

# Factor Associated with Depression among Undergraduate Students in FHPK Programme UMK City Campus Post Covid-19 Pandemic

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## ABSTRACT

*Depression is an emotional health problem becoming more prevalent among youth, particularly among undergraduate students. The objective of the study is to examine the relationships between socio-demographic factors, quality of internet connections, and family characteristics with depression among undergraduate students. A cross sectional study was conducted among 327 of undergraduate students. A set of questionnaires comprising Depression, Anxiety and Stress Scale (DASS-21), Orman Internet Scale and Asian Family Characteristic Scale (AFCS) was used to measure depression, quality of internet connection and family characteristics, respectively. Data was analysed by using Pearson Correlation analysis to determine the relationship between variables. Findings of this study revealed that there were a significant association between quality of internet connection and family characteristics with depression among university students. Future research could benefit from large scale nationwide longitudinal studies which include all possible factors related to the student's depression.*

**Keyword:** *Depression, Mental health, Socio-demographics, Family Characteristics, Internet Connections*

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## INTRODUCTION

Depression is a mood condition characterized by chronic sorrow and a loss of interest. Depression affects how a person feels, thinks, and acts, also can lead to several mental and physical difficulties. University students endure a variety of challenges, including independent living, academic stress, peer pressure, and family issues, all of which can lead to depression. Student debt, higher education fees, and the online learning method were all difficulties that contemporary students experienced, and they had to face them.

### Significance of study

This research will contribute to the body of knowledge on understanding of the factors related with depression among university students. To increase knowledge and attitudes regarding depression that can aid in the management of difficulties associated with depressive illnesses. Future research will lead to the establishment of an intervention program for lowering depression among university students for future research.

This study consists of three objectives:

1. To determine the relationship between socio-demographic factors and depression among undergraduate university students in FHPK, UMK.

2. To identify the relationship between quality of internet connections and depression among undergraduate university students in FHPK, UMK.
3. To examine the relationship between family characteristics and depression among undergraduate university students in FHPK, UMK.

## **LITERATURE REVIEW**

### **Depression**

Depression is a major mental health concern around the world due to its high of prevalence, chronic nature, and the challenging of treatment and recovery. Depression can cause feelings like sadness, guilt, low self-esteem, not being happy, and being unhappy with what's going on around them. Depression is a common and serious medical condition that affects how we feel, what we think, and how we act. It is characterized by constant sadness and losing interest or pleasure in things that used to make you happy.

Depression is an emotional health problem that is getting worse among university students in Malaysia post Covid-19 pandemic. This is mostly happening with first-year students who have a lot of problems. This situation is to be worried because depressions in the biggest mental health that can cause health effects and psychological effects (Nor Asikhin Ishak, 2020).

### **Socio-demographics**

Socio-demographics is the study of how people in a certain group or population can be identified by a mix of social and demographic factors. Depressive disorders in Malaysian university students can also be caused by how old they are. There are differences between men and women in how common different mental health problems are. For example, females are more likely to have internalizing diseases like depression because they have more problems balancing their lives at home, at school, and online, which can lead to mental health problems. Marriage status can also be one of the biggest problems for university students in Malaysia. There are both good and bad things that can be said about how a woman's marital status affects her education. Malaysian university students are most worried about money problems, especially during the pandemic. Muhammad Ashraful Islam et al. (2018) reported that 63.4% of students come from low-income families, which makes them more likely to get depressive illnesses.

### **Quality of Internet Connection**

Students can fall behind in school if they have a slow internet connection or cannot get online from home in rural areas. The quality of your internet connection can affect what you do online, your grades, your digital skills, how well you do your homework, and even your career goals. Students who live in rural areas or have low incomes are less likely to have high-speed internet at home. Students are less likely to go to university if they do not have high-speed internet at home. When university students don't have good internet connections, it can affect their mental health.

The emotional problems of Malaysian university students can be caused by poor internet connections. Internet connections are different in cities and in the country. In rural areas, the government can come up with ways to improve network connections and internet plans. The evidence showed that the rural and socioeconomically disadvantaged students are least likely to have broadband internet or WIFI access at home to study via online learning. Only 47% of university students who live in rural areas have high speed internet access at home compared

to 77% of those in suburban areas who have a good quality internet connection (Mohammed Faez, 2020).

### Family Characteristics

Depression could reduce the quality of life and relationships with friends and family. Having family problems can make it harder for university students in Malaysia to do well in school and stay motivated, which can make them more likely to have depressive disorders. Depression was 1.63 times more likely to happen to college students who lived with their parents than to those who lived far away from their parents (Yunmiao Yu, 2015). Researchers found that having a history of mental illness in your family and having been through other traumatic events contributed to the higher rates of depression.

It is not good for students' academic performance if they experience conflict with family members that can lead to their emotional health problems. It was important to maintain harmony in their family members and also focus more on their mental health and less on their family problems that could be contributing to their disorder or making it worse (Alyssa, 2019). Previous studies reported that 75% of students have a depressive disorder in 75% because of changes in their family lifestyles so there is a risk for mental health problems among them. Relationships within our family can help give us a sense of worth and value so this is important for our family members to support each other and not create the conflicts that can cause family relationships to become fragile (Yunmiao Yu, 2015).

### Research Hypotheses

In this study, the following were the two hypotheses:

- H1 There is a significant relationship between quality of internet connections and depression among university students
- H2 There is a significant relationship between the family characteristics and depression among university students.

### Research Framework

The Figure 1 below shows the research framework use for this study.

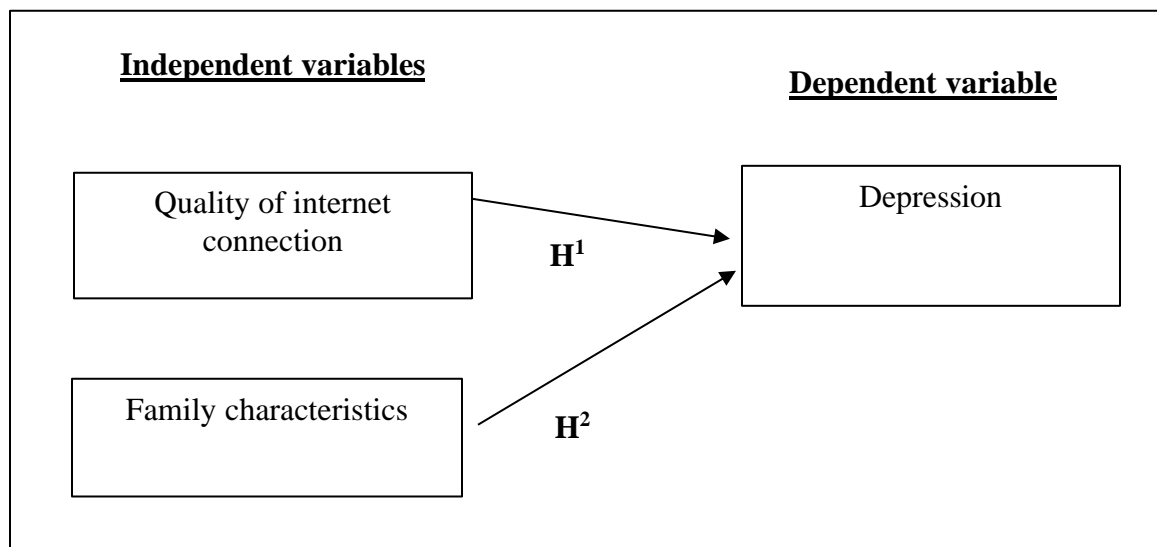


Figure 1: Research Framework

## METHODOLOGY

### Research design

A cross-sectional study design was used as research design. A total of 327 university students were involved in this study.

### Data Collections

A set of questionnaires consisted of four sections, Section A for socio-demographic characteristics, whereas Section B consisted of Depression, Anxiety and Stress Scale (DASS-21) which used to measure depression, the dependent variable of this study. Section C and Section D consisted of Orman Internet Scale and Asian Family Characteristic Scale (AFCS), were used to assess quality of internet connection and family characteristics, respectively. The set of questionnaires was distributed via Google Forms.

### Sampling

The non probability sampling technique was the sampling method used in this study because the samples are not selected at random. This type of sample is easier and cheaper to access. Purposive sampling will be used for this study. This study collected 327 respondents.

### Data Analysis

This study used a SPSS to analyze the data. Three types of data analyses were conducted in this study, descriptive analysis, reliability analysis, and Pearson correlation analysis. For descriptive analysis, continuous data was presented in the form of standard deviations and mean, meanwhile, for categorical data, data was presented in the form of frequency and percentage. For reliability analysis, Cronbach alpha value was used for reliability of questionnaire in 30 respondents during pilot study. This analysis is crucial to determine whether the questionnaire used in this study was reliable or not. The Pearson Correlation analysis was conducted to determine the significant association between dependent variable and independent variables.

## FINDINGS

### Result of Frequency Analysis

The result of socio-demographic characteristics of respondents from undergraduate students was presented in Table 1. Majority of respondents were female (80.4%), aged 23-26 years old (61.5%), and single (98.8%).

Table 1: Frequency Analysis (n=327)

| Characteristics       | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| <b>Gender</b>         |               |                |
| Male                  | 64            | 19.6           |
| Female                | 263           | 80.4           |
| <b>Age</b>            |               |                |
| 19 – 22               | 117           | 35.8           |
| 23 – 26               | 201           | 61.1           |
| 27 – 30               | 5             | 1.5            |
| 30 and above          | 4             | 1.2            |
| <b>Marital status</b> |               |                |
| Single                | 323           | 98.8           |
| Married               | 4             | 1.2            |

**Result of Descriptive Analysis**

The question which will dominate the first of ranked with the highest mean is D10 “I felt that I had nothing to look forward to” with 1.388. The second ranking goes for D17 “I felt I wasn’t worth much as a person” (1.351) followed by the D21 “I felt that life was meaningless” with is in 1.162. After that the least range of mean in D5 with “I found it difficult to work up the initiative to do things” with (1.003). This questionnaire was focused in types of depression questionnaire because of DASS-21 questionnaire have consist of Depression, Anxiety, and Stress Scales but for our main research for this study, that we only focused the questionnaire that consists of our main topic for this research, which is Depression, and have 7 items for this dependent variable of the study.

For a questionnaire to measure the quality of internet connections, the highest value of the mean for this questionnaire is “It is necessary to provide wireless Internet in their residence area” with 3.767 followed by the rank 2 with is “Without technology and Internet I cannot study effectively at any of my residence area (3.764). Other than that, the most at least for this mean is “Do you have problems controlling your impulse to connect to the Internet? Mostly the range for this questionnaire is acceptable and suitable because the range of mean is in 3 of above.

For the family characteristics, the first rank with the highest mean represented by the question of “We are always willing to pitch in and help each other” is 3.058 and followed by “Our family sticks together no matter how difficult things get (3.055). After that, the rank 3 was represented for the last question of harmony questionnaire family characteristics which is “We often show the harmony in the family with a smile” which is in 2.929. Fourth ranked was represented in 2.923 with “We often discuss if there is a problem in the family”. Lastly, the lowest rank for question FC9 is (2.639) for “We often spend time watching movies together”. The results of descriptive analysis for the questionnaire is presented in Table 2.

Table 2: The Result of Descriptive Analysis

| <b>Variables</b>                       | <b>Items</b>  | <b>Mean Score</b> | <b>Standard Deviation</b> |
|--|---|-------------------|---------------------------|
| <b>Depression</b>                      | I couldn’t seem to experience any positive feeling at all                                       | 1.052             | 0.933                     |
|  | I found it difficult to work up the initiative to do things                                     | 1.003             | 1.031                     |
|  | I felt that I had nothing to look forward to  | 1.388             | 0.882                     |
|  | I felt downhearted and blue   | 1.015             | 0.938                     |
|  | I was unable to become enthusiastic about anything  | 1.039             | 1.063                     |
|  | I felt I wasn’t worth much as a person  | 1.351             | 0.950                     |
|  | I felt that life was meaningless  | 1.162             | 0.910                     |
| <b>Quality of Internet Connections</b> | Do you have problems controlling your impulse to connect to Internet?                           | 3.048             | 1.225                     |
|  | Do you think you will feel bad and struggle if you have the poor connection lines at your area? | 3.422             | 1.250                     |

|  |   |       |       |
|--|---|-------|-------|
|  | Do you get much of your pleasure from being connected to the Internet?                                      | 3.574 | 1.182 |
|  | Do you find it hard to keep away from struggle with the internet access at home for several days at a time? | 3.183 | 1.247 |
|  | If no internet access, how would you feel (depression, anxiety, and stress)?                                | 3.082 | 1.299 |
|  | Using the Internet is not problem to me   | 3.583 | 1.181 |
|  | I have a limited access to connect my WIFI in my residence area   | 3.094 | 1.331 |
|  | Without technology and Internet, I cannot study effectively at my residence area                            | 3.764 | 1.222 |
|  | It is necessary to provide wireless Internet in their residence area  | 3.767 | 1.167 |
|  | I feel very bored if I don't have internet access in my house   | 3.550 | 1.224 |
| <b>Family Characteristics (Domain Harmony)</b> | We are always willing to pitch in and help each other   | 3.058 | 0.965 |
|  | Our family sticks together no matter how difficult things get   | 3.055 | 1.016 |
|  | We often discuss if there is a problem in the family  | 3.923 | 0.992 |
|  | We often spend time watching movies together  | 2.639 | 0.961 |
|  | We often show the harmony in the family with a smile  | 2.929 | 0.971 |

### Result of Reliability Analysis

The result of the reliability analysis is shown in Table 3.

Table 3: Result of Reliability Analysis

| Variable                               | Number of items | Cronbach's Alpha Value |
|--|-----------------|------------------------|
| <b>Depression</b>                      | 7               | 0.926                  |
| <b>Quality of Internet Connections</b> | 10              | 0.933                  |
| <b>Family Characteristics</b>          | 5               | 0.877                  |

Cronbach's Alpha is found to be very good when the value is 0.9 which is regarded as strong consistency and the respondents who tend to choose higher scores, according to Walker et al., (2016). Depression is the dependent variable with the excellent good of Cronbach's alpha score of 0.926, meanwhile, the quality of internet connection that also has an excellent reliability score, 0.933. The last independent variable is family characteristics (harmony) which comprises 5 questions and a Cronbach's Alpha of 0.877, indicated as good internal consistency.

### Result of Pearson Correlation Analysis

Table 4 shows the result of Pearson Correlation analysis. Based on Pearson Correlation Analysis, there was a significant relationship between quality of internet connections and depression ( $p=0.001$ ). The strength of the association between quality internet connections and depression was weak.

For the second independent variable, the family characteristics, findings of this study showed that there was a significant relationship between family characteristic (harmony) with depression among undergraduate students ( $p=0.001$ ).

Table 4: Result of Correlations Analysis

| Independent Variables           | Pearson Correlation | p-value | Confidence interval (Lower, upper) | Interpretation               |
|---------------------------------|---------------------|---------|------------------------------------|------------------------------|
| Quality of Internet Connection  | 0.488               | 0.001   | (0.403, 0.566)                     | Weak Positive Correlation    |
| Family Characteristic (Harmony) | -0.187              | 0.001   | (-0.309, -0.065)                   | Strong Negative Correlations |

### DISCUSSION AND RECOMMENDATION

This study is designed to determine the relationship between quality of internet connections and family characteristics with depression among undergraduate student in FHPK, University Malaysia Kelantan (UMK) post Covid-19 pandemic. The main finding of this study showed that there was a significant relationship between quality of internet connection with depression. The finding is corresponding to past research, whereby the level of depression among students in this study was significantly affected by the quality of internet connections that was used for online classes for educational study. Additionally, the level of depression was higher in students with a poor internet connection as compared to those with a good internet connection. Examples, depression was found in 64.94% in those with the poor of internet access and the poor of internet connection had obviously impacts on the mental health of students using online classes (Ghazi, 2020).

Following that, finding of this study also showed that there was significant association between family characteristics and depression among students. Our findings established convincing evidence that students are likewise experiencing interference of family conflicts that was negatively affect student life. Previous research revealed that having to stay at home with family members will contributed the different obstacles of characteristics family in every life. Findings suggest that more students are experiences higher in family conflict 39.2% than family harmony 50.4% because of non-conducive environment. In line with past research, family conflict inflicts more damage to the family aspect, rather than the vice versa. It will affect the academic of lifestyles for student using online learning, assignment, and others. Development of a good relationship with family members will show a good, harmony for our family and this will prevent depression among students (Wan Mohd Azam Wan Mohd Yunus S. K., 2021).

The recommendation of this research is to collect data effectively, distributes the questionnaire physically or face to face is acceptable. This is significantly easier because the researcher can persuade the respondents to spend their time to filling out the questionnaire. In other ways, we can keep the forms short to ensure their target of respondents can have enough time to answer

the survey if want to use the online google form. Next, time constrains can negatively impact our study for the research and it can be reduced by the acknowledge this impact by mentioning a need for future study such as develop the longitudinal study to answer this research problems. In addition, future research could benefit from large scale nationwide longitudinal studies which include all possible factors related to students of depression. Reduce the number of people who react for the desired demographic.

## CONCLUSION

In conclusion, the findings of this study show the significant factors of depression among undergraduate student were quality of internet connection and family characteristics. These two significant factors is important to be targeted in development of depression intervention program in future study.

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