

A Comparative Analysis of Self-reported Psychological Wellbeing of Undergraduate Nursing and Non-Nursing Students in Jamaica

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Abstract

Introduction: Psychological well-being refers to the inter-and intra-individual levels of positive functioning that can include one's relatedness with others and self-referent attitudes that include one's sense of mastery and personal growth. It reflects dimensions that affect judgments of life satisfaction and contentment. The Covid-19 pandemic has changed the lives of humans, and included in this shift in health is one's psychological well-being. A review of the literature revealed no current study on the psychological well-being of undergraduate students in Jamaica.

Objective: This study seeks to 1) compare the psychological well-being of nursing and non-nursing students and 2) identify how the school has affected them psychologically.

Methods and Materials: A correlational research design was used for this research using a sample of 500 respondents who attend a tertiary educational institution in Jamaica between November 2 and December 18, 2020. A standardized questionnaire adapted from the Rand Cooperation SF 36 wellness index was used to gather data.

Results: Of the sampled respondents (n=500), 67% indicated at least good psychological well-being, with most of them having good health status (31.2%, n=156). 40.4% of the respondents indicated having at least a better psychological well-being than last year, with most of them responding that they have a somewhat better psychological well-being (24.2%, n= 121). Seventy-seven percent (77%, n=173) of the nursing students indicated that they have a good psychological well-being compared to 58.95% (n = 162) of non-nursing students ($\chi^2(4)=18.682$, P = 0.001).

Conclusion: The finding provides some insights into the resilience of nursing students and supports future research on the cognitive domain of these students.

Keywords: Non-Nursing Student, Nursing Student, Psychological Well-Being, Undergraduate, Well-Being, Jamaica.

Introduction

The main objective of the education system is to produce skilled and knowledgeable individuals who are equipped with the requisite skills and knowledge needed to advance their future careers. This is even more vital in the Nursing industry as student nurses are gifted with the grave task of supporting individuals who might lack the necessary strength or knowledge to bring about optimal health or recovery. Nursing students are faced with the critical challenge of administering nursing safely and effectively, even as they are operating in unsure, ever-changing health care and complex nursing environment. The education system in and of itself is a highly stressful one, and as such, to effectively prepare nursing students, there has been an intense focus, traditionally, on achieving statutory competencies by emphasizing theoretical content and skills acquisition (Freshwater & Stickley, 2004). These stressors will be discussed interchangeably with E Diener, RE Lucas & S Oishi's scientific research of subjective well-being and Richard Lazarus' theory of stress and coping.

Lazarus' Theory of Stress and Coping established a comprehensive theory where stress is explained as a dynamic process and is experienced when a person perceives that the demands exceed the personal and social resources the individual can mobilize. The model highlights that stress refers to a relationship between an individual and his/her perception of their environment. (Lazarus & Folkman, 1986). Diener established that psychological well-being improves outcomes in life such as creativity, work, school, social life, and health. It was also stated that happiness is a consequence of psychological well-being; this facilitates desirable behaviours and outcomes (Lopez & Snyder, 2011). All this coupled with the harsh reality is the benchmark on which this research is based; therefore, this study intends to test if nursing students will experience more of a psychological decline than non-nursing students.

Theoretical Framework

Subjective well-being has been defined as a person's cognitive and affective evaluations of his/her life. (Diener, Lucas & Oishi, 2002). Diener, Lucas, and Oishi further defined subjective well-being as a personal perception and experience of positive and negative emotional responses and global and domain-specific cognitive evaluations of satisfaction with life. (Diener, Lucas & Oishi, 2002). (Centre for Addiction and Mental Health, 2020) Lazarus' Theory of Stress and Coping presents stress as a product of a transaction between a person (including cognitive, physiological, affective, psychological, and neurological) and his/her environment. (Lazarus & Folkman, 1984). The framework of this study is aimed to investigate if nursing students experience more of a psychological decline in well-being than non-nursing students. Lazarus'

framework is most relevant to the aims of this study given the emphasis it places on the appraisal of the environment (school) by the persons (nursing & non – nursing students) who view this environment as significant to their psychological well-being and in which the demands of this environment tax available coping resources. (Lazarus & Folkman, 1986).

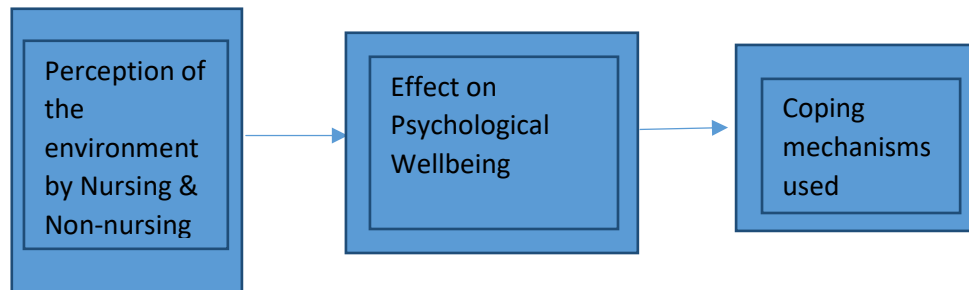


Figure 1. Theoretical Framework Model

Literature Review

Many subjective well-being studies have been conducted to appraise satisfaction and happiness among persons working in healthcare. Ed Diener has written and spearheaded multiple research pieces on well-being, happiness, and subjectivity. It was outlined that well-being indicates optimal psychological functioning. Studies by Diener have sought to answer the phenomenon between effect and subjective well-being. Subjective well-being is a field of psychology that attempts to understand people's evaluation of their lives. These evaluations may be primarily cognitive or correlate with the frequency with which people experience pleasant or unpleasant emotions. (Diener, Suh & Oishi, 1997).

Richard Lazarus developed the *Theory of Stress and Coping*, where he argued that the experience of stress differs among individuals depending on their interpretation and perception of a situation that ultimately influences how the situation is perceived a stressful. (Lazarus & Folkman, 1984). Individuals experiencing stress will be affected by their socio-demographic and clinical background (Shahrour, 2020). It involves the process of assessing whether a situation threatens our well-being or whether there are sufficient personal resources for coping with such situations. (Lazarus & Folkman, 1986).

According to Chow, Tang, et al., college students studying nursing experience a higher level of academic stress than those of other disciplines, as they have to adjust to various clinical settings for hands-on training and to apply theoretical knowledge to practice to bridge the theory-practice gap (Thomas & Revell, 2016). These stressors may cause an increase in stress and psychological morbidities, such as excessive anxiety, worry, and depression, causing a decline in psychological well-being. (Chow et al., 2018) Well-being is a broad concept that is subjective and consists of three main concepts: life satisfaction, pleasant affect, and unpleasant affect. Resilience and positive coping strategies can resist stress and improve personal well-being. (Gibbons, Dempster & Moutray, 2011)

The psychological well-being of nursing students versus their non-nursing counterparts has been compared in other studies. Ratanasiripong & Wang investigated the psychological well-being of Thai nursing students in an article published in August 2010. The study found that nursing students seemed to demonstrate greater psychological well-being than non-nursing students, although a significant percentage of the nursing cohort reported critical depressive scores. (Ratanasiripong & Wang, 2011). Xuhua He et al. (2018) published an assessment on stress, protective factors, and psychological well-being among undergraduate nursing students in Australia; the cross-sectional study on the nursing cohort produced 657 responses, 538 utilized for data analysis. Results analysis shows that lower psychological well-being is perhaps due to nurses' difficulty juggling various responsibilities between academia, work, and family (He, Turnbull, Kirshbaum, Phillips, & Klainin-Yobas, 2018). Continuously balancing multiple aspects of life eventually results in a deterioration in well-being, especially in timeframes where there is a tedious academic work burden. Severe workloads are felt by non-nursing students but are similar to the intensity experienced by nursing students. Even Though the study represented only a specific period, it emphasized the need for curriculum modification to promote positive coping strategies and better prepare new graduates to globally engage with complex and demanding work environments.

In support, a study conducted by Timmins & Kaliszer, 2002; explores causes of stress to nursing students. The results drawn from the analysis of 110 3rd year nursing students indicated that distress exists for students in both the clinical and academic aspects of the program. Socioeconomic constraints and academic-related pressure emerged as the most stressful areas for the students. Consequently, advisors recommended that prospective nursing students take cognizance of the stress that current nursing students face and utilize counselling services. (Timmins & Kaliszer, 2002)

Methodology

This study is a part of a survey determining whether a decline in psychological well-being is more prevalent among college students, emphasizing nursing or non-nursing-related curriculum. The research design was framed from an objectivistic epistemology through a correlational research design (Babbie, 2010; Neuman, 2014). Crotty's work was reviewed as a guide within this paper (2005) as well as that of Rea and Parker (1996). The research process commenced from the general epistemology, theoretical framework, methodology, and method. For this study, an objectivist epistemology was employed, followed by a positivist theoretical framework, survey research methodology (Crotty, 2005), and standardized instrument of questionnaires was used for the method (Rea and Parker, 2014). For this research, the correlational design approach was taken to measure relationships between two variables without controlling either of them.

A quantitative cross-sectional study was conducted to generate knowledge on University students: nursing students and non-nursing students and their psychological well-being throughout their study. The timeframe for the present study was from November 06, 2020, through to December 18, 2020. A questionnaire of 25 closed-ended questions was formulated, the questions on the survey instrument used were adapted and modified from the Rand

Cooperation SF 36 wellness index (Appendix I). The questionnaire was administered between November 6, 2020, and December 6, 2020. The majority of questions addressed psychological well-being (mental health), biographical data such as age and gender, academically related questions such as relating university and program of study. The study had a sample size of a minimum of 500 participants (nursing and non-nursing students) throughout the island of Jamaica. Participants were chosen using probability sampling. A standardized questionnaire was sent to participants electronically using survey planet via WhatsApp, Messenger, and email. Data were analyzed using IBM- Statistical Packages for the Social Sciences (SPSS) for Windows, Version 26.0, and a 5% level significance was used at the 2-tailed level (Creswell, 2013; Polit, 1996).

Findings

Table 1 presents the demographic characteristics of the sampled respondents. Of the sampled respondents (n=500), majority of them are females (75.4%, n=377). Of the sampled females, more of them are nursing students (88.0%, n=198) compared to non-nursing students (65.1%, n=179)- $\chi^2(1)=35.015$, $P < 0.0001$.

Table 1. Demographic Characteristics Sampled of the Respondents

Detail	Undergraduate Students		Total
	Non-Nursing, n=275	Nursing, n=225	
	% (N)	% (N)	% (N)
Gender ¹			
Male	34.9 (96)	12.0 (27)	24.6(123)
Female	65.1 (179)	88.0 (198)	75.4 (377)
Age Cohort ²			
18-25 years	81.8 (225)	75.6 (170)	79.0 (395)
26-35 years	11.3 (31)	13.3 (30)	12.2 (61)
36-45 years	4.4 (12)	10.7 (24)	7.2(36)
45+ years	2.5 (7)	0.4 (1)	1.6 (8)
Enrolment Status ³			
Freshman	11.3 (31)	15.1 (34)	13.0 (65)
Sophomore	13.8 (38)	16.9 (38)	15.2 (76)
Junior	18.9 (52)	24.4 (55)	21.4 (107)
Senior	56.0 (154)	43.6 (98)	50.4 (252)

¹ $\chi^2(1)=35.015$, $P < 0.0001$

² $\chi^2(3)=11.287$, $P = 0.010$

³ $\chi^2(3)=7.744$, $P = 0.052$

Psychological Well-being

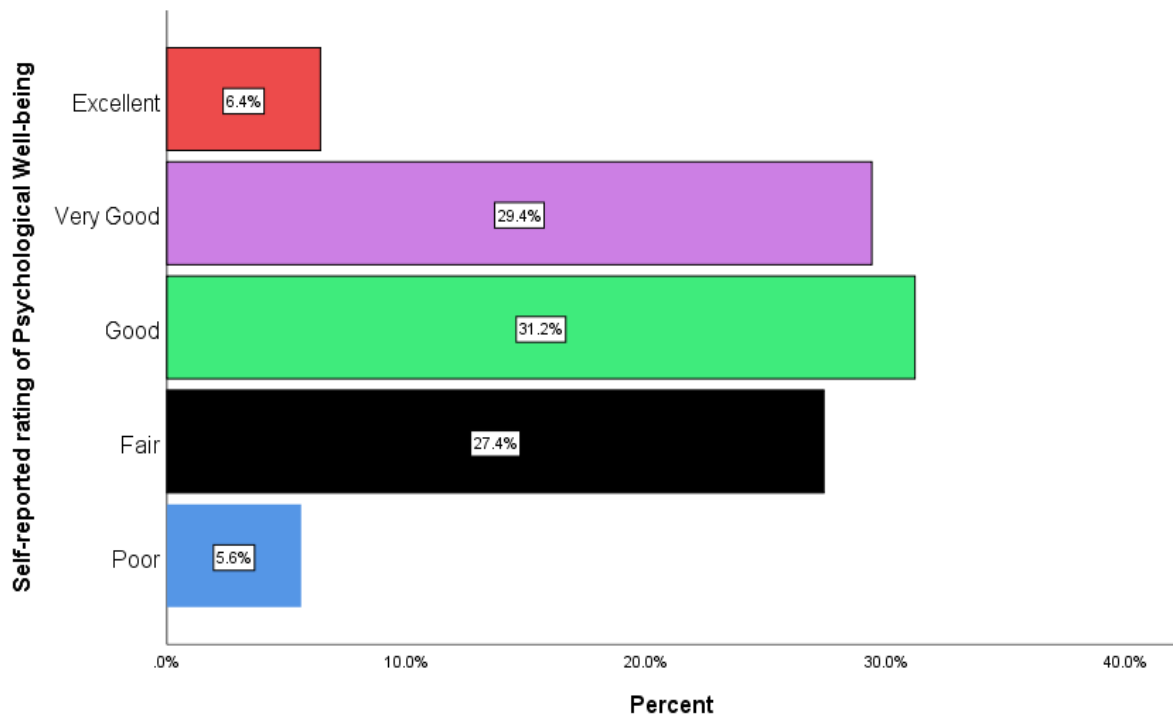


Figure 2.Self-reported Rating of Individual’s Psychological Well-being

Figure 2 depicts respondents’ self-reported rating of their psychological well-being. Of the sampled respondents (n=500), 67% have at least good psychological well-being, with most of them having good health status (31.2%, n=156). Furthermore, only 5.6% of the sampled respondents have poor psychological well-being.

Table 2 presents a cross-tabulation between self-reported psychological well-being and undergraduate student enrolment. The cross-tabulation revealed a significant statistical relationship between the two variables ($\chi^2(4)=18.682$, $P = 0.001$). Almost 77% (173) of the undergraduate nursing students indicated at least an excellent psychological well-being than undergraduate non-nursing students (58.95, n=162).

Table 2.A Cross Tabulation between Self-reported Psychological Well-being and Undergraduate Student Enrolment

Detail	Undergraduate Students		Total
	Non-Nursing, n=275	Nursing, n=225	
	% (N)	% (N)	% (N)
Self-reported Psychological Well-being			
Poor	6.5 (18)	4.4 (10)	5.6 (28)
Fair	34.5 (95)	18.7 (42)	27.4 (137)
Good	26.9 (74)	36.4 (82)	31.2 (156)
Very Good	25.8 (71)	33.8 (76)	29.4 (147)
Excellent	6.2 (17)	6.7 (15)	6.4 (32)

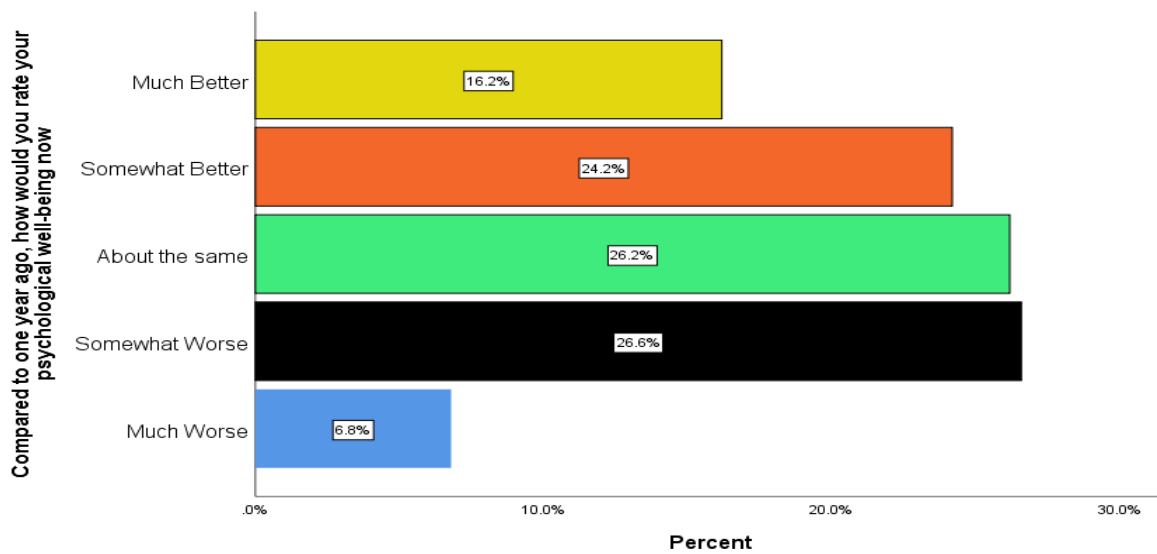


Figure 3. Compared to one year ago, how would you rate your psychological well-being now?

Figure 3 depicts respondents' self-reported rating of their present psychological well-being compared to one year ago. Of the sampled respondents (n=500), 40.4% of them have at least a better psychological well-being than last year, with most of them responding that they have a somewhat better psychological well-being (24.2%, n= 121). The majority of the sample responded that they had a somewhat worse psychological well-being (26.6%, n= 133). Furthermore, only 6.8% of the sampled respondents have a much worse psychological well-being than last year.

Table 3 presents the current psychological well-being of the respondents as compared to one year ago. Of the sampled respondents, the majority indicated that they have worse psychological well-being than last year (n=133). A significant portion of the sample responded that their psychological well-being is about the same compared with last year (n=131).

Table 3. Compared to one year ago, how would you rate your psychological well-being now?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Much Worse	34	6.8	6.8	6.8
Somewhat Worse	133	26.6	26.6	33.4
About the same	131	26.2	26.2	59.6
Somewhat Better	121	24.2	24.2	83.8
Much Better	81	16.2	16.2	100
Total	500	100	100	

Table 4 presents a cross-tabulation between the Current Psychological Wellbeing of the Sample Compared to One Year Ago and Undergraduate Student Enrolment. Almost 33.8% (76) of the undergraduate nursing students indicated they had at least a somewhat better psychological well-being than undergraduate non-nursing students (45.9%, n=126). 36.4% of the sample of nursing students indicated that they had at least a somewhat worse psychological well-being as compared to non-nursing students (30.9%, n= 85)- $\chi^2(4)=8.360$, $P=0.079$.

Table 4.A Cross Tabulation between the Current Psychological Well-being of the Sample Compared to One Year Ago and Undergraduate Student Enrolment

Compared to one year ago, how would you rate your psychological well-being now?	Non-Nursing Student	Nursing Student	Total
Much Worse	16	18	34
	5.8%	8.0%	6.8%
Somewhat Worse	69	64	133
	25.1%	28.4%	26.6%
About the same	64	67	131
	23.3%	29.8%	26.2%
Somewhat Better	78	43	121
	28.4%	19.1%	24.2%
Much Better	48	33	81
	17.5%	14.7%	16.2%
Total	275	225	500
	100.0%	100.0%	100.0%

Discussion

This research aimed to determine if nursing students experience a decline in psychological well-being than non-nursing students. In discussing the hypotheses, nursing students will experience more of a decline in psychological well-being than non-nursing students (H1), or psychological health is not affected whether you are a nursing or non-nursing student (H0); it is crucial to recall the following terms. Psychological well-being is usually conceptualized as some combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudemonic perspective). (Deci, 2008)

In analysis, a total of 500 undergraduate students from different Universities across Jamaica participated in the conducted research; the majority was female, which was 75.4% compared to that of the males, which was 24.6%. These findings could be the result of the female ratio to male ratio in our Universities across Jamaica and that the subject being analyzed - nursing students - is seen as a female-dominated profession. Seventy-nine per cent of the sampled respondents were young undergraduates between ages 18-25. Psychological well-being is associated with both nursing and non-nursing undergraduate students, with 67% of them having at least an excellent psychological well-being. Seventy-seven per cent (77%, n =173) of the nursing students indicated that they have good psychological well-being compared to 58.95% (n = 162) of non-nursing students. Only a minority of the sampled respondents had poor psychological well-being (28 respondents); furthermore, 6.5%, n=18 of non-nursing students responded that they had poor psychological well-being compared to the 4.4%, n= 10 of nursing students. These results support the hypothesis that Non-nursing students experience more of a psychological decline than nursing students. The research revealed that compared to a year ago, 26.6% of the student's psychological well-being is somewhat worse compared to 16.2%, which is much better. In answering the phenomenon, this study demonstrates that nursing students experienced better

psychological well-being than non-nursing students. This is consistent with the study conducted in Thailand, where nursing students seemed to demonstrate greater psychological well-being than non-nursing students. There were no significant differences in psychological well-being between the different undergraduate year groups.

Concerning Diener's theory, the analysis of the results found that nursing students have a higher level of satisfaction with life and less negative emotional responses to school and academia when compared with non-nursing students. Using Lazarus' theory on stress and coping, it can be deduced that non-nursing students perceived their academic/school life as stressful and lack sufficient resources to help them cope with school stressors.

Conclusion

Emotional intelligence, self-efficacy, and psychological well-being (happiness, life satisfaction, and depression) are essential resources for enhancing students' learning, success, and quality in education (Salami, 2010). To become a student nurse, knowledge of nursing techniques and clinical skills must be developed. This study demonstrates that despite the challenges nursing students face in pursuing their careers, they still possess better psychological well-being than their non-nursing counterparts.

Recommendations

Response set bias may have been present in the findings as respondents may not have answered the questions that reflected their true feelings regarding their psychological well-being. Ideally, the ratio of nursing students to non-nursing students should be equal to analyze the results to be fair and unbiased. The researchers tried to curb this issue by selecting a target population to do the survey and narrow the gap between the number of nursing student respondents and non-nursing students. However, future work on this topic can address this issue where the ratio of nursing to non-nursing students is equal. This research only focused on the psychological well-being of nursing students and their non-nursing counterparts; further research could be developed to test if other factors such as age or gender also play a part in the psychological well-being of these two cohorts.

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Appendix I

Questionnaire

1. Are you a Nursing Student? Yes No
2. What age group do you belong to? 18-25 26- 35 36-45 >45
3. Gender? M F
4. Are you a freshman, sophomore, junior or senior?
5. In general, how do you rate your psychological well-being?
 - a) Excellent
 - b) Very good
 - c) Good
 - d) Fair
 - e) Poor
6. Compared to one year ago, how would you rate your psychological well-being now?
 - a) Much better now than one year ago
 - b) Somewhat better now than one year ago
 - c) About the same
 - d) Somewhat worse now than one year ago
 - e) Much worse than one year ago
7. During the past 4 weeks, have you had any of the following problems with your schoolwork or other regular daily activities resulting from your psychological health? Check all that apply.
 - Cut down the amount of time you spent on work or other activities
 - Accomplished less than you would like
 - Were limited in the kind of work or other activities
 - Had difficulty performing the work or other activities (for example, it took extra effort)
8. During the past 4 weeks, has your psychological health interfered with your normal social activities with family, friends, neighbours, or groups?
 - a) Not at all
 - b) Slightly
 - c) Moderately
 - d) Quite a bit
 - e) Extremely

These questions are about how you feel and how things have been with you during the past 4 weeks. Please give the one answer that comes closest to the way you have been feeling for each

question. Responses: (All of the time - 1) (Most of the time -2)(A good bit of the time- 3) (Some of the time -4) (A little of the time -5) (None of the time -6).

How much of the time during the past 4 weeks?

9. Have you felt so down in the dumps that nothing could cheer you up?
1 2 3 4 5 6
10. Did you have a lot of energy?
1 2 3 4 5 6
11. Have you felt downhearted and blue?
1 2 3 4 5 6
12. Did you feel worn out?
1 2 3 4 5 6
13. Have you been a happy person?
1 2 3 4 5 6
14. Did you feel tired?
1 2 3 4 5 6
15. During the past 4 weeks, how much of the time have your psychological health interfered with your social activities (like visiting with friends, relatives, etc.)?
a) All of the time
b) Most of the time
c) Some of the time
d) A little of the time
e) None of the time
16. Do you get your assignments done on time? Yes No
17. Approximately how many hours per day do you spend doing schoolwork?
<30 mins 1hr 2hrs >2hrs
18. Approximately how many hours per day do you spend on leisure activities?
<30mins 1hr 2hrs >2 hrs
19. Does having a spiritual life help you cope with the stresses of school? Yes No

20. Have you ever experienced mental breakdowns? Yes No
21. How many mental breakdowns have you experienced in the past year?
0 1 2 3 4 5 >5
22. Identify critical triggers for your academic stress. Select all that apply.
- examinations
 - multiple deadlines in a short timeframe
 - procrastination
 - other
23. How do you relieve your academic stress?
- prayer
 - attend parties or clubs
 - consume alcohol and recreational drugs such as Ganja
 - sports
 - other
24. Have you ever experienced physical illness due to excessive academic stress?
Yes No
25. Have you ever sought professional help when experiencing psychological breakdowns?
Yes No