Stress, Anxiety, and Depression Among Nursing Students: Basis For An Intervention Program

Vanessa N. Fernandez, Marichu P. Diendo

General Santos Doctors’ Medical School Foundation, Inc.
Dadiangas West, General Santos City, Philippines
van.fernandez2016@gmail.com

Ramon Magsaysay Memorial Colleges
Pioneer Avenue, General Santos City, Philippines
marichu.diendo@rmmc.edu.ph

Abstract: Nursing school is challenging and overwhelming. It has been well-documented that nursing students worldwide experience stress, anxiety, and depression throughout their formal education and clinical training. The main objectives of the present study were to determine the levels of stress, anxiety, and depression among nursing students in General Santos Doctors’ Medical School Foundation, Inc. and to develop an intervention program based on the results of the study. A descriptive survey research design was conducted among a randomized sample of 163 nursing students in General Santos Doctors’ Medical School Foundation, Inc. from March to April 2021. Data collection was performed using the Depression Anxiety Stress Scale (DASS-42). Out of 163 identified randomized samples, 146 nursing students participated in the study; most of them were within the 17–20 year old age bracket and in their first year. Furthermore, the majority of the respondents experienced stress, anxiety, and depression, which ranged from mild to extremely severe levels. Results also showed that among the three psychological health issues, anxiety was the most prevalent. The Counselor CARES (Caring About Restoring Students' Well-being) intervention program, a CBT-based intervention program, has been developed to address the mental health problems of students, specifically stress, anxiety, and depression.

Keywords: Anxiety, depression, intervention program, nursing students, stress

1. Introduction
Depression, anxiety, and stress are widespread among college students. Stress is an emotional and physical strain caused by our response to environmental pressure. It is a normal part of a college student's life. Stress levels are often suitable for college students, as the right amount encourages them toward change and growth. However, stress can become a burden or a psychological state risk when stress exists for an extended period. If not appropriately addressed, overwhelming stress among college students might cause more severe mental state problems, including anxiety and depression. Additionally, anxiety is most prominent among college students. Many students face anxiety due to overwhelming academic and non-academic pressures. Moreover, they cope with it in several other ways. However, some may struggle, which causes many symptoms that affect their mental health. Like anxiety, depression is also a common mental health problem among college students. It is debilitating and negatively impacts students’ psychosocial, emotional, interpersonal functioning, and academic performance. Because of the prevalence and associated consequences of depression, it is considered a crucial mental health problem. This conclusion is consistent with the World Health Organization (WHO), describing depression as the leading cause of disability worldwide. Nursing school is challenging and overwhelming. It has been well-documented that nursing students worldwide experience stress, anxiety, and depression throughout their formal education and clinical training. The issues that further the development of stress, anxiety, and depression are academic and clinical challenges, technological advances, financial problems, interpersonal and family problems, physical and mental health issues, inadequate support, and poor coping skills (Tapariya, 2020). A study conducted about stress, anxiety, and depression among nursing students in Hongkong in 2016 found an overall prevalence of moderately to extremely severe levels of depression, anxiety, and symptoms of the stress of 24.3%, 39.9%, and 20.0%, respectively, among nursing students. Another study showed that the prevalence of symptoms of depression, anxiety, and stress among nursing students in a public university in Sri Lanka was a great height. The majority of the respondents, accordingly, reported mild to extremely severe symptoms of depression (51.1%), anxiety (59.8%), and stress (82.6%). This determination is alarming regarding the increased risk for mental disorders (Cheung et al., 2016; Rathnayake & Ekanayaka, 2016). The evidence regarding stress, anxiety, and depression among student nurses is growing worldwide. However, not much in the literature assesses the same among Filipino nursing students. Examining students’ mental health status is vital since most lifetime mental disorders have their first onset during college. Early detection and intervention are likewise essential to prevent mental disorders from worsening. The researcher conducted this study to determine nursing students’ stress, anxiety, and depression levels in General Santos Doctors’ Medical School Foundation, Inc. The researcher utilized the results of the study to develop an intervention program to address the psychological distress experienced by the students, specifically stress, anxiety, and depression.

1.1 Research Questions
The researcher conducted the study to determine the stress, anxiety, and depression levels among nursing students of General Santos Doctors’ Medical School Foundation, Inc. as the basis for an intervention program.
Distinctively, it desired to answer the following questions:
1. What are the levels of stress, anxiety, and depression of the respondents in terms of:
   1.1 age
   1.2 sex
   1.3 academic year level

2. What intervention programs could be proposed based on the result of the present study?

1.2 Conceptual Framework
Numerous studies indicated the prevalence of stress, anxiety, and depression among nursing students. A systematic review on stress and coping strategies among Saudi nursing students showed moderate to high-stress levels in Saudi student nurses. These originated mainly from heavy workloads and taking care of patients. Additionally, a cross-sectional study conducted among Iranian Nursing Students found that nursing students in Southeast Iran experience moderate stress. This study also cited that nursing students experience moderate to high-stress levels in clinical settings (Labrague et al., 2018; Rafati et al., 2020). Furthermore, one study cited that stress has a detrimental effect not only on the physio-psycho-social health of an individual but on well-being as a whole. Accordingly, excessive stress can harm a student's academic performance and welfare and interfere with learning a complex psychomotor skill. Stress could result in detrimental symptoms such as alcoholism and drug dependence, eating disorders, impulsive use of illegal substances, sleep disorders, and absenteeism. It could also result in mental health disorders and suicide (Labrague, 2021). On the other hand, anxiety also affects nursing students, as indicated by some studies conducted. It was found in a recent survey that nursing students had experienced moderate anxiety during the COVID-19 pandemic. Accordingly, stress factors related to COVID-19, including economic, social life, educational, family and health issues, were directly correlated with the anxiety level of the nursing students during the pandemic (Temiz, 2020). Similarly, depression, a chronic mental health condition affecting millions worldwide, also affects nursing students. It is well-established that psychological stress plays an integral role in depression and that depression has numerous adverse health outcomes, including suicide. The study's findings concluded that symptoms of stress, anxiety, and depression are highly among undergraduate nursing students, and there is an appositive association between stress, anxiety, and depression. School-based intervention programs are crucial in preventing the occurrence and worsening of the mental health conditions nursing students may be experiencing. This study determined nursing students' stress, anxiety, and depression levels. The results of the study were the basis of the proposed intervention program designed to address the mental health problems encountered by nursing students, specifically stress, anxiety, and depression. Figure 1 presents the conceptual framework of this study. It shows the determination of stress, anxiety, and depression levels among General Santos Doctors' Medical School Foundation, Inc. nursing students. The results of the study were the basis for the proposed intervention program.

1.3 Theoretical Framework
For this study, the researcher selected two theoretical models of high relevance. The first is the Transactional Model of Stress and Coping, developed by Lazarus and Folkman (1984). The second is the Cognitive Theory of Anxiety and Depression by Aaron T. Beck in 1960.

The Transactional Model of Stress and Coping
Lazarus and Folkman, in 1984, described the transactional model of stress and coping as a theory that views the person and the environment in a dynamic, mutually reciprocal, bidirectional relationship. This theory explains that stress is neither in the environment nor the person but a product of their interplay. This theory also considers an individual's psychological response to stress, such as anxiety and despair (McEwen & Wills, 2019). Continuously, Lazarus describes the concept 'stress' as of heuristic value and is not a single measurable factor. It includes the person's abilities or capacities, resources available to the person in their environment, and norms that "define" where and how the individual can comfortably use these resources. Stress, resulting from a transaction between a person and their environment - encompasses a set of cognitive, affective, and coping factors. Lazarus claims that different factors influence whether or not a person will experience an event as discomforting (for example, stress-producing). Coping behavior is the behavior that responds to this event (Rice, 2012). Although the Transactional Model of Stress and Coping is based on behavioral science, many nursing researchers have employed it as a theoretical framework. A crucial part of this theory is the process concerned with unfolding events. Lazarus and Folkman (1984) explain that an emotional state is never static. Accordingly, our emotional life is constantly changing, just like our environment. Our emotions express what is happening – that in a stressful encounter, one may feel fearful; then angry; guilty; then loving and joyful. Hence the process of the event unfolds one's behavior and the environmental alterations - this, in turn, alters the appraised significance of the encounter (Jerreholt & Martinez, 2017).

The Cognitive Theory of Anxiety and Depression
Aaron Beck's Cognitive Theory in 1964 explained anxiety as the tendency to overestimate potential danger. Accordingly, patients with anxiety disorder tend to imagine the worst possible scenario and avoid situations.
they think are dangerous, such as crowds, heights, or social interaction. Correcting misperceptions and modifying unhelpful thinking and behavior improves reactions (Bhatt, 2019). Aaron Beck's Cognitive Theory of Depression states that negative thoughts generated by dysfunctional beliefs are typically the primary cause of depressive symptoms. A direct relationship occurs between the amount and severity of someone's negative thoughts and depressive symptoms. In other words, the more negative thoughts someone experiences, the more depressed they will become. Beck also asserts that there are three main dysfunctional belief themes (or "schemas") that dominate depressed people's thinking: 1) I am defective or inadequate, 2) All of my experiences result in defeats or failures, and 3) The future is hopeless. The Negative Cognitive Triad describes these three themes mentioned. When these beliefs are present in someone's cognition, depression is likely to occur if it has not already occurred (mentalhealth.net, 2020). Additionally, Beck claimed that we could acquire negative schemas in childhood due to a traumatic event. Beck believed that depression-prone individuals develop a negative self-schema. Accordingly, they possess a set of beliefs and expectations about themselves that are essentially pessimistic (McLeod, 2015).

2. Methodology
The study utilized a descriptive survey design to determine stress, anxiety, and depression levels among nursing students of General Santos Doctors' Medical School Foundation, Inc. Descriptive research aims to describe a population, situation, or phenomenon accurately and thoroughly. It can answer the questions of what, where, when, and how, but not why. It can use various research methods to investigate one or more variables, specifically surveys, observations, and case studies. As a descriptive research method, survey research allows the researcher to collect vast quantities of information that can be scrutinized for frequencies, averages, and patterns to describe the study population (McCombes, 2019). The researcher utilized the Depression Anxiety Stress Scale 42 or DASS-42 to determine stress, anxiety, and depression among General Santos Doctors' Medical School Foundation, Inc nursing students. It is an adopted questionnaire developed by Lovibond and Lovibond (1995). It was utilized by many researchers in their studies regarding stress, anxiety, and depression. The demographic profile of the research respondents, which included their sex, age, and academic year level, was also gathered. Another means of gathering information is through literary reviews and research regarding the subject matter. Figure 2 presents the research paradigm design, which depicts the demographic profile of nursing students, their stress, anxiety, and depression levels, and the proposed intervention program.

The study was conducted at General Santos Doctors' Medical School Foundation, Inc., Bulaong, Brgy. Dadiangas West, General Santos City. It is a higher educational institution that offers courses in line with the medical profession. The programs offered are bachelor's degrees preparatory for medicine proper. These include Bachelor of Science in Medical Technology, Bachelor of Science in Midwifery, Bachelor of Science in Nursing, Bachelor of Science in Pharmacy, Bachelor of Science in Physical Therapy, Bachelor of Science in Psychology, and the Bachelor of Science in Radiologic Technology. It also offers Senior High School STEM Strand. Marking its 18th year, the institution aspires to be one of the leading schools in the SOCCSKSARGEN area. It was established in 2003, with only a Bachelor of Science in Nursing as its program offering. Gradually, it has opened other program offerings to further its efforts in achieving its vision. The respondents of the present study were the nursing students of General Santos Doctors' Medical School Foundation, Inc., enrolled for the second semester of the school year 2020-2021. The research sample (n=163) was drawn from a total population of 275 nursing students. Out of 163 respondents, only 146 respondents (79 out of 80 samples from BSN Level 1 students, 39 out of 49 samples from BSN 2, 16 out of 20 samples from BSN 3, and 12 out of 14 samples from BSN 4) filled and returned the questionnaires, indicating a response rate of 89.57%. The present study utilized a stratified random sampling technique. This technique was employed to ensure a relatively equal representation of the variables of the study. The stratification was based on the academic year level of the respondents. In this study, the total population of the respondents is 275. Using Slovin's formula, the computed total sample size was 163. The sample size per stratum was then computed using the stratified sample formula:
(Sample size of the strata = sample size of the entire population/population size multiplied by population size per stratum) to calculate the proportion of respondents per stratum.

Table 1 shows the distribution of random respondents by stratum. Random sampling was done using the GIGAcalulator – a random number generator to identify the samples. The generated list of random respondents was included in the appendices.

Table 1

Distribution of random respondents by stratum (n=163)

<table>
<thead>
<tr>
<th>Strata</th>
<th>Population per Stratum</th>
<th>Sample Size per Stratum</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSN 1</td>
<td>135</td>
<td>80</td>
</tr>
<tr>
<td>BSN 2</td>
<td>83</td>
<td>49</td>
</tr>
<tr>
<td>BSN 3</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>BSN 4</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>275</strong></td>
<td><strong>163</strong></td>
</tr>
</tbody>
</table>

The study utilized a two-part questionnaire. The first part of the survey questionnaire contains the demographic profile of the respondents, particularly their age, sex, and academic year level. The second part is the Depression Anxiety and Stress Scale (DASS – 42), a pre-designed and self-administered questionnaire developed by Lovibond & Lovibond. It was used to assess the stress, anxiety, and depression levels experienced by nursing students of General Santos Doctors' Medical School Foundation, Inc. It is an adopted questionnaire utilized by many researchers worldwide in their studies regarding stress, anxiety, and depression. The Depression Anxiety Stress Scale, also known as the DASS, is a collection of three self-report scales used to assess the negative emotional states of depression, anxiety, and stress. Each of the three DASS has 14 items, further subdivided into subscales of 2-5 items with similar content. The Depression Scale evaluates dysphoria, hopelessness, life devaluation, self-deprecation, lack of interest/involvement, anhedonia, and inertia. Additionally, the Anxiety Scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. Furthermore, the Stress Scale is sensitive to chronic non-specific arousal levels that assess difficulty relaxing, nervous arousal, being easily upset/agitated, irritable/over-reactive, and impatience state of an individual. Respondents in the study were asked to rate each state on a 4-point severity/frequency scale over the previous week. Summing the scores for the relevant items yields the scores for depression, anxiety, and stress. The DASS has good test-retest reliability, high internal consistency, and adequate convergent and discriminant validity with other measures of anxiety and depression (Antony et al., 1998; Brown, Chorpita, Korotitsch, & Barlow, 1997). Little overlap has been found between the three subscales, consistent with the tripartite model (Clark & Watson, 1991) upon which the DASS is based. Brown and colleagues (1997) found the depression scale to be most strongly correlated with measures of depression and positive affect and the anxiety scale to be most strongly correlated with measures of physiological arousal and panic. The stress scale is most strongly correlated with measures of worry and negative affect than the other two scales. A list of publications related to the DASS can be found at http://www2psy.unsw.edu.au/groups/dass/pub.htm.

The study was conducted at General Santos Doctors’ Medical School Foundation, Inc. The questionnaire was distributed to randomly selected nursing students enrolled during the 2nd semester of the school year 2020-2021. For meaningful and worthwhile research to be carried out, data from either primary or secondary data collection are required. Moreover, to gain entrance to organizations under study to carry out research, formal permission must be utilized to enable a welcome reception and a conducive environment for research (Nwachukwu, 2015). In order to conduct the research in the college under study, a letter of request was submitted to the college dean of General Santos Doctors’ Medical School Foundation, Inc., requesting the conduct of the study at the institution. After the approval was secured, the researcher distributed the adapted survey questionnaire in joint form to the randomly selected nursing students through Schoology (the school’s LMS or Learning Management System). The data collection was conducted in March and April 2021. After three weeks of constant follow-up, the researcher finally gathered enough data for the research study. Out of 163 respondents, only 146 answered and submitted the questionnaire. Data analysis and interpretation use varied analytical methods to review and analyze data and arrive at relevant conclusions. The interpretation of data helps researchers categorize, manipulate, and summarize the information to answer critical questions. Data interpretation could be quantitative or qualitative. Quantitative analysis refers to processes by which numerical data is analyzed. More often than not, it involves using statistical modelings such as mean, standard deviation, and frequency distribution (Calzon, 2022). In this study, quantitative analysis is utilized. The gathered data was tabulated and tallied in Excel format. Frequency distribution and percentages were computed. The results were finally interpreted and analyzed using the DASS severity rating index below.

Table 2

DASS Severity Ratings

<table>
<thead>
<tr>
<th>Severity</th>
<th>Depression (D)</th>
<th>Anxiety (A)</th>
<th>Stress (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>0 - 9</td>
<td>0 - 7</td>
<td>0 - 14</td>
</tr>
<tr>
<td>Mild</td>
<td>10 - 15</td>
<td>8 - 9</td>
<td>15 - 18</td>
</tr>
<tr>
<td>Moderate</td>
<td>14 - 20</td>
<td>10 - 14</td>
<td>19 - 25</td>
</tr>
<tr>
<td>Severe</td>
<td>21 - 27</td>
<td>15 - 19</td>
<td>26 - 33</td>
</tr>
<tr>
<td>Extremely Severe</td>
<td>28 +</td>
<td>20 +</td>
<td>34 +</td>
</tr>
</tbody>
</table>


The data gathered in the study are tallied and tabulated using Excel. Depression, anxiety, and stress scores were calculated by summing the scores for the depression,
anxiety, and stress scale. The depression scale items are numbers 3, 5, 10, 13, 16, 17, 21, 24, 26, 31, 34, 37, 38 & 42. The anxiety scale items are numbers 2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40 & 41. The stress scale items are numbers 1, 6, 8, 11, 12, 14, 18, 22, 27, 29, 32, 33, 35 & 39. The scores for each respondent over each sub-scales (Depression, Anxiety, and Stress) were calculated and interpreted per the severity-rating index of DASS scoring. The Depression Anxiety Stress Scale (DASS) is developed not to serve as a comprehensive biopsychosocial assessment instrument or a diagnostic tool but as a measuring tool only. Its depression subscale appraises hopelessness, life devaluation, lack of involvement/interest, self-deprecation, and the inactivity state of an individual. On the other hand, its stress subscale measures relaxing difficulty, easiness of upsetting, levels of chronic non-specific stimulation, and impatience state. In contrast, its anxiety subscale evaluates situational anxiety, arousal, effects of skeletal muscle, and inmanent experience. According to one study, people with at least moderate depression are more likely to commit suicide. They should be referred immediately to a mental health professional for assessment and treatment. The DASS provides information on respondents’ reports of low mood, self-esteem, irritability, panic, motivation, and fear. Based on the score obtained from the DASS assessment, respondents with signs and symptoms of depression may be referred for further psychometric evaluation (Adetunji & Ademuyiwa, 2019). Frequency counts and percentages were then used to present the demographic profile of the respondents. It was also used to analyze the levels of stress, anxiety, and depression in terms of the demographic profile of the respondents. Research ethics was taken into consideration in the conduct of this study. Ethical considerations in research are principles that guide the researchers in their research designs and practices. It protects the rights of research participants, enhances research validity, and maintains scientific integrity. Researchers must always adhere to a particular code of conduct when collecting data from people. (Bhandari, 2021). For research to be ethical, one crucial consideration is informed consent. Informed consent is the process of informing research participants about (1) the purpose of the study, its expected duration, and research procedures; (2) their right to decline to participate and to withdraw from the research once participation has begun; (3) the foreseeable consequences of declining or withdrawing; (4) reasonably anticipatable factors that may be expected to influence their willingness to participate such as potential risks, discomfort or adverse effects; (5) any future research benefits; (6) confidentiality limits; (7) incentives for participation; and (8) contact information for inquiries and questions about the research and research participants’ rights. They allow prospective participants to ask questions and receive answers (APA, 2014). In this study, approval to conduct the study was obtained from the College Dean and the Program Head of the BS Nursing program of General Santos Doctors’ Medical School Foundation, Inc. Informed consent was acquired from the respondents to participate in the study before data collection. Voluntary participation was assured, and respondents were informed that their withdrawal from this study would not affect the evaluation of their academic course. Respondents of the study were also assured about the confidentiality and anonymity of the collected data. They were assured that the researcher would use the collected data only for the present study.

3. Results

3.1 Level of Stress, Anxiety, and Depression When Analyzed According to the Respondents’ Demographic Profile

The following tables show the stress, anxiety, and depression levels when analyzed according to the demographic profile of the nursing students of General Santos Doctors’ Medical School Foundation, Inc.

Table 3

<table>
<thead>
<tr>
<th>Demographic Profile</th>
<th>Level of Stress</th>
<th>Level of Anxiety</th>
<th>Level of Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Normal (%)</td>
<td>Mild (%)</td>
<td>Moderate (%)</td>
</tr>
<tr>
<td>Male</td>
<td>92.96%</td>
<td>6.11%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Female</td>
<td>85.33%</td>
<td>14.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Age</td>
<td>17-21</td>
<td>21-25</td>
<td>26-30</td>
</tr>
<tr>
<td></td>
<td>35.35%</td>
<td>15.83%</td>
<td>4.68%</td>
</tr>
<tr>
<td></td>
<td>18.49%</td>
<td>18.49%</td>
<td>12.17%</td>
</tr>
<tr>
<td></td>
<td>8.76%</td>
<td>2.03%</td>
<td>4.68%</td>
</tr>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Academic Year</td>
<td>1st Year</td>
<td>2nd Year</td>
<td>3rd Year</td>
</tr>
<tr>
<td></td>
<td>33.33%</td>
<td>33.33%</td>
<td>33.33%</td>
</tr>
<tr>
<td></td>
<td>25.00%</td>
<td>25.00%</td>
<td>25.00%</td>
</tr>
<tr>
<td></td>
<td>16.67%</td>
<td>16.67%</td>
<td>16.67%</td>
</tr>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Table 3 shows the level of stress among the respondents when analyzed according to their demographic profile. Results show that most female nursing students have stress symptoms. 30 or 20.55% indicated a mild stress level, another 30 or 20.55% indicated a moderate stress level, and 11 or 7.53% indicated a severe stress level. On the other hand, results show that most male nursing students have a normal stress level of 8.22%. Similar to these findings is a study about gender differences in perceived stress and coping among college students. This study found significant gender differences in perceived stress levels, with the females reporting significantly higher total PSS (Perceived Stress Scale) levels. In addition, more females indicated more moderate stress levels than their male counterparts. In addition, stress appears to be differently experienced between genders: emotional exhaustion prevails in women. At the same time, men tend to feel more depersonalized. According to this study, women appear to be more vulnerable to psychological problems due to biological and social determinants such as gender stereotypes, inequity, social segregation, and autonomy (Graves et al., 2021; Costa et al., 2021). As with age, results show that most of the nursing students within the age bracket 17-20 years old have symptoms of stress; 27 or 18.49% within this age bracket indicated a mild level of stress, 23 or 15.75% within this bracket indicated a moderate level of stress, and 11 or 7.53% within this age bracket indicated a severe level of stress. Most of the nursing students from the 21-24 years old age bracket indicated stress symptoms; 9 or 6.16% within this age bracket indicated a moderate level of stress, 6 or 4.11% indicated a mild level of stress, and 2 or 1.37% indicated...
an extremely severe level of stress. Most nursing students in the remaining age bracket have indicated a normal stress level. When analyzed according to their academic year level, a significant percentage of level 1 nursing students indicated symptoms of stress. 22 or 15.07% of level 1 nursing students indicated a mild level of stress, 14 or 9.59% indicated a moderate level of stress, and 10 or 6.85% indicated a severe level of stress. Most of the level 3 and 4 nursing students, on the other hand, indicated a normal level of stress. International studies show that nursing students face moderate to severe stressors in clinical settings. In addition, clinical stressors for nursing students have been identified in the literature to include caring for dying and end-stage patients, a lack of clinical knowledge and abilities, clinical dishonesty, fear of making a mistake, interpersonal disputes with peers, fear of unknown events and phenomena, unfamiliar clinical circumstances, and a severe workload. One study also states that low or moderate levels of stress can boost students’ motivation, resulting in more perseverance in studying and achieving long-term goals (Admi et al., 2018; Zhao et al., 2015). On the other hand, high levels of stress may harm students, leading to depression and despair and thereby impacting their health and academic performance, according to one study. It is also said that stress is inevitable and, in most situations, impossible to overcome; however, students with an effective coping mechanism can improve their academic performance (Riley et al., 2019; Wang et al., 2019). Furthermore, in understanding stress, Betty Neuman’s stress theory helps comprehend the stress that students face in clinical settings. Accordingly, in Neuman’s concept of stress, stressors are classified as extra-personal, intrapersonal, or interpersonal. Extra-personal stressors occur outside of the individual (for example, instructors’ insufficient clinical competence), intrapersonal stressors occur within the individual (for example, inadequate knowledge and skill), and interpersonal stressors occur between individuals (for example, bad relationships with teachers, staff, and patients) (Graham et al., 2016).

### Table 4

**Distribution of Level of Anxiety According to the Demographic Profile of the Respondents (n=146)**

<table>
<thead>
<tr>
<th>Demographic Profile</th>
<th>Level of Anxiety</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
<td>Mild</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-20</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>21-24</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>25-28</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>29-32</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>33-above</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4 shows the level of anxiety among the respondents when analyzed according to their demographic profile. Results show that most male and female nursing students have symptoms of anxiety. 34 or 23.29% of female nursing students and 6 or 4.11% of male nursing students have a moderate level of anxiety, 29 or 19.86% of female and 4 or 2.74% of male nursing students have an extremely severe level of anxiety. Another 29 (19.86%) female and 2 (1.37%) male nursing students indicated a severe level of anxiety, and 11 (7.53%) female and 6 (4.11%) male nursing students indicated a mild level of anxiety. These results coincide with the result of a longitudinal study conducted in China. This study highlighted that anxiety was the most severe and prevalent issue for college students, especially for female students. Anxiety was discovered to have a significant positive relationship with introversion. Anxiety levels in female first-year students were also linked to their body image, drinking habits, and academic performance (Gao et al., 2020). When analyzed according to age, results show that most of the nursing students within the age bracket 17-20 years old have symptoms of anxiety: 26 (17.81%) within this age bracket indicated an extremely severe level of anxiety, and another 26 (17.81%) within this bracket indicated a severe level of anxiety, 24 (16.44%) within this age bracket indicated a moderate level of anxiety, and 11 (7.53%) indicated a mild level of anxiety. With the 21-24 years old age bracket: most of them indicated a moderate level of anxiety (13 or 8.90%), 7 or 4.79% of them indicated an extremely severe level of anxiety, 4 or 2.74% of them indicated a mild level of anxiety, and 3 or 2.05% indicated a severe level of anxiety. In addition, many 25-28 age bracket students have indicated anxiety symptoms. 3 or 2.05% indicated a moderate level of anxiety, 2 or 1.37% indicated a severe level of anxiety, and another 2 or 1.37% indicated a mild symptom of anxiety. On the other hand, most nursing students in the remaining age bracket have indicated a normal level of anxiety. One article entitled "How Is Age-Related to Anxiety?" stated that anxiety could manifest differently at different ages and that age should be considered when making treatment decisions. Accordingly, anxiety differs for young children, teens, young adults, and older adults. Anxiety affects older children more than younger children. Anxiety disorders affect approximately 1% of children aged 3 to 5 and 6% of children aged 6 to 11. Anxiety is also more common in teenagers than in younger children. Teens go through many physical and emotional changes that can lead to anxiety. Anxiety affects approximately 10% of adolescents aged 12 to 17. Likewise, anxiety disorders affect more than 30% of teenagers. According to a survey conducted between 2001 and 2003, approximately 21% of US adults aged 18 to 60 reported having an anxiety disorder in the previous year. Over 32% said they had an anxiety disorder at some point. Furthermore, adults aged 30 to 44 have the highest rate of anxiety in this age group, with approximately 23% reporting an anxiety disorder in the previous year. Also, adults aged 60 and up are more likely to experience physical anxiety symptoms than their younger counterparts. This age group is also at a higher risk of other medical problems, which increases the likelihood of developing an anxiety disorder (Guarnotta, 2020). When analyzed according to academic year level, it can be noted that most of the respondents have anxiety symptoms. Most 1st year nursing students indicated an extremely severe level of anxiety (22 or 15.07%). 18 or 12.33% indicated a severe level of anxiety, 17 or 11.64% indicated a moderate level of anxiety, and 11 or 7.53% indicated a mild level of
anxiety. The results are relatively quite similar to the 2nd year of nursing students. Most of them have symptoms of anxiety as well. 11 or 7.53% of them indicated a moderate level of anxiety, 10 or 6.85% of them indicated a severe level of anxiety, 8 or 5.48% indicated an extremely severe level of anxiety, and 4 or 2.74% indicated a mild level of anxiety. In addition, most of the 3rd year nursing students indicated a moderate anxiety level (10 or 6.85%). Furthermore, most 4th-year nursing students also indicated anxiety symptoms. 2 (1.37%) of them have indicated an extremely severe level of anxiety. Another 2 (1.37%) of them indicated a moderate level of anxiety. Also, another 2 (1.37%) indicated a mild level of anxiety. In one study regarding the year of studies, findings support previous studies where the students with the most experience displayed higher anxiety levels. In contrast, those with the least experience reported lower stress and anxiety levels. It could be because students believe their teachers and other nurses expect more from them. After all, they are more experienced and thus more knowledgeable students, causing their stress levels to rise. According to this study, students who have more extensive training but are also required to have higher competencies and skills during patient care are more likely to experience anxiety and stress (Onieva-Zafra et al., 2020). The results of the study show the prevalence of anxiety among nursing students. Many different factors could influence the level of anxiety among them. As cited in one study, nursing education has consistently been associated with anxiety among students. It was mentioned in this study that heavy course loads, rigorous examinations, continued pressure to attain a high grade point average, complex interpersonal relationships, challenges of the clinical environment, and caring for chronic and terminally ill patients result in more significant anxiety among nursing students than among students from any of the other healthcare disciplines (Savitsky et al., 2020). In addition, it has been found in one study that the clinical training taking place in nursing education is more stressful and challenging than its theoretical aspect. Also, it was stated that having the class in the middle of the pandemic is developing significant psychological stress that can negatively impact nursing students’ learning and mental health. It is also noted in one study conducted that nursing students had moderate anxiety during the COVID-19 pandemic and that there was a positive relationship between the stressors related to COVID-19, including economic, social life, educational, family and health issues, and anxiety (Labrague, 2013; Temiz, 2020). Furthermore, according to a study conducted on university students in Lebanon, the abrupt shift during the pandemic hampered students’ ability to learn and resulted in overwhelming workloads, which led to anxiety and depressive symptoms (Fawaz & Samaha, 2020).

Table 5 shows the level of depression among the respondents when analyzed according to their demographic profile. Results show that most female nursing students have symptoms of depression than male nursing students. 29 or 19.86% of female nursing students have indicated a mild level of depression, 26 or 17.81% of them indicated a moderate level of depression, 17 or 11.64% of them indicated a severe level of depression, and 10 or 6.85% of them indicated an extremely severe level of depression. On the other hand, most male nursing students indicated a normal level of depression (10 or 6.85%), and another 9 or 6.16% of them indicated a moderate level of depression. These results are consistent with the results of several studies conducted. It has been well-established that there are gender differences in depression prevalence, with women experiencing major depression more frequently than men. This danger exists regardless of race or ethnicity. According to a large-scale 2017 study, gender differences in depression began at 12, with girls and women being twice as likely as men to suffer from it. Several risk factors, including hormonal differences, socialization differences, social roles, coping styles, and stressful life events, have been studied to explain gender differences in depression rates (Schimelpfenig, 2020). Furthermore, according to a study conducted in the Philippines, 8.9 percent of young Filipino adults have moderate to severe depressive symptoms, with females (10.2%) having a higher prevalence than males (7.6%). It is also stated in this study that among females, the top three symptoms reported were “feeling lonely”, having restless sleep, and feeling depressed; while among males, the top three symptoms reported were feeling that people were unfriendly, not enjoying life, and “feeling lonely” (Puyat et al., 2021). When analyzed according to age, results show that most nursing students in the 17–20 age bracket have depression symptoms. 26 or 17.81% indicated a moderate level of depression, 21 or 14.38% indicated a mild level of depression, 11 or 7.53% indicated a severe level of depression, and 9 or 6.16% of them indicated an extremely severe level of depression. Similarly, most nursing students in the 21–24 age bracket have depression symptoms. 9 or 6.16% within this bracket indicated a mild level of depression, 7 or 4.79% indicated a moderate level of depression, and 5 or 3.42% indicated a severe level of depression. On the other hand, most nursing students within the remaining age brackets indicated a normal level of depression. These results are consistent with other research results regarding age and depression. According to data from the National Health

### Table 5: Distribution of Level of Depression According to the Demographic Profile of the Respondents (n=146)

<table>
<thead>
<tr>
<th>Demographic Profile</th>
<th>Level of Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>17-20</td>
<td>11</td>
</tr>
<tr>
<td>21-24</td>
<td>9</td>
</tr>
<tr>
<td>25-29</td>
<td>1</td>
</tr>
<tr>
<td>30-34</td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
</tr>
<tr>
<td>Academic Year</td>
<td></td>
</tr>
<tr>
<td>1st year</td>
<td>11</td>
</tr>
<tr>
<td>2nd year</td>
<td>9</td>
</tr>
<tr>
<td>3rd year</td>
<td>1</td>
</tr>
<tr>
<td>4th year</td>
<td>1</td>
</tr>
</tbody>
</table>
| Distribution of Level of Depression According to the Demographic Profile of the Respondents (n=146)
Interview Survey (2019), the percentage of adults aged 18–29 who had any signs of depression was the highest (21.0%), followed by those aged 45–64 (18.4%), 65 and over (18.4%), and finally, those aged 30–44 (16.8%). In addition, according to one study, young adults ages 19 to 29 sometimes develop depression due to significant life transitions, lack of support in new environments, lack of coping skills, relationship issues, poverty, trauma, work issues, and more (Becker, 2020). When analyzed according to the academic year level of the respondents, it was found that most of the 1st year nursing students have depression symptoms. 21 or 14.38% indicated a moderate level of depression, 14 or 9.59% indicated a mild level of depression, 9 or 6.16% indicated an extremely severe level of depression, and 8 or 5.48% of them indicated a severe level of depression. The results are similar to the 2nd year nursing students, as most have depression symptoms. 10 or 6.85% indicated a moderate level of depression, 9 or 6.16% indicated a mild level of depression, and 4 or 2.74% indicated a severe level of depression. Similarly, most third- and 4th year nursing students have depression symptoms on varied levels. The study’s findings showed that most nursing students (63.68%) were experiencing depression symptoms at varying levels. These results are consistent with previous research. According to the findings of one study, the prevalence of depression among nursing students is high. Likewise, the prevalence of depression and major depressive disorder among nursing students in Cameroon was 69.57% and 26.40%, respectively. Accordingly, due to clinical practice rotations, night shifts, and a rigorous workload during their studies, nursing students continuously rearrange their schedules. As a result, they are subjected to significant amounts of long-term stress. Therefore, nursing students are particularly vulnerable to depression, with some studies estimating that up to 38.7% of nursing students are depressed. Depression has a significant negative impact on nursing students’ academic performance. Depressed students have been observed to miss more classes and have worse cumulative grade point averages (GPA) than their non-depressed peers (Njim et al., 2020; Abu et al., 2018).

3.2 Proposed Intervention Program

### Table 6
Matrix of the Proposed Intervention Program
Counselor CARES (Caring About Restoring Students’ Well-being) Intervention Program

<table>
<thead>
<tr>
<th>Findings</th>
<th>Objectives</th>
<th>Activity</th>
<th>Expected Outcomes</th>
<th>Personnels Involved</th>
<th>Expected Outcome</th>
<th>Guidance Personnel</th>
<th>School Administrator</th>
<th>College Dean</th>
<th>Pounds ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutchess 63.68% of total were experiencing depression symptoms at varying levels.</td>
<td>To help overcome common stressful events</td>
<td>The CBT-based intervention will focus on the following techniques to address stress symptoms.</td>
<td>At the end of this session, students will be able to:</td>
<td>Guidance Personnel</td>
<td>Nursing Program Head</td>
<td>School Administrator</td>
<td>College Dean</td>
<td>106.00</td>
<td></td>
</tr>
</tbody>
</table>
Table 6 presents the matrix of the proposed intervention program. Based on the determination of the study, the researcher proposed the Counselor CARES (Caring About Restoring Students’ Well-being) intervention program. This program will address students’ mental health problems, specifically stress, anxiety, and depression. The Counselor CARES Intervention Program is a CBT-based stress, anxiety, and depression intervention program which targets students with chronic stress, anxiety, and depression symptoms. Cognitive-Behavioural Therapy (CBT) is based on the Cognitive Theory developed by Aaron Beck for anxiety and depression. CBT combines cognitive and behavioral therapies that help patients tune into their internal dialogue to change maladaptive thinking patterns. The objectives of the Counselor CARES Intervention Program is to promote students’ mental health & well-being, to prevent worsening anxiety and depressive symptoms, and to reduce the rates of future mental health illness onset among students.

4. Conclusions and Recommendations

4.1 Conclusion
Based on the results of the study, the following conclusions are derived:

1. According to the demographic profile of the respondents, females constitute the majority of nursing students at General Santos Doctors’ Medical School Foundation, Inc. It was also revealed that most nursing students are within the 17-20 age bracket and that 1st year nursing students represented the most significant part of the nursing populace.

2. When levels of stress, anxiety, and depression were analyzed according to their demographic profile, it was revealed that most of the female nursing students indicated stress and depression symptoms which ranged from mild to extremely severe levels while most of the male nursing students indicated normal levels of stress and depression. With anxiety, it was revealed that most male and female nursing students had indicated symptoms of anxiety ranging from mild to extremely severe levels. In addition, the study revealed that most of the respondents within the 17-20 & 21-24 age brackets reported stress, anxiety, and depression symptoms which range from mild to extremely severe levels. The majority of the respondents within the age bracket 25-28, on the other hand, reported only symptoms of anxiety. In contrast, most of the respondents within the remaining age brackets reported normal stress, anxiety, and depression symptoms. Furthermore, the study’s findings revealed that most 1st and 2nd year nursing students indicated symptoms of stress, anxiety, and depression ranging from mild to extremely severe. In contrast, 3rd and 4th year nursing students indicated symptoms of anxiety and depression ranging from mild to extremely severe. Overall, it can be deduced that the majority of nursing students suffer from stress, anxiety, and depression. Based on the findings, among the three psychological health issues, anxiety was the most prevalent.

3. It can be concluded that prevention, including the early detection and treatment of mental health problems, promises to reduce the prevalence of stress, anxiety, and depression among students. Formulating and implementing an effective mental health intervention program is essential to limit the psychological health issues encountered by students.

4.2 Recommendations
Based on the findings and conclusions derived, the researcher recommends that:

1. Further study must be conducted to fully assess the factors that cause stress, anxiety, and depression among nursing students.

2. Students should be evaluated routinely by a mental health professional to detect any psychological discomforts that affect their mental health status and academic achievements.

3. Effective mental health intervention programs should be formulated and implemented by educational institutions to address the mental health problems encountered by students.

4. Counselor CARES intervention program proposed by the researcher should be utilized by educational institutions to address the stress, anxiety, and depression symptoms experienced by students. It is to prevent it from worsening and reduce the rates of future mental health illness onset among them.
References


Author Profile

Vanessa N. Fernandez is a Licensed Psychometrician and is a graduating Master of Arts in Education Major in Guidance and Counseling student at Ramon Magsaysay Memorial Colleges. She graduated her Bachelor of Arts Major in Psychology at the same institution on March 2010 and passed the licensure examination for Psychometrician in 2016. She is currently working as the Head of the Guidance Office at General Santos Doctors’ Medical School Foundation, Inc. for almost six years now.

Marichu P. Diendo, RPsy, RPm is a Doctor of Philosophy major in Clinical Psychology. She is currently the Director of Research, Extension, External Affairs and Development Office of the Ramon Magsaysay Memorial Colleges (RMMC) - a 62-year-old higher education institution in General Santos City, Mindanao, Philippines, with more than 8,000 students. Under her leadership, the College became a publisher duly authorized by the National Book Development Board of the Philippines to publish their own Research Refereed Journals bearing ISSN. She made the Community Extension/Outreach Program of the College as Top 5 Outstanding Literacy Program both Regional and National levels awarded by the National Literacy Coordinating Council, Department of Education, Philippines. She is also a Professor of Psychology both in the undergraduate level, and Graduate Studies. Being a Registered Psychologist (RP), and Registered Psychometrician (RPm), she extends her expertise from the academe to special population of women, and children in the community who are in need of psychological services and interventions towards improving their self-esteem.