

## STRESS MANAGEMENT AND RESILIENCE IN JUNIOR AND SENIOR NURSING STUDENTS IN GHANA

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### ABSTRACT

This descriptive cross-sectional study aimed to investigate the sources of stress, the stress management strategies, and the resilience among Junior and Senior nursing students at different nursing schools in Ghana. 240 students enrolled in different schools in Ghana were surveyed during the month of September 2013. The data collected were analyzed through SPSS. Descriptive statistics (Mean and Standard Deviation) and inferential statistics (t test and ANOVA) were used to compare the Junior and Senior baccalaureate nursing students in terms of their stress management and resilience. The findings showed that nursing students are exposed to different source of stress but the fear of their performance in the clinical setting is the greatest source of stress. The findings also revealed that while students were somehow resilient, emotional and spiritual support along with getting more involved in physical/school activities are the main strategies used to deal with stress. Finally, the results revealed that the source of stress, the strategies to manage stress, and the resilience level differ according to the students' age and level; but do not differ in terms of gender.

**Keywords:** Stress management, resilience, nursing students.

### INTRODUCTION

Stress is a normal phenomenon that almost every person experiences in his lifetime. Stress generally occurs when a situation is highly complicated and demanding to a person. Stress has a major impact on an individual's social, physiological and physical health. Some level of stress is necessary to enable learning; however, it has been demonstrated that stress can have serious health effects on the individual (O'Regan, 2005). Additionally, an individual under stress can pose questionable acts at his workplace (O'Regan, 2005).

Nursing profession, as the other health professions is known for the overwork of its professionals. Actually, it has been proven that the work environment of health care is a permanent source of stress (Shirey, 2006) and that the stress level among health professionals is higher than that of other workers (Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2012).

In this reality, the case of nursing students is not the best. There is even a tendency to believe that high level of stress is preordained for nursing students. Such a thinking is not surprising considering the academic workload, heavy examinations, the uncertainty of career choice, as well as the feeling of incompetence that baccalaureate nursing students experience sometimes in the clinical setting (LeDuc, 2010). College students, especially beginners, are particularly prone to stress due to the provisional nature of college life. They may have difficulties adjusting to more demanding academic expectations and the need to learn to deal with individuals of different cultures and beliefs. Seyedfatemi, Tafreshi, and Hagani (2007) found in their study that stress in the case of beginners may result from being separated from home for the first time, the transition from a personal to an impersonal academic environment, and

the very structure of the academic experience at the college level. This is further echoed by Shirey (2005) who admits that student nurses face variety of stressors everyday from clinical settings, educational setting or from their own personal lives. Other authors such as LeDuc (2010) have investigated the sources of stress among nursing students and have found that several factors facilitate the coping mechanism in these students.

In Ghana, Atindanbila, Abasimi, and Anim (2012) and Rita, Atindanbila, Mwini-Nyaledzigbor, and Abepuoring (2013) investigated the sources of stress, the level of stress and the consequences of stress on clinical nurses. Though their conclusions and recommendations can be extended to nursing students, it seems that investigating nursing students specifically can provide a better contextual understanding of what causes stress among nursing students. This work purposes to describe the level of stress, its management, and the resilience level among nursing students. The study also aims to compare if there is any difference in the impact of the level of stress and the resilience level when their age, level of study, and gender is considered.

## **LITERATURE REVIEW**

Stress promotes organizational incompetency, high staff turnover, sickness absenteeism, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction (Wheeler & Riding as cited by Shirey, 2006). According to Prymachuk (as cited in Shields, 2011), "one third of nursing students experience stress severe enough to stimulate mental health problems such as anxiety and depression" (p. 6). While this has been the drift, it does not have to persist. Pointing out resilience skills to nursing students may be one method to help nursing students manage stress.

Stress is a normal occurrence in everyday life and nearly everyone experiences it at some time. Stress has been ascertained as a 20th century malady and has been viewed as a complicated and dynamic transaction between individuals and their environments (Evans & Kelly as cited by Seyedfatemi, Tafreshi, & Hagani, 2007). In other words, stressors can be said to be situations or events that have the tendency to bring about undesirable consequences.

According to Misra and McKean (as cited by Seyedfatemi et al., 2007), college students experience elevated stress at expectable times each semester due to academic commitments, financial pressures, and lack of time management skills. Other possible sources of stress for college students include excessive homework, unclear assignments, and uncomfortable classrooms. In addition to academic requirements, relations with faculty members and time pressures may also be sources of stress.

Moreover, regardless of year in school, college students often deal with pressures related to finding a job or a potential life partner. These stressors do not cause anxiety or tension by themselves. Instead, stress results from the interaction between stressors and the individual's perception and reaction to those stressors (Seyedfatemi et al., 2007).

Archer and Lamnin (1985) found that tests, grades, competition, time demands, professors and the class environment, and concern about future careers were major sources of academic stress. Evans and Kelly (as cited by Seyedfatemi et al., 2007) stated that, nursing students have the same academic stressors as other college students, such as mid-semester and final examinations, research papers and other assignments.

In addition, nursing students go through a clinical component, which is highly stressful. Students have a large amount of preliminary work before their clinical assignments. They often must travel long distances to clinical sites and use highly technical equipment (Mahat, 1998; Shriver, 2000). Yet again, they must perform procedures that can cause serious harm to their patients, thus highlighting their fear of making mistakes. Studies point out that, nursing students may be more predisposed to stress than other students.

Nursing students face not only academic stress but stress at work during their training period. One spotlight of interest in research on stress at work is the sources of stress which relate and aid in the onset of stress in organizational settings (Spielberger & Reheiser, 2005). Some of the most common stressors are time pressures, workload, making decisions, continuous changes and economic mistakes at work (Pulido-Martos, Augusto-Landa & Lopez-Zafra, 2012). This is further echoed by Shirey (2005) who admits that student nurses face variety of stressors everyday from clinical settings, educational setting or from their own personal lives.

Stress is a psychological factor that influences the academic performance and welfare of nursing students (Sawatzky, 1998). Some level of stress is necessary to enable learning, however, the increasing stress that student nurses have to carry can interfere with teaching and learning and can only be disadvantageous to the profession in the long term (O'Regan, 2005). Unwarranted stress can be detrimental to a student's academic performance and students who perceive their stress levels as very extreme may often become depressed. This depression can progress to other mental health problems, such as excessive drinking or haphazard use of other substances (Robin, 2002).

Some of the major stressors for nursing students include academic workload, heavy examination schedules, feelings of reservation about nursing as a career choice, feelings of incompetency and uncertainty in the clinical setting, personal inadequacy, and fear of making a mistake. Stress in nursing students does not just have a negative impression on them; eventually it will have negative impressions on the nursing workforce as stress may lead to a shortage of nurses entering clinical practice. (LeDuc, 2010)

Several reports by occupational health institutions reveal that, stress affects almost every profession. However, levels of stress are complex, and there are a greater number of sources of stress among health professionals, especially nurses, with depressing repercussions for their health (Demeuroti et al., 2000; Humpel & Caputi 2001; Lim et al., as cited by Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2012). On the other hand, the focus should be at a stage earlier than nurses' integration into their workplaces: their training period.

Three main classes of stressors have been labelled: (i) academic stressors (testing and evaluation, fear of failure in training, problems with workload, etc.), (ii) clinical stressors (work, fear of making mistakes, negative responses to the death or suffering of patients, relationships with other members of the organization, etc.), and (iii) personal/social stressors (economic problems, imbalance between housework/schoolwork, etc.) (Prymachuk & Richards as cited by Pulido-Martos et al., 2012).

Misra and McKean (as cited in Seyedfatemi et al., 2007) also maintain that students' perception of high stress levels can lead to poor academic performance, depression, attrition and serious health problems. They went on further to state that methods to reduce student stress often include effective time management, social support, positive reappraisal, and engagement in leisure pursuits.

O'Regan (2005) reported on a study conducted to examine the experience of stress among Irish student nurses, this study indicated that stress is a major factor affecting them that need urgent attention. O'Regan states that students should receive support and a caring attitude from their educators, their practical supervisors and qualified nurse colleagues; she went on further to state that schools of nursing need to incorporate comprehensive programs of stress identification and management into their curricula.

A study by Kang, Choi, and Ryu as cited by Shields (2011) on the effects of a mindfulness based stress reduction program on stress, anxiety, and depression experienced by nursing students in Korea found that participants in the study showed significantly reduced stress level, while there was an increase in stress level of the control group. With such findings, they concluded that stress-coping program based on mindfulness meditation is effective in decreasing stress and anxiety in nursing students.

## METHODOLOGY

The aim of this descriptive cross-sectional study was to investigate the sources of stress, the stress management strategies, and the resilience among Junior and Senior baccalaureate nursing students at different nursing schools in Ghana. 240 students enrolled in different schools in Ghana were surveyed during the month of September 2013. The students were assigned numbers by the administration prior the researcher visit. Once in the schools, the researcher asked the students to put their numbers in a box by levels. 30 numbers were picked in each box's level and only those who numbers were chosen took part in the study.

The final sample was made of 240 students in level 3 and level 4. 120 students in each level. Their consents were obtained through an informed consents form that was attached to the survey questionnaire. The survey was made of three sections: (a) Source of Stress, (b) Stress Management Strategies, and (c) resilience. The survey was built based on the literature review and on the Resilience Scale from Gail Wagnild (2009) and measured on a four point likert scale. The construct *source of stress* was divided in three subscales (academics, clinical, and personal). The construct stress management was made of four subscales (leisure activities, emotional/spiritual support, professional support, and engaging in physical or school activities). Finally, the construct resilience had three subscales (general resilience, clinical resilience, and physical resilience). The reliability test of the three constructs gave the following value for the Cronbach's Alpha .722, .740, and .797 respectively for the source of stress, the stress management, and the resilience.

The data collected was analyzed through SPSS. Descriptive statistics (Mean and Standard Deviation) and inferential statistics (t test) were used to compare the Junior and Senior baccalaureate nursing students in terms of their stress management and resilience.

## RESULTS

The participants distribution in terms of their gender was quite balance. 41.8% of females for 38.2% of males. While only 33.3% of the participants were aged 24 years old and above, 66.7% of the participants' age ranged between 20 to 23 years old. Finally, as it was the purpose of our sampling, each level represented 50% of the total population.

In relation to the source of stress (Table 1), the questions related to the clinical stresses got the highest mean (2.75) and the lowest standard deviation (.44), followed by the academics

stress ( $M = 2.55$ ,  $SD = .59$ ). This means that nursing students are mostly stress in clinical setting.

Table 1  
*Source of Stress*

	N	Mean	SD
Academics	240	2.55	.58
Clinical	240	2.75	.44
Personal	240	2.28	.49

Note. Strongly Disagree: 1.00-1.49, Disagree: 1.50- 2.49, Agree: 2.50-3.49. Strongly Disagree; 3.50-4.00

Regarding the stress management strategies and resilience (Table 2, 3), leisure activities got the lowest mean (1.6) while engaging in physical/school activities along with emotional/spiritual support got the highest mean scores (2.7 and 2.6). In other words, though nursing students agreed that engaging in physical/school activities along with emotional/spiritual support help them in managing their stress, nursing students did not agree that being involved in leisure help in reducing their stress. It can also be understood as their academic and clinical schedules do not really favor such activities. Nevertheless, in the area of resilience, nursing students showed relatively good scores. General resilience that encompassed the students' abilities to have confidence on their choices, to manage their time appropriately, and to be positive got the highest mean (2.9), while the health resilience that took into consideration the abilities of the students to care for their health though balance diet and physical activity was the lowest mean score (2.4). This means that nursing students are somehow resilient when it comes to managing their health while they are resilient in general and when it comes to the clinical setting.

Table 2  
*Stress Management*

	N	Mean	SD
Leisure activities	240	1.61	.37
Emotional/spiritual support	240	2.62	.50
Professional support	240	1.97	.59
Physical/School activities	240	2.70	.62

Note. Strongly Disagree: 1.00-1.49, Disagree: 1.50- 2.49, Agree: 2.50-3.49. Strongly Disagree; 3.50-4.00

Table 3  
*Resilience*

	N	Mean	SD
General Resilience	240	2.95	.37
Clinical Resilience	240	2.77	.47
Health Resilience	240	2.46	.39

Note. Not at all resilient: 1.00-1.49, Somehow resilient: 1.50- 2.49, Resilient: 2.50-3.49. Very Resilient: 3.50-4.00

When comparing the study participants in terms of their gender regarding their source of stress, stress management strategies, and resilience, there was no significant difference in the level of resilience between male and female. However, when comparing the study participants in terms of their age, there was a significant difference in the personal source of stress, in the choice of leisure and professional support as stress management strategies. Moreover, the level of general and clinical resilience differed between the age groups 20 – 23 years old and 24 years old and above (Table 4). The older students presented highest mean score than their counterparts. Finally, when comparing the participants in terms of their level of study, only health resilience was significantly different with  $t(1) = 7.102$ ,  $p = .009$ .



Table 4  
*Group Comparison (Age)*

	<i>N</i>	<i>F</i>	<i>p</i> -value
<b>Source of Stress</b>			
Personal Factors	240	2.806	.006
<b>Stress management strategies</b>			
	240	2.113	.038
Leisure			
Professional support	240	4.717	.000
<b>Resilience</b>			
General Resilience	240	3.442	.001
Clinical Resilience	240	2.233	.028

## DISCUSSION

College students are prone to stress due to the different environment they are confronted to. Moreover, some personal factors along with the academic requirements can make difficult the students's adaptation to college. Different studies have found the sources of stress among college students. Notably, interpersonal relationship (Mahat, 1998), examinations (Evans & Kelly, 2004), class workload (Seyedfatemi, 2007), and clinical work (Pulido-Martos, 2012). This study found that clinical setting was the highest source of stress, but also academics and personal factors. This is therefore in accordance with the cited authors. There is a thing in knowing what the stressors of nursing students are, but it is another thing to know how to deal with them. In that sense, Toray (1998) indicates that although students cannot avoid these stressors, their ability to adjust to demands and cope with these stressors are important in achieving success in the college academic and social environments.

Different coping strategies are promoted in the literature. However, there is no most appropriate coping strategy. It seems to depend upon the nature on the learner and its background. Nevertheless, Murphy (2004) and Shirey (2007) advise faculty to distinguish what works to lessen the students' stress and eventually teaching them strategies to reduce stress. In the case of this study, the study participants agreed in majority that emotional and spiritual support is important in managing stress. This finding is in agreement with Seyedfatemi et al. (2007) and LeDuc (2010)'s findings that showed that majority of their respondents reported the importance of having people who care and are dedicated to the student's well-being. However, in terms of engaging in physical activities, the participants' answers quite differ from those of Seyedfatemi et al. (2007) since the latter reported only seldom or never used such strategy. Whatever the coping strategy is, one other component that helps well students to deal with stress is their resilience.

According to Cadogan-McClean (2009) "resilience is an individual-difference variable, which might have a positive impact on the experience of work stress" (p. 4). "Resilience starts with taking good care of yourself. That means positive self-talk about the value you bring to the workplace as a nurse . . . healthy lifestyle choices, including adequate rest, time away from the routine, nutritious food, exercise, and play" (Laskowski-Jones, 2011, para. 5). In the case of this participants however, health resilience—which can be defined by what Laskowski-Jones (2011) talks in terms of healthy lifestyle choices—was the weakest resilience subscale. Even more, students in the early year showed a weakest resilience level compare to their counterparts. The general resilience and the clinical resilience however were higher.

Increasing resilience in students can improve their ability to face and move forward after challenges (Stephens, 2012). One way of doing this according to McAllister and Lowe (2011) is to be prepared beforehand for the challenges that may come, understand what is stress, and understand what are some of the personal factors that may affect your coping mechanisms. Beside this, resilience can also be learned through learning to be optimistic, flexible, altruistic, morally compassed, and physically fit; but also through having a resilient mentor, a supportive social network, and a sense of humour (McAllister & Lowe, 2011). However, it is also important that “teaching of resilience be incorporated into evidence-based educational programs to give students strength, focus, and endurance” (Stephens, 2012, p. 50).

## CONCLUSION

The purpose of this study was to examine the source of stress, the stress management strategies and the resilience among nursing students. It was revealed that nursing students experience various sources of stress though the stress related to the clinical setting is the greatest one. In relation to the coping strategies emotional/spiritual support appeared to be really important as well as the ability of the student to keep him/herself involved in physical/school related activities. In term of their resilience level, physical resilience was found to be low compared to the general and clinical resilience. It appears that though the students have recognized the workability of physical activity in helping them to deal with stress, they are somehow slow in involving in physical activities. However, if today’s nursing students who are tomorrow’s nurses need to become resilient in their work places based on the nature of their work, they definitely need to start to develop resilient skills. Because “nurses should be proactive about resilience in the work-place” (McAllister & Lowe, 2011, p.17), the following recommendations are given (a) defining stress and resilience in the context of nursing, (b) providing a less stressful clinical environment, (c) revisiting the curriculum to allow nursing students to have a better social life, (d) offering seminar to train teachers on how to enhance resilience on nursing students, and (e) providing adequate professional support.

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