



# Online Mental Health Survey: An Analysis based on Family Characteristic

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## ABSTRACT

The Coronavirus disease 2019 (Covid-19) outbreak has spread from Wuhan to Indonesia. Since 2020, the government has asked people to quarantine at home to reduce the spread of disease. As a result, students learn from home, which causes them to spend more time with their families. As a result of the increasing number of confirmed cases and deaths of Covid-19, people are starting to experience mental health problems, including depression, anxiety, and stress. This study aims to investigate students' mental health in terms of various family characteristics. This study involved 743 students selected by a disproportionate random sampling technique from eight faculties at Universitas Negeri Jakarta. Researchers collected data from March to April 2022 using the Depression Anxiety Stress Scale (DASS-21). After analysing the validity and reliability of the items, the researcher confirmed that DASS-21 fit the model. The study results concluded that there were differences in students' average mental health problems based on differences in birth order, father's occupation, and father's last education. In addition, the analysis showed that the average scores for depression, anxiety and stress for male students were higher than for female students. Appropriate coping strategies will have a good impact on student's mental health. So, families need to pay attention to students' mental health conditions, provide solutions or assistance when students are experiencing problems, provide support and motivation to keep their enthusiasm for online learning and socialize with good coping strategies.

**Keywords:** *College Student, Family Characteristic, Mental Health.*

## 1. INTRODUCTION

The Covid-19 virus spreads very quickly and makes all people anxious. The Covid-19 virus has had a significant impact on every area of Indonesian people's lives, one of which is education. The president has issued several regulations and policies during this pandemic, and some regulations are significant for handling Covid-19 [1].

The government also advises everyone in Indonesia to apply masks, keep their distance, and wash their hands in clean running water daily. During the Covid-19 pandemic, all activities usually carried out by Indonesian people were limited. Face-to-face learning has turned into online learning to prevent the spread of the virus rapidly. Based on circular letter No. 4 of 2020 regarding implementing Education Policies in the Emergency Period of the Spread of Corona Virus Disease (Covid-19), learning is online or online [2]. Distance or online learning applies to all school strata, including tertiary institutions.

Universities recognize synchronous and asynchronous systems. The difference is in real-time meetings between lecturers and students. In asynchronous learning, lecturers do online teaching and learning processes and utilize digital learning media to give assignments. Limitations of asynchronous learning make students feel difficulty doing assignments and can cause them to feel anxious and stressed. Incidents like this can hinder students from doing online learning. The disturbances experienced by these students can also have an impact on their physical health. Anxiety experienced by students can cause headaches, muscle tension, excessive sweating, faster heartbeats and breathing [3]. Central Bureau of Statistics survey results prove that the age group of 17 to 30 often feel anxious as much as 24.7%, another 24.7% are easily angry, and 16% are overly afraid [4]. Central Bureau of Statistics added that the mental health conditions of teenagers were at their worst during the Covid-19 pandemic. Based on the 2020 National Basic Health Research Report, the prevalence of mental and emotional problems in Indonesians over 15

is 11.6% [5]. While participating in online learning, students undergo learning at home, so they meet more intensely with their families. The results of [6] prove that adolescents with good family support in learning can minimize learning anxiety, especially during the Covid-19 pandemic. Students need to communicate well with their families to live their days lighter. The higher the level of consensual family communication, the higher the ability to use coping strategies that focus on problems [7]. Students can use problem-focused coping strategies to avoid or solve problems.

**2. METHODS**

This research looks at pursuits to students' mental health in phrases of various family characteristics. This research makes use quantitative with survey method. This remark's population is college students at Universitas Negeri Jakarta who took online learning. As many as 743 university college students (male = 157, female = 586) from eight faculties with disproportionate random sampling technique. We conduct this research at Universitas Negeri Jakarta, Rawamangun Muka road, East Jakarta. The studies were performed from March to September 2022. Students' mental health turned into measured by the usage of the Depression Anxiety Stress Scale 21 (DASS-21) instrument together with 21 items along with the size of depression (7 items), anxiety (8 items), and stress (6 items) and was measured the usage of a verbal frequency scale, namely usually, regularly, hardly ever, and never [8].

After discovering the construct and empirical validity, all items suit the version and are suitable for the information series. For example, the validity coefficient for the DASS items ranged from 0.50 to 0.78 (extra prominent than 0.273). Therefore DASS-21 have been declared valid. Furthermore, the reliability coefficient of the DASS is 0.95. Because of this, DASS-21 is reliable and can be used to build up and look at the information.

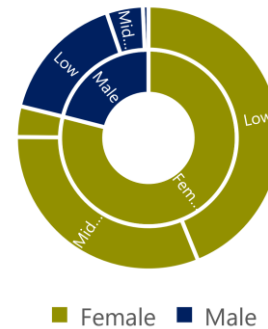
Despite everything, respondents' facts become collected, carrying out the analysis of the facts. Information analysis records based on variables and varieties of respondents, tabulating facts based totally on variables, providing statistics for the variable, acting calculations to reply to hassle formulations, and appearing calculations to test hypotheses [9]. We conduct cross-tabulation and Chi-Square tests to find students' mental health based on the family characteristic.

**3. RESULT AND DISCUSSION**

**3.1. Descriptive Analysis**

Respondents in this study were categorized based on gender and mental health issue level. The analysis results showed that there were 586 female students (78.87%).

This number is more than three times the number of male students. Based on these results, female students dominated the respondent of this research. This conclusion follows existing data in several faculties that women dominate students from specific faculties. According to [10], gender is related to students' mental health conditions, where females are more likely to experience mental health issues than males. Males and females can experience depression; the only difference is how to deal with problems. Males tend to use more logic, while females place more emphasis on feelings [11].



**Figure 1** Diagram of number of respondents by sex and mental health issues level.

Based on Figure 1, both males and females have common mental health issues. However, they still have pretty good mental health. There are many things that students can do while participating in online learning so that they can think positively and live their days well without frustration and disappointment. [12] summarizes that students can create an atmosphere of studying at home as if on campus. Students still need time to focus on studying without distractions from other people in their homes.

Descriptively, the average mental health issues of male students, characterized by symptoms of depression, anxiety, and stress, is higher than that of female students. However, the difference is not significant. The stress variance of male and female students is also high. The height of this number indicates that the stress levels of students vary. There are students with high enough stress levels, and there are also students who have pretty low-stress levels. Differences in student stress levels can be related to student efforts in dealing with stress, one of which is applying good coping strategies.

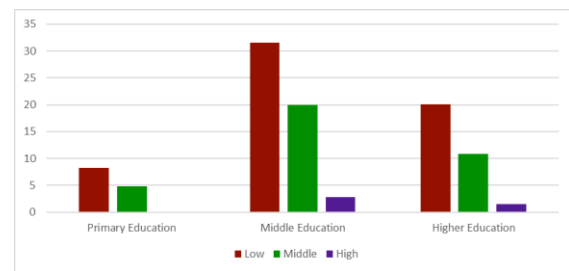
Based on figure 2, the eldest children have higher mental health issues than other children. As the oldest children, they sometimes feel that they have a burden to help their parents to guide their younger siblings. They need to be good examples to their siblings. Even in some families, the eldest children also become the backbone of the family.

**Table 1.** Descriptive statistics of depression, anxiety, and stress related to mental health issues.

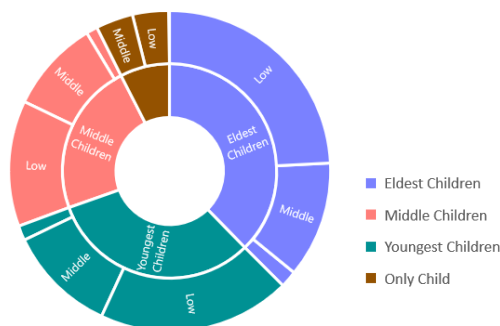
Statistic	Mental Health Issues		Depression		Anxiety		Stress	
	Female	Male	Female	Male	Female	Male	Female	Male
Mean	56.78	58.54	52.33	54.26	57.53	59.50	61.18	62.41
Variance	151.004	154.840	197.659	242.553	221.524	187.790	217.613	231.051
Std. Deviation	12.288	12.443	14.059	15.574	14.884	13.704	14.752	15.200
Minimum	26	26	25	25	25	28	25	25
Maximum	89	85	96	93	97	94	100	100

Based on Figure 3, middle education graduates dominated the respondent's father's last education. Among the respondents whose fathers completed middle education, most students had common mental health issues, but few also had mental health issues in the medium category. Fathers have high hopes that their children can get a decent tertiary education and finish school well to become someone more successful than their fathers. Figure 4 shows data regarding the relationship between the father's occupation and the level of student mental health issues. Entrepreneurs and workers in the private sector dominated respondents' fathers.

last education, and father's occupation on mental health issues.



**Figure 3** Diagram of number of respondents by father's last education and mental health issues level.



**Figure 2** Diagram of number of respondents by birth order and mental health issues level.

**Table 2.** Chi-square testing based on sex.

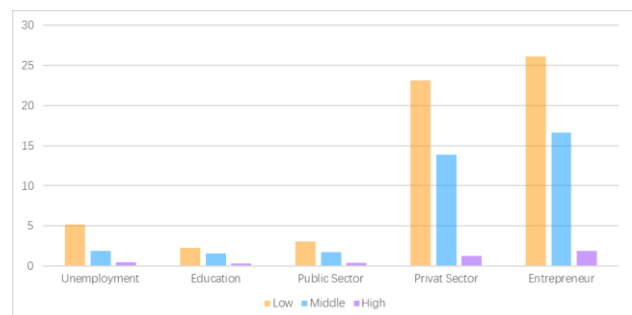
Pearson Chi-Square	Value	df	Asym. Sig. (2-sided)
Mental Health Issues	21.089 <sup>a</sup>	2	0.000
Depression	10.554 <sup>a</sup>	2	0.005
Anxiety	34.550 <sup>a</sup>	2	0.000
Stress	13.208 <sup>a</sup>	2	0.001

a. 0 cells (.0%) have expected count less than 5

### 3.2. Quantitative Analysis

The results of the Chi-Square test show that there is a relationship between mental health issues and student gender ( $0.000 < 0.005$ ). Furthermore, the test results show that there is a relationship between depression anxiety and stress that occurs in students with their gender (all p values less than 0.05).

Mental health issues can affect student well-being and affect their ability to achieve academically. Various factors can affect students' mental health, including the characteristics of their families. The One-Way ANOVA test shows that there is an influence of birth order, father's



**Figure 4** Diagram of number of respondents by father's occupation and mental health issues level.

**Table 3.** One-way ANOVA testing based on birth order, father's last education, and father's occupation.

Characteristic	Sig.
Birth Order	.017
Father's Last Education	.033
Father's Occupation	.043

### 3.3. Discussion

Amid the Covid-19 pandemic, the mental health of students in Jakarta is experiencing many challenges. Several factors impact the mental health of students in Jakarta, including social isolation, academic stress, worries about the health and safety of themselves and their families, and uncertainty about the future. Several studies have also shown an increase in anxiety disorders and depression in university students during the Covid-19 pandemic [13], [14].

In addition, various risk factors can exacerbate student mental health conditions, such as lack of social support, inability to adapt to changes that occur, and inability to access adequate mental health services [15]. To overcome this challenge, students in Jakarta need to develop effective strategies for caring for their mental health during the Covid-19 pandemic. Some strategies that can help include maintaining social relationships, reducing stress with exercise and meditation, and accessing available mental health support [16].

Mental health is a state of well-being in which individuals are aware of their abilities, can cope with the everyday stresses of life, can work productively and contribute to their communities [17]. Students' mental health problems will undoubtedly hinder them from carrying out the online learning process. The difficulties that occur during online learning will affect students' mental health. The average mental health issue for male students is higher than for female students.

This study measures students' mental health issues with three dimensions, namely the dimensions of depression, anxiety, and stress. Depression is a mood disorder characterized by feelings of sadness that are too deep and will harm students' thoughts, actions, and mental health. Depression is a mental health issues affecting a person's daily life. Students often experience depression due to high academic and social pressure in college. The average student depression score is 52.33 (for females) and 54.26 (for males). Both are in a low category (< 60). The impact of depression on students includes decreased productivity, concentration, and academic achievement, which impact mental and physical well-being. Research conducted by [18] show that depression predicted a decrease in exam performance from first to second year. Thus, there is a need for greater

attention from universities and mental health to increase awareness and facilitate mental health services for students who experience depression.

Academic anxiety is a feeling of uncertainty and worry related to one's academic performance. Students often experience academic anxiety due to high academic and social pressure in college. Anxiety is a student condition characterized by fear or worries about something, but if this anxiety is difficult to control, it will undoubtedly interfere with students' daily activities. The average student anxiety score is 57.53 (for females) and 59.50 (for males). Both are in a low category. The impact of academic anxiety on students includes decreased mental and physical well-being and poor academic performance. Research conducted by [19], [20] that anxiety disorders affected academic performance. Therefore, efforts are needed to reduce academic anxiety in students, such as stress reduction programs and increasing adjustment skills.

Then stress is a student's psychological condition where they feel pressured by a problem or situation considered too heavy and difficult. Students often experience stress due to high academic, social and financial pressures in the college environment. The average student stress score is 61.18 (for females) and 62.41 (for males). The impact of stress on students includes decreased mental and physical well-being and poor academic performance. Research conducted by [21] showed that medical students who experience stress are more prone to fatigue, anxiety, and depression. Another study by [22] that stress scores were negatively correlated with academic performance. In addition, research conducted by [23] show that sources of social support represent a valuable resource for universities in protecting the mental health of students. Therefore, there is a need for support and adjustment skills to help students cope with the stress they experience.

There is a relationship between gender and the level of student mental health issues (p-value = 0.000). This study reinforces the results of research [24] that male students have higher stress levels than female students. Therefore, there is still debate about the relationship between student gender and perceived level of mental health.

Testing with One-Way ANOVA showed an effect of birth order on students' mental health issues (p-value = 0.017). [25] found that differential of birth order impacts on child mental health, for both positive and negative sides. These finding aligns with research conducted by [26], who found that firstborns have better mental health than their younger siblings.

Other results show an influence of the father's last education on students' mental health issues (p-value = 0.033). Education, including students, is a crucial factor that can affect a person's mental health. The results of this

study corroborate the research of [15], which shows that the father's last education level has a significant relationship with the level of mental health students feel. This study found that students whose fathers had higher levels of education tended to have better mental health levels than students whose fathers had lower levels of education.

Previous research conducted by [27] also found results that were in line with the research of [15]. This study shows that college students whose fathers have higher levels of education have higher levels of life satisfaction and lower stress levels. Another One-Way ANOVA test shows the influence of a father's occupation towards students' mental health issues ( $p$ -value = 0.043). Father's occupation is also an essential factor affecting students' mental health.

#### 4. CONCLUSION AND SUGGESTION

The study results concluded that there were differences in students' average mental health problems based on differences in birth order, father's occupation, and father's last education. In addition, the analysis showed that the average scores for depression, anxiety and stress for male students were higher than for female students. Appropriate coping strategies will have a good impact on student's mental health. So, families need to pay attention to students' mental health conditions, provide solutions or assistance when students are experiencing problems, provide support and motivation to keep their enthusiasm for online learning and socialize with good coping strategies.

#### AUTHORS' CONTRIBUTIONS

Conceptualization, UH & MO; methodology, UH & MO; validation, UH; data analysis, MO; literature review, AZT; writing-original draft preparation, MO; writing-review and editing, MO; visualization, MO.

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