonesia, totaling 63 samples using purposive sampling techniques. Univariate data analysis is presented in the form of frequency distribution and bivariate analysis using tests of Chi-square data processing using the computerized IBM version 25.0 SPSS program. More than half of the students of the 2020 class of the Faculty of Medicine, Universitas Prima Indonesia have an introverted personality type, namely 42 people (66.7%), almost half of the students of the 2020 class of the Faculty of Medicine, Universitas Prima Indonesia have a moderate level of stress, namely 25 people (39.7%) and there are relationship between introverted personality type and moderate stress levels in 2020 students at the Faculty of Medicine, Universitas Prima Indonesia ( $p=0.004$ ). There is a relationship between introvert and extrovert personality types and stress levels in students in the class of 2020, Faculty of Medicine, Universitas Prima Indonesia.

### 1. Introduction

Stress is the body's response to every need that stresses a person's psychological condition due to disturbances in the mind and body caused by changes and demands in life that cannot be avoided and are experienced by every individual. Normal stress is experienced by every individual and is an inseparable part of life. Stress will make someone who experiences it think and try hard to solve a problem in their life as a form of adaptive response to survive. The causes of stress can be internal and external causes. Internal causes that come from within a person include health problems, such as fever, physical trauma, infectious diseases, malnutrition, and fatigue. External causes that originate from outside a person, such as

significant changes in social, environmental, and work roles. There are several characteristics of stress. One of them is frustration, feeling frustrated when you have disappointment caused by failure to complete a task. This is a conflict of needs that must be met in working on the final assignment, which must be completed on time. Pressure: Someone will experience pressure when submitting their final assignment, which makes students do things that they don't want to do. Students who experience pressure come from themselves and from outside themselves, which has an impact on stress. Previous research shows that around 50.8% of students experience stress, and 42.9% do not experience stress. Another study found that the stress level of final-year students was very

high, namely 97.0%. This occurs due to emotional factors and also a lack of confidence in his ability to carry out a successful goal (self-efficacy). This is different from the results of other studies, which show that 57.23% experienced moderate levels of stress. Students experience stress from various sources, both academic and non-academic. The lifestyle experienced by students is often an additional burden apart from the tiring pressure of studying. Problems outside of lectures also cause stress for students. Each person will have their own way of dealing with the stress problems they face. Whether a person is easily affected by stress or not will be influenced by several factors.<sup>1-3</sup>

One factor that influences stress is personality. Personality is a characteristic possessed by a person that can lead to determination in controlling feelings, thoughts, and behavior. Personality types are classified into two types, namely, the introvert personality type and the extrovert personality type. The basis for classifying personality types is based on differences in individual interactions, daily habits, responses to things, and how an individual communicates with other individuals in their environment. Introverted personality types tend to live in their own world. The interaction that introverted personality types have with the outside world is not good. This makes them have a closed personality, find it difficult to socialize with other people, and often withdraw from busy situations. They tend to do things carefully and do not easily trust their words. This is slightly different from the extrovert personality type, who has very good interactions with the outside world. They are friendly people, easy to get along with and adapt to, like visiting new places, behave actively, get bored easily, and don't like routine and monotonous activities. Their actions are influenced by the external world, which is open, and their emotions are spontaneous. They are not very sensitive to failure. They do not do much introspection and self-criticism.<sup>4-7</sup> This study aims to determine the relationship between introvert and extrovert personality types and stress levels in students in the class of 2020, Faculty

of Medicine, Universitas Prima Indonesia.

## 2. Methods

This research was carried out at Universitas Prima Indonesia in July - September 2023. The research was carried out using analytical descriptive observational research, using a cross-sectional design approach. A total of 63 research subjects participated in this study, where the research subjects met the inclusion criteria. The inclusion criteria for this study are students from the class of 2020, Faculty of Medicine, Universitas Prima Indonesia, who have received approval to participate in this study, which is indicated by the signing of an informed consent sheet. This study has received approval from the medical and health research ethics committee of Universitas Prima Indonesia.

In this study, 2 research instruments were used in the form of introvert and extrovert personality type questionnaires, namely, the Eysenck personality inventory (EPI) and a stress level questionnaire, namely, the perceived stress scale (PSS-10). The researcher will give the questionnaire sheet to the research subject, and it is hoped that the research subject will honestly fill in the answers on the questionnaire sheet. In this study, the independent variable is the introvert and extrovert personality types, and the dependent variable is the stress level. Analyze this research data using univariate analysis to obtain an overview of the frequency distribution and bivariate analysis using Chi-square tests to obtain a relationship between two variables with a p-value <0.05.

## 3. Results and Discussion

Based on Table 1, it can be concluded that from 63 respondents, more than half of the students of the class of 2020 of the Faculty of Medicine, Universitas Prima Indonesia, are female. Namely, 47 people (74.6%) and more than half of the students of the class of 2020 of the Faculty of Medicine, Universitas Prima Indonesia are 43 people (68.3%).

Table 1. Frequency distribution of respondent characteristics for a class of 2020 students, Faculty of Medicine, Universitas Prima Indonesia.

Characteristics of respondents	Frequency	Percentage (%)
<b>Gender:</b>		
Male	16	25,4
Female	47	74,6
<b>Age:</b>		
19 years old	1	1,6
20 years old	11	17,5
21 years old	43	68,3
22 years old	5	7,9
23 years old	2	3,2
26 years old	1	1,6
<b>Total</b>	<b>63</b>	<b>100,0</b>

Table 2. Relationship between personality type and stress level in a class of 2020 students, Faculty of Medicine, Universitas Prima Indonesia.

Personality type	Stress level										p-value
	Normal		Mild		Moderate		Severe		Total		
	f	%	F	%	F	%	f	%	F	%	
Extrovert	7	33,3	5	23,8	5	23,8	4	19,0	21	100,0	0,003
Introvert	2	4,8	4	9,5	14	33,3	22	52,4	42	100,0	
<b>Total</b>	<b>9</b>	<b>14,3</b>	<b>9</b>	<b>14,3</b>	<b>19</b>	<b>30,2</b>	<b>26</b>	<b>41,3</b>	<b>63</b>	<b>100,0</b>	

Based on Table 2, it can be concluded that of the 63 respondents, the level of severe stress was more common in respondents who had an introverted personality type (52.4%) compared to extroverts (19.0%). The results of statistical tests using the Chi-square test obtained a value of  $p = 0.003$  ( $p < 0.05$ ), which means that there is a relationship between personality type and stress levels in students of the class of 2020, Faculty of Medicine, Universitas Prima Indonesia.

The results of this study are in line with other research regarding the relationship between personality type and stress levels in students, finding that there is a relationship between personality type and stress levels in students. Also, in line with other research regarding the relationship between personality type and stress level, it was found that there is a relationship between personality type and stress level. Likewise, other research found that There is a relationship between personality type and stress levels. It has been proven in research that there is a

relationship between personality type and stressful events, where it appears that introverted personality types are more at risk of experiencing stress compared to extroverted personality types.<sup>8-10</sup>

In accordance with other research, the source of stress or stressors can come from within oneself (internal) or from outside oneself (external). Internal stressors include unfavorable physical conditions, such as fever, pregnancy, or menopause, and psychological conditions, such as pessimism, feelings of guilt, or excessive self-criticism. External stressors can be physical changes in the environment, such as changes in temperature and work location, and psychological conditions, such as discriminatory behavior, workload, acts of violence, or death. One factor that influences stress is personality. Personality is a characteristic possessed by a person that can lead to determination in controlling feelings, thoughts, and behavior. Personality types are classified into two types, namely, the introvert personality type and the extrovert personality type. The basis for classifying

personality types is based on differences in individual interactions, daily habits, responses to things, and how an individual communicates with other individuals in their environment.<sup>11,12</sup>

#### 4. Conclusion

There is a relationship between the introverted personality type and moderate stress levels in the 2020 class of students at the Faculty of Medicine, Universitas Prima Indonesia.

#### 5. References

1. Wahyudi R, Bebasari E, Nazriati E. Overview of stress level in first-year students of Faculty of Medicine, Universitas Riau. *Journal of Medical Sciences*. 2017; 9(2).
2. Hedyaty S, Herlambang, Shafira NNA. Description of medical student stress levels based on the medical student stressor questionnaire at the Faculty of Medicine and Health Sciences, Universitas Jambi. *Journal of Medical Studies (JOMS)*. 2022; 2(2).
3. Fatmayanti N, Sukiatni S, Kusumandari R. Stress levels in students: Is there a difference between students with introverted and extroverted personalities? *INNER: Journal of Psychological Research*. 2022; 2(3).
4. Legiran, Azis MZ, Bellinawati N. Stress risk factors and differences in students. *Journal of Medicine and Health*. 2015; 2(2).
5. Agusmar AY, Vani AT, Wahyuni S. Comparison of stress levels in a class of 2018 students with a class of 2015, Faculty of Medicine, Universitas Baiturrahmah. *Health & Medical Journal*. 2019; 1(2).
6. Fatningsaliska C, Bidjuni H, Wowiling F. Comparison of stress levels based on the Hippocrates-Galenus personality type in students involved in the organization of the Christian spiritual team student senate of the Faculty of Medicine Unsrat. In *UNSRAT Nursing Journal*. 2015; 3(1).
7. Safitira RP, Wilson, Putri EA. Differences between introverted and extroverted personalities on depression levels in 2017 medical study program students at Tanjungpura University. *National Journal of Health Sciences*. 2021; 4(1).
8. Prayitno SH, Ayu SM. The relationship between introvert and extrovert personality types with the incidence of stress in the co-assistant class of 2011, Faculty of Medicine, Universitas Udayana. *Insight Journal of the Faculty of Psychology, Universitas Muhammadiyah Jember*. 2018.
9. Linasari FS. The relationship between personality type and stress level in new students at the Faculty of Medicine, Universitas Andalas in 2016. Diploma thesis, Universitas Andalas. 2017.
10. Trisnayanti A. Relationship between personality type and stress level of nursing professional students at Universitas Tribhuwana Tunggaladewi (Doctoral dissertation, Universitas Brawijaya). 2018.
11. Hidayah R, Trisnayanti A, Rachmawati SD. The relationship between personality type and stress levels in nursing Professional Students. *Mesencephalon Journal of Health*. 2021; 6(2).
12. Anggita I. Relationship between Personality type and stress level of Diploma of midwifery students of Stikes Indramayu 2018. *Indra Husada Health Journal*. 2020; 8(1).