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# **Research Article**

# Living with the Virus: Graduate School Students Evaluation of Stressors Related to the Pandemic

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#### **ABSTRACT**

The Coronavirus Disease (COVID-19) becomes a global threat in March of 2020. Several countries were on lockdown. It affects health and results in post-traumatic stress disorder (PTSD). During the quarantine and lockdown, the lack of freedom resulted to psychological consequences. In the Philippines, it was March 15, 2020 when the initial COVID-19 was instituted commonly recalled due to lockdown and canceled classes. Filipinos in general and students in particular were worried of their health information including vaccine availability, efficacy, and infection rates. Mental health is impaired by pandemic risks. UNICEF Philippines, then, advocated alternative and continuing learning. The major purpose of this research is to determine graduate students' levels of stress during the COVID-19 outbreak. The descriptive-correlational design was used for the quantitative investigation. The 150 responders are selected at random from Metro Manila master's degree students in the academic year 2022-2023. The adopted questionnaire consists of seven items that are multidimensional scales with psychometric qualities. Using chi-square, the findings revealed that, among demographic profiles, only age showed a significant relationship with the association of global stress. Thus, it can be stated that age is a crucial factor in assessing the global stress of graduate students. COVID-19 is more contagious in adults, reflecting their anxiety and stress during the epidemic.

Keywords: Covid-19, Global stress, Graduate students, Philippines

#### Introduction

The Coronavirus Disease 2019, mostly known as COVID-19, became a global danger and public health crisis that started last March 2020; the WHO described this as a Pandemic (World Health Organization, 2020). This urges many countries to implement a nationwide lockdown as a last resort to contain the transmission (Ren, 2020). However, COVID-19 triggers a person's physical and mental health, causing a lot of people to be more likely to develop post-traumatic stress disorder. (Qiu et al., 2020) Even though quarantine and lockdown are preventive measures during the widespread of COVID- 19, the deprivation of liberty often has a psychological effect on individuals; a recent study shows that more extended quarantine is associated with poorer psychological outcomes (Brooks et al., 2020).

The COVID-19 outbreak caused lockdowns to minimize the risk to all individuals. Due to lockdowns, a study shows that 37.3% of Malaysian students experience moderate to extremely severe symptoms of stress, anxiety, and depression; the study also provides that work and family may contribute to the result of this issue across different demographic factors (Yunus et al., 2021). Another study was conducted in India, where they used a two-time data collection to compare the stress level from 15 days of lockdown and after 21 days of lockdown. The investigators found out in the scenario that stress level increases as the time of lockdown prolongs where adults and parents worry about their financial resources while the students lose focus in their studies (Rai et al., 2020). As the pandemic continuously hinders physical activity, which also increases the potential of job closures, lay off, or reductions of employees, the graduate students are expected to have a higher level of mental stress and anxiety compared to the undergraduate students (Talapko et al., 2021).

The first community lockdown during the pandemic of COVID-19 in the Philippines was declared on March 15, 2020, with the suspension of classes at all levels. In the Philippines, the organization UNICEF Philippines encouraged the schools to plan for alternative and continuity of learning to adopt in the current situation (UNICEF Philippines). A study

showed that during the early phases of the COVID-19 pandemic in the Philippines, 70% of the respondents wanted additional health information about COVID-19, such as updates regarding the availability and effectiveness of the vaccine and the number of people infected. This information significantly contributed to the high anxiety score; in addition to this, the demographic profile regarding sex and age where female and younger age groups had a significantly higher score in stress, anxiety, and depression (Tee et al, 2020), Another supporting study shows that during the COVID-19 pandemic, academic performance and satisfaction were significantly affected by undergraduate nursing students; it is also stated that online learning during the outbreak of covid 19 was considered very stressful (Oducado et al., 2020). The perceived stress during the pandemic substantially affects college students' mental health, and the result of this stressor also varies on the year level of the students (Canillo et al., 2022).

This study aimed to identify graduate students' stress levels during the COVID-19 pandemic. Due to the limited studies related to this research, this study may contribute additional knowledge to the higher education institutions in the Philippines. This may also be able to help us be more equipped for the future in the midst of the pandemic.

## **Methods**

Research Design. The researchers employed the quantitative research approach. The justification for the use of the quantitative approach of research lies in the need to explore the level of stress of graduate school students during the pandemic and its association to their demographic profile that could not be easily measured through qualitative analysis. Quantitative research seeks to describe the current situation, establish a relationship between variables and sometimes explain the causal relationship between variables (Creswell, 2009).

Moreover, this study uses the descriptivecorrelational research design which facilitates description of the scenario, prediction and relationship among variables (Seeram, 2019). This study determines the association of graduate school students' demographic profiles to their stress levels during the pandemic.

Respondents of the Study. This study's respondents were Graduate School students, specifically those currently enrolled for their master's degree academic year 2022-2023 in different schools around Metro Manila using random sampling. The actual number of participants was 150 students.

Research Instrument Questionnaire. The instrument used for this study is adopted on the research paper of Maria Clelia Zurlo, Maria Francesca Cattaneo Della Volta and Federica Vallone entitled Covid-19 Student stress questionnaire: Development and Validation of a Questionnaire to Evaluate Students Stressor Related to the Coronavirus Pandemic Lockdown. The Questionnaire is a 7-item multidimensional scale with psychometric properties

(Zurlo, 2020). Since it is available on the internet, the researchers used it for their research and ensured that it was adequately cited and included in the references.

Ethical Consideration. This study ensures compliance with the Data Privacy Act of 2012 by adhering to the ethical standards established by general research ethics. Consequently, respondents were informed of each stage of the research procedure. After the completion of the study the data collection instruments were stored and then destroyed.

#### **Results and Discussion**

This section presents the analysis and interpretation of data obtained through the questionnaire-checklist pertinent to the specific problems of the study. The findings were presented in tabular form, and textual discussion.

Table 1. Frequency and Percentage Distribution of the Graduate School Students' Profile in terms of Sex

Corr	Graduate sch	nool students
Sex	Frequency	Percentage
Male	56	36.84%
Female	96	63.16%
Total	152	100.00%

Table 1 shows graduate school students' frequency distribution in terms of sex. Majority of respondents were female at 63.16 percent,

as opposed to their male counterparts who made up 36.84 percent.

Table 2. Frequency and Percentage Distribution of the Graduate School Students' Profile in terms of Age

Age	Graduate school students			
	Frequency	Percentage		
20-25	34	22%		
26-30	60	39%		
31-35	28	18%		
36-40	14	9%		
41-45	10	7%		
46 and above	6	4%		
Total	152	100%		

The frequency and percentage distribution of graduate students by age is shown in Table 2. 39% of the students are between the ages of 26 and 30, followed by 22% of those between

the ages of 20 and 25, 18% of those between 31 and 35, 9% of those between 41 and 45, and 4% of those aged 46 and above.

Table 3. Frequency and Percentage Distribution of the Graduate School Students' Profile in terms of Employment type

Employment type	Graduate school students		
	Frequency	Percentage	
Public / Government Agency	78	51%	
Private Company / Organization	61	40%	
Self - Employed	13	9%	
Total	152	100%	

Table 3 displays the frequency and percentage distribution of academic employment types. As shown, the majority of respondents are from public/government agencies, with 78

(51%) followed by those from private companies/organizations, with 81 (40%) and a minority who are self-employed, with 13 (9%).

Table 4. Level of the graduate students' global stress in terms of Relationship and Academic Life

Statement	Mean	Verbal Interpretation
1. How do you perceive the relationship with your uni-	1.76	Somewhat Stressful
versity colleagues during this period of COVID-19 pandemic?		
2. How do you perceive the relationship with your university professors during this period of the COVID-19 pandemic?	1.76	Somewhat Stressful
3. How do you perceive your academic studying experience during this period of COVID-19 pandemic?	2.22	Somewhat Stressful
4. How do you perceive the relationship with your relatives during this period of COVID-19 pandemic?	2.02	Somewhat Stressful
<b>General assessment</b>	1.94	Somewhat Stressful

Legend: Not at all stressful 1.00-1.75; Somewhat Stressful 1.76-2.50; Very Stressful 2.51-3.25; Extremely Stressful 3.26-4.00

Table 4 reflects the graduate students' assessment of their relationship and academic life. The majority of respondents replied to the questions: "1. How do you perceive the relationship with your university colleagues during the COVID-19 pandemic?; 2. How do you perceive the relationship with your university pro-

fessors during this period of the COVID-19 pandemic?; 3. How do you perceive your academic studying experience during this period of the COVID-19 pandemic? And 4. How do you perceive the relationship with your relatives during this period of the COVID-19 pandemic? " as somewhat stressful (M=1.94).

Table 5. Level of the graduate students' global stress in terms of Isolation

Statement	Mean	<b>Verbal Interpretation</b>
5. How do you perceive the changes in your sexual life due		
to the social isolation during this period of COVID-19		Not at all Stressful
pandemic?		
6. How do you perceive the condition of social isolation im-	2.37	Somewhat Stressful
posed during this period of COVID-19 pandemic?	2.57	
General assessment	2.04	Somewhat Stressful

Legend: Not at all stressful 1.00-1.75; Somewhat Stressful 1.76-2.50; Very Stressful 2.51-3.25; Extremely Stressful 3.26-4.00

Table 5 illustrates the graduate school students' stress assessment in terms of isolation. Most of the respondents answered not at all stressful on the question: "How do you perceive the changes in your sexual life due to social isolation during this period of the COVID-19

pandemic? While most of the respondents answered the question: "How do you perceive the condition of social isolation imposed during this period of the COVID-19 pandemic?" as somewhat stressful.

Table 6. Level of the graduate students' global stress in terms of Contagion

Statement	Mean	Verbal Interpretation
7. How do you perceive the risk of contagion during	2.74	Very Stressful
this period of COVID-19 pandemic?		
<b>General assessment</b>	2.74	Very Stressful

Legend: Not at all stressful 1.00-1.77; Somewhat Stressful 1.76-2.50; Very Stressful 2.51-3.25; Extremely Stressful 3.26-4.00

Table 6 depicts the graduate school students' stress assessment in terms of contagion. Majority of the graduate students responded to

the question. "How do you perceive the contagion danger during the current COVID-19 pandemic?" as very stressful.

Table 7. Level of the graduate student's global stress

Statement	Mean	Verbal Interpretation
Level of the graduate students' global stress in terms of Relationship and Academic Life	1.94	Somewhat Stressful
Level of the graduate students global stress in terms of Isolation	2.04	Somewhat Stressful
Level of the graduate students global stress in terms of Contagion	2.74	Very Stressful
General Assessment	2.08	Somewhat Stressful

Legend: Not at all stressful 1.00-1.77; Somewhat Stressful 1.76-2.50; Very Stressful 2.51-3.25; Extremely Stressful 3.26-4.00

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Table 7 presents the graduate school students' stress assessment in terms of global stress. Respondents rated global stress in terms of contagion to be very stressful.

This study's results were similar to what (Yunus et al., 2021) found: most students scored normal to mild for stress, anxiety, and depression regarding work-family and academic conflicts like online learning, assignments, and other related activities. According to a study that was carried out in the Philippines, the greatest obstacle that students had was connected to the learning environment that they had at home. At the same time, the challenge that they faced the least was related to their technology literacy and ability. The findings also demonstrated that the COVID-19 pandemic had the most significant effect on the overall quality of the educational experience as

well as the mental health of the students (Barrot et al., 2021).

The second component evaluates how much stress was caused by Isolation during COVID-19 which recorded a mean of 2.04, indicating that it is somewhat stressful. In a manner that is comparable to the findings of prior studies on how students perceive the stress level they are experiencing during a pandemic, students reported positive academic outcomes in general. However, students reported higher tension and anxiety as well as difficulties concentrating, which suggests that the impediments to fully online learning included technological and instructional challenges and the social and affective challenges of isolation and social distancing (Lemay et al., 2021). According to the findings of a study that was carried out in the Philippines, online learning stress had a

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significant and inverse correlation with online learning satisfaction. Stress has a negative impact on both the level of satisfaction and academic performance that undergraduate nursing students experience (Oducado et al., 2020).

The third section measures the stress level of graduate school students in terms of contagion. This is one question to assess the experienced stress of respondents during covid 19, and the general assessment is 2.74, indicating that it is very stressful. According to the previous study, having a family member diagnosed with COVID-19 and a family member diagnosed with COVID-19 are factors affecting the level of anxiety (Sahin et al., 2022). This is one of the proofs why contagion is stressful to the majority since the Covid 19 also cause a vast case of death. According to research conducted in the Philippines, 70% want further COVID-19 health information. Those who wanted additional information, details on symptoms, advice on prevention and treatment, regular updates for the latest information and for outbreaks in their local area, advice for people who may need more tailored information, information on the availability and efficacy of medicine/vaccine for COVID-19, and updates on the route of transmission had significantly higher anxiety scores (Tee et al, 2020).

For overall assessment of the level of stress of graduate school students in terms of Global stress combining the 3 stressor values in terms of relationship and academic life, isolation and contagion. The general assessment is 2.08, which indicates that it is somewhat stressful. The result of this study shows that respondents stress the changes brought by the pandemic, which supports the study in which a major short- and long-term complication of COVID-19 infection, depression, has been identified for its significant impact on work productivity and disability. Quarantine has far-reaching, substantial, and perhaps long-lasting psychological repercussions (Bucciarelli et al., 2022). In the Philippines, students are already stressed due to the COVID-19 pandemic. The pandemic and the switch to online learning have already impacted the pupils' emotional health. It would therefore be beneficial for the pupils to feel that they are not wholly alone in this circumstance. The students may benefit if the teachers show more significant consideration for their wellbeing and mental health specialists regularly monitor them and take appropriate action when necessary (Canillo et al., 2022).

Table 8 Association between profile of graduate school students and level of stress in global stress

Parameter	d.f.	Chi square table value	Chi-square calculated value	P value	inference
Age	15	24.996	41.568	0.000	Significant
Sex	3	7.815	3.587	0.310	Non-significant
Type of organi-zation	6	12.592	6.561411563	6.561	Non-significant

Table 8 demonstrates the relationship between the demographic profiles of graduate students in their level of global stress. Using chi-square among demographic profiles tested, only age yielded a significant relationship with the association of global stress.

There is a significant association between the age of the respondents and their levels of global stress; however, the sex of the respondents and the type of organization for which they work did not show any significant correlation with their levels of global stress. According to a previous study that supports the findings of this study, there is also a significant relationship between age and stress scores among young people. This is because young people tend to obtain a large amount of information from social media, which can easily cause stress (Qiu et al., 2020). This study runs true to a prior one that found that sex had a substantial relationship with how much stress people perceive. In that study, the researcher found that women reported much higher stress, anxiety, and depression levels than men (Talapko et al., 2021). A higher score of work-to-family conflict contributes to greater odds of having severe levels of anxiety. In terms of the employment organizations and status of the

respondents, this finding runs counter to the results of the earlier study, which demonstrated that work-family conflict and familywork conflict both contribute to stress levels, which in turn are positively connected with greater degrees of negative emotional symptoms (Yunus et al., 2021). Graduate students have experienced a mental and emotional toll ranging from moderate to severe because of the COVID-19 epidemic, which has far-reaching implications on the psychological and mental well-being of graduate students. These findings are unsettling and fail to consider the adverse psychological impact. Students' emotional discomfort due to the COVID-19 pandemic might lead to undesirable outcomes (Oducado et al., 2020).

#### **Conclusion and Recommendation**

Based on the results of the assessment of the graduate students regarding the level of stress during the pandemic indicates that it was somewhat stressful in terms of relationship-academic life and isolation. Moreover, the level of stress that the respondents indicated in terms of contagion stated that it was very stressful. It can then be safely concluded that age has a significant relationship in the assessment of their global stress.

Overall, the study suggests the following interventions based on its findings: The public health care system and the availability of medical resources should be enhanced globally. Communities need a system of national strategic planning and coordination to provide psychological first aid in times of crisis. Epidemiological surveillance, comprehensive crisis preventive and intervention mechanisms must be established. The results also indicate that therapies be developed to aid graduate students in handling the academic pressures and responsibilities they experience during the pandemic. While online education may help reduce the spread of the COVID-19 virus, efforts should be made to improve current teaching methods to match today's students' needs. After all, precautions have been taken, and in-person teaching can resume in stages.

Given the limitations of this study, future researchers conducting similar research should carefully consider the number of male

and female participants to avoid significant differences that could lead to bias. For more generalized data, a larger sample size is also recommended. Finally, qualitative research may be conducted to describe the sentiments and experiences of the participants.

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