

The Use of Qualitative Cases Studies of Graduate School Students: A Quantitative Analysis of their Depression Scale

Meshel B. Balijon, Cherie Guy B. Giray, Rose Anna L. Refuerzo, Sonia T. Enrile,
Gabino P. Petilos

^a *meshel.balijon@evsu.edu.ph*

Eastern Visayas State University, Main Campus, Tacloban City 6500, Philippines

Abstract

This study analyzed the depression scale of graduate school students of a certain State University in Region VIII, Philippines. It aimed to know the socio-demographic profile of the respondents in terms of age, gender, civil status, religion, program major and program level in correlation to their scale of depression. There were one hundred thirty-seven (137) graduate school students who participated as the respondents. The Depression Anxiety Stress Scales (DASS), a standardized tool by the Psychology Foundation of Australia was administered as an instrument. A simple random sampling, descriptive statistics and case notes from the Guidance Office were obtained and to ensure the validity of responses the researchers used a direct administration approach of the said standardized tool. The results generally show that the younger the age, the higher is the scale of depression. The result also implied an extreme scale of depression for females than males. As to civil status, the result represented a high leaning of depression for those single respondents whereas for religion, non-roman Catholics have a higher tendency to be depressed than Roman Catholics. As regards to program majors, the results showed that the master of arts in education (MAEd) program students tend to be vulnerable to experiencing depression among other programs. Lastly, with regard to program level, respondents taking up master's programs tend to have a higher scale of depression than students taking up doctorate programs.

Keywords: qualitative case studies; graduate school students; quantitative analysis; depression; depression scale

1. Introduction

Depression is more prevalent in graduate school students than in the general population by a factor of more than six, nonetheless, few research has particularly looked at how depression is affected by graduate school students (Gin et al., 2021). This has been the common scenario in school setting because we would expect that graduate school students are emotionally mature to handle any emotional challenges that they may encounter considering their age of maturity and exposure on the different aspects of their lives be it personal, social, marital status, spiritual, academic and career or employment respectively. Aside from the fact that they have hurdled a lot of challenges when it comes to academics because they have reached to a point of enrolling or pursuing graduate school studies. Yet, there is still a dearth of studies on the subject, and those that do exist typically do not compare graduate students to the working population as a whole or involve biological or

mental evaluation (Gallea, Medrano & Morera, 2021). Any age can be affected by depression, and the way it manifests itself might change depending on the stage of life (Hwang et al., 2023). Depression in young people can be exacerbated by peer pressure, scholastic stress, and the emergence of independence. In addition, issues with relationships, job decisions, and identity formation may confront young adults (Wiltshire, 2023). When people reach middle age, they may suffer from depression as a result of life upheavals including changing careers, the empty nest syndrome (when kids move out), and health issues. The strain of juggling job, family, and personal obligations can exacerbate depression symptoms and lead to stress (Beddoe et al., 2023). With regard to gender, there are numerous studies that affirm the connection of gender to the level or scale of depression among graduate school students. The prevalence of anxiety and depression in transgender or gender-nonconforming graduate students was 55 percent and 57 percent, respectively (Shelp-Peck, 2023). This is consistent with other research on nonstudent populations, which found that transgender and gender-nonconforming graduate students, along with women, were significantly more likely to experience these conditions than their cisgender male counterparts (Evans et al., 2018).

The purpose of the study was to assess graduate school students' depression on a scale. The particular goals were the respondents' sociodemographic characteristics in terms of their age, gender, civil status, religion, program major and program level in relation to their depression scale.

2. Research Methodology

All ethical guidelines were followed when conducting this study. Each respondent filled out a web form requesting informed consent, confirming that participating in the study will not compromise their ethics or safety or that of the researchers and this research was supported solely by the ethical necessity of anonymity of the data gathered. The use of qualitative case studies of graduate school students and quantitative analysis of their depression scale were used in this study employing the non-experimental research design and the research studies were descriptive and correlational within the sociodemographic characteristics of the respondents. The Depression Anxiety Stress Scales (DASS), a standardized instrument administered as a tool in the conduct of the study by the Psychology Foundation of Australia, was employed by the researchers. The DASS should only be interpreted by persons with sufficient training in psychological science, including emotion, psychopathology, and assessment (Ahmed et al., 2022). Two of the researchers have sufficient training in assessment. The DASS can be administered in a group setting or one-on-one for research purposes. Online administration of this tool is possible. The DASS was created to increase the understanding, assessment, and description of the normal and clinically relevant emotional states that are commonly referred to as depression, anxiety, and stress (Chen & Bonanno, 2021). To administer the self-report instrument to 137 graduate school students of a State University of Region VIII in the Philippines, the researchers decided to use online platforms. Similarly, information was acquired from the 137 respondents in 2021 using online platforms (Google Meet, Zoom Meeting, and WebEx) based on their preferred platform. Their age, gender, marital status, civil status, religion, program major and program level were among the details provided. Then, utilizing online platforms, the Depression Anxiety Stress Scales (DASS) instrument was administered to them. Accordingly, to make the numerical data easier to understand, the data were also categorized, summarized and organized in a table. Each responder's response frequency was counted. In-depth analysis was done on profile data from the databases. The databases were searched for frequency counts of the available quantitative data, percentages were computed when needed, and tables were made in order to provide an overall evaluation of the results through the summarization of the quantitative data.

3. Results and Discussion

Table 1 depicted the age of the respondents. It showed that majority of the graduate school respondents belonged on the age range of 22-34 years old while the ages 20-21 and 45-64 years old respectively assimilated the lowest number of respondents. It explained that there were higher number of respondents who manifested an extremely severe scale or level of depression from the age bracket of 20-21 years old. Yet, there were no respondents who suffered extremely severe level of depression from the age brackets of 35-44 and 45-64 years old correspondingly. In addition, one of the study's key findings was that the younger the age the more extreme the scale of depression. Age-related variations in symptom frequency of depression have been found (Twivy, Kirkham & Cooper, 2023).

Table 1. Correlation of Age and Depression

Depression		Age_Categories				Total
		20-21	22-34	35-44	45-64	
Normal	Observed	3	51	28	11	93
	% within column	25.0 %	63.0 %	87.5 %	91.7 %	67.9 %
Mild	Observed	0	14	1	1	16
	% within column	0.0 %	17.3 %	3.1 %	8.3 %	11.7 %
Moderate	Observed	3	13	3	0	19
	% within column	25.0 %	16.0 %	9.4 %	0.0 %	13.9 %
Severe	Observed	4	1	0	0	5
	% within column	33.3 %	1.2 %	0.0 %	0.0 %	3.6 %
Extremely Severe	Observed	2	2	0	0	4
	% within column	16.7 %	2.5 %	0.0 %	0.0 %	2.9 %
Total	Observed	12	81	32	12	137
	% within column	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Table 2 below showed the profile of the respondents in accordance with their choice of gender. Meanwhile, there was a higher number of women respondents than men respondents. It displays that there were 4.0% from the women respondents who experienced extremely severe depression scale while none from the men respondents. The findings also suggested that women were more likely than men to have experienced normal-scale depression. Although depression can afflict people of any gender, there are significant patterns and distinctions in the occurrence, manifestation, and management of depression that are specific to gender (Copeland, 2023).

Table 2. Correlation of Gender and Depression

Depression		Gender		
		Women	Men	Total
Normal	Observed	68	22	90
	% within column	68.7 %	62.9 %	67.2 %
Mild	Observed	12	4	16
	% within column	12.1 %	11.4 %	11.9 %
Moderate	Observed	13	6	19
	% within column	13.1 %	17.1 %	14.2 %
Severe	Observed	2	3	5
	% within column	2.0 %	8.6 %	3.7 %
Extremely Severe	Observed	4	0	4
	% within column	4.0 %	0.0 %	3.0 %
Total	Observed	99	35	134
	% within column	100.0 %	100.0 %	100.0 %

Table 3 presented that for those respondents who were single, the results showed a high leaning toward depression. Only 4.9% of respondents who were single reported having an extremely severe depressive feeling, whereas no respondents who were married or widowed/separated reported experiencing the same. Being single or married is simply one of many potential factors that might impact depression, which is a complicated mental health condition. Depression may affect both single and married people, and there is a complex link between marital status and mental health (Abbas et al., 2023).

Table 3. Correlation of Civil Status/Marital Status and Depression

Depression		Civil_Status			Total
		Single	Married	Widowed/Separated	
Normal	Observed	48	38	7	93
	% within column	59.3 %	80.9 %	77.8 %	67.9 %
Mild	Observed	11	4	1	16
	% within column	13.6 %	8.5 %	11.1 %	11.7 %
Moderate	Observed	13	5	1	19
	% within column	16.0 %	10.6 %	11.1 %	13.9 %
Severe	Observed	5	0	0	5
	% within column	6.2 %	0.0 %	0.0 %	3.6 %
Extremely Severe	Observed	4	0	0	4
	% within column	4.9 %	0.0 %	0.0 %	2.9 %

Depression		Civil_Status			Total
		Single	Married	Widowed/Separated	
Total	Observed	81	47	9	137
	% within column	100.0 %	100.0 %	100.0 %	100.0 %

Table 4 indicated that the mainstream of the respondents was Roman Catholics. As to religion, Non-Roman Catholics tend to have an extremely severe scale of depression than Roman Catholics. The intricate and very variable link between depression and religion varies greatly between people. Social support is essential for mental health, and being a part of a religious community may offer a network of support by creating a sense of connection and belonging (Gan et al., 2023).

Table 4. Correlation of Religion and Depression

Depression		Religion		Total
		Non-Roman Catholic	Roman Catholic	
Normal	Observed	12	81	93
	% within column	66.7 %	68.1 %	67.9 %
Mild	Observed	1	15	16
	% within column	5.6 %	12.6 %	11.7 %
Moderate	Observed	4	15	19
	% within column	22.2 %	12.6 %	13.9 %
Severe	Observed	0	5	5
	% within column	0.0 %	4.2 %	3.6 %
Extremely Severe	Observed	1	3	4
	% within column	5.6 %	2.5 %	2.9 %
Total	Observed	18	119	137
	% within column	100.0 %	100.0 %	100.0 %

Based on table 5 below, as regards to program major, it resulted that the Master of Arts in Education (MAEd) program respondents tend to be vulnerable of experiencing extreme scale of depression among other programs. Mental health may be impacted by program major study requirements in addition to other life circumstances. Similar to anybody pursuing any kind of education, master's degree candidates may encounter a range of circumstances that might exacerbate symptoms of depression (Smith et al., 2023).

Table 5. Correlation of Program Major and Depression

Depression		Program Major					Total	
		DMT	PhD	ME	MPRM	MRD		MAEd
Normal	Observed	8	2	14	33	4	32	93
	% within column	72.7 %	50.0 %	77.8 %	70.2 %	66.7 %	62.7 %	67.9 %
Mild	Observed	2	0	1	9	2	2	16
	% within column	18.2 %	0.0 %	5.6 %	19.1 %	33.3 %	3.9 %	11.7 %
Moderate	Observed	1	2	2	5	0	9	19
	% within column	9.1 %	50.0 %	11.1 %	10.6 %	0.0 %	17.6 %	13.9 %
Severe	Observed	0	0	1	0	0	4	5
	% within column	0.0 %	0.0 %	5.6 %	0.0 %	0.0 %	7.8 %	3.6 %
Extremely Severe	Observed	0	0	0	0	0	4	4
	% within column	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	7.8 %	2.9 %
Total	Observed	11	4	18	47	6	51	137
	% within column	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

As depicted in table 6 below, with regard to program level, respondents taking up master’s programs tend to experience severe and extremely severe scale of depression. Perhaps as a result of their lack of adjustment to the rigors and difficulties of graduate school coursework. Uncertainties regarding their future professions, employment opportunities, and the return on their educational investment may cause stress for master's students (Griffin, K. A., Miller, C., & Roksa, J., 2023).

Table 6. Correlation of Program Level and Depression

Depression		Program_Level		Total
		Master's	Doctorate	
Normal	Observed	83	10	93
	% within column	68.0 %	66.7 %	67.9 %
Mild	Observed	14	2	16
	% within column	11.5 %	13.3 %	11.7 %
Moderate	Observed	16	3	19
	% within column	13.1 %	20.0 %	13.9 %
Severe	Observed	5	0	5
	% within column	4.1 %	0.0 %	3.6 %
Extremely Severe	Observed	4	0	4
	% within column	3.3 %	0.0 %	2.9 %
Total	Observed	122	15	137

Depression	Program_Level		
	Master's	Doctorate	Total
% within column	100.0 %	100.0 %	100.0 %

4. Conclusion

Graduate school students experienced the same levels of stress, less involvement at work, and higher levels of anxiety and depressive symptoms than ordinary workers (Gallea, Medrano & Morera, 2021). This has been the prevailing dilemma of graduate school students more so as regards to depressive manifestations that they have been experiencing in relation to the socio-demographic characteristics that they hurdled and occupied. Understanding that depression is a complicated mental illness impacted by a range of factors—including biological, psychological, and environmental ones—is crucial. Furthermore, no two people in a given age group will experience sadness in the same manner, and individual experiences of depression might differ greatly from one another. The younger the graduate school students the more extremely severe their level or scale of depression. Getting expert assistance is essential for an accurate diagnosis and suitable therapy, regardless of age. As to gender, it's critical to understand that these patterns are generalizations and that different people may have unique experiences that deviate from these patterns.

According to a new Harvard study, graduate school students are over three times more likely to have mental health issues and depression than the ordinary individual (Chonody, 2022). Therefore, this study wanted to support the quest for data as to the depression scale of graduate school students. So as to at least give the school administration ample knowledge with regard to the mental health of these graduate school students and they will be afforded with a reliable contribution for their mental wellness, it is imperative that graduate school students give their mental health first priority and get help when they need it (Punjabi, 2023). Counseling services are frequently offered by universities. Other strategies to enhance general wellbeing throughout graduate school studies include setting reasonable goals, seeking out social support, and striking a balance between personal and academic life. Seeking advice and assistance from mental health specialists is crucial if depressive symptoms are severe.

References

- Abbas, J., Aqeel, M., Ling, J., Ziapour, A., Raza, M. A., & Rehna, T. (2023). Exploring the relationship between intimate partner abuses, resilience, psychological, and physical health problems in Pakistani married couples: a perspective from the collectivistic culture. *Sexual and Relationship Therapy*, 38(3), 431-460.
- Ahmed, O., Faisal, R. A., Alim, S. M. A. H. M., Sharker, T., & Hiramoni, F. A. (2022). The psychometric properties of the Depression Anxiety Stress Scale-21 (DASS-21) Bangla version. *Acta Psychologica*, 223, 103509.
- Beddoe, L., Baker, M., Cox, K., & Ballantyne, N. (2023). Mental health struggles of social work students: Distress, stigma, and perseverance. *Qualitative Social Work*, 14733250231212413.
- Chen, S., & Bonanno, G. A. (2021). Components of emotion regulation flexibility: Linking latent profiles to depressive and anxious symptoms. *Clinical Psychological Science*, 9(2), 236-251.
- Chonody, J. M. (2022). 'I'm going to need a lot of therapy for this someday:' Finding your 'grit' in graduate school during COVID. *Social Work Education*, 41(6), 1313-1335.
- Copeland, M. (2023). Embedded Distress: Social Integration, Gender, and Adolescent Depression. *Social Forces*, 101(3), 1396-1421.
- Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature biotechnology*, 36(3), 282-284.
- Gan, S. K. E., Wong, S. W. Y., & Jiao, P. D. (2023). Religiosity, theism, perceived social support, resilience, and well-being of university undergraduate students in Singapore during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 20(4), 3620.

- Gallea, J. I., Medrano, L. A., & Morera, L. P. (2021). Work-related mental health issues in graduate student population. *Frontiers in neuroscience*, 15, 593562.
- Gin, L. E., Wiesenthal, N. J., Ferreira, I., & Cooper, K. M. (2021). PhDepression: Examining how graduate research and teaching affect depression in life sciences PhD students. *CBE—Life Sciences Education*, 20(3), ar41.
- Goodwin, R. D. (2002). Anxiety disorders and the onset of depression among adults in the community. *Psychological Medicine*, 32(6), 1121-1124.
- Griffin, K. A., Miller, C., & Roksa, J. (2023). Agency and career indecision among biological science graduate students. *Studies in Graduate and Postdoctoral Education*, 14(1), 99-113.
- Hwang, S., Kang, S. W., Kim, S. J., Han, K., Kim, B. S., Jung, W., ... & Shin, D. W. (2023). Impact of Age-Related Macular Degeneration and Related Visual Disability on the Risk of Depression: A Nationwide Cohort Study. *Ophthalmology*, 130(6), 615-623.
- Punjabi, A. (2023). University academic staff members as gatekeepers of mental health for graduate students (Doctoral dissertation, Memorial University of Newfoundland).
- Shelp-Peck, E. F. C. (2023). It is So Much More than Therapy: Mental Health and Mental Healthcare Utilization Among Transgender and Gender Non-Conforming University-Enrolled Students in the United States (Doctoral dissertation, Vanderbilt University).
- Smith, C. A., Barr, K., Alhassani, G., Taylor, E., & Conti, J. (2023). Experiences and challenges related to wellbeing faced by Australian higher degree research candidates prior to and during the COVID-19 pandemic. *Higher Education Research & Development*, 1-16.
- Twivy, E., Kirkham, M., & Cooper, M. (2023). The lived experience of adolescent depression: A systematic review and meta-aggregation. *Clinical Psychology & Psychotherapy*.
- Wiltshire, C. A. (2023). Early childhood education teacher workforce: Stress in relation to identity and choices. *Early Childhood Education Journal*, 1-14.