



Correlates and predictors of quality of life among Saudi nursing students



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ABSTRACT

The demands of academic life for nursing students are overwhelming. Despite all available resources and coping mechanisms, still, the quality of life of some if not all students, may be affected in many ways. It has been determined that in the general assessment of nursing students QOL or Quality of Life, those without any obligation at home and other social sources have less stress and better quality of life compared to those who have. This study primarily focused on the following aims. First, it determined the demographic profile of the participants as to age, gender, academic classification, nursing related experience, and grade point average (GPA); second, how nursing students (the participants) perceived their quality of life using based on their responses to the Quality of Life Evaluation Scale (QOLES) for Nursing Students; third, determined the degree of relationship between the demographic profile of the participants to their responses to the (QOLES) for Nursing Students Scale; and lastly, it evaluated how academic profiles become predictors of quality of life of nursing students. The Grade Point Average (GPA) of each student participant cannot exactly and profoundly explain the status of their quality of life. The quality of life of students, not only nursing students, while in the university is a mix of unrest and steady situations.

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1. Introduction

The academic life presents an array of multifactorial sources of struggles among nursing students especially with those who have other obligations aside from their academic roles. It has been determined that in the general assessment of nursing students QOL or Quality of Life, those without any obligation at home and other social sources have less stress and better quality of life compared to those who have (Aboshaiqah and Cruz, 2019; Chu et al., 2015). Nurse educators and nurse managers are considered to be crucial determinants of nursing students and even professional nurses perceived quality of life or QOL. Among many reasons, educators and managers can provide an objective analysis of the satisfaction and sense of well-being of their students and staff nurses, respectively (Cruz et al., 2018).

Not only that the academic community of students can affect a particular domain of their personality, most importantly, but their psychological well-being is also very much affected as well. As stipulated in the ecological model, the learning experience of students within the classroom and the school as a whole has a direct impact to their academic performance, not only to their well-being but most significantly, to their scholastic performance, self-esteem and sense of educational climate (Oliveira et al., 2011). The academic community is not only tasked to produced competent professionals, but they are also seen as well to be a resource in generating professionals that are morally upright and with high regard for the well-being of self and others. They also serve as partners in improving a community that can foster long lasting relationships that sustains and integrate moral values towards others (Oliveira et al., 2011).

In Brazil, a study analyzed the QOL of nursing students using the World Health Organization Quality of Life questionnaire (WHOQOL-BREF) among public universities. It was found that in the quality of life and social relationships, the participants had more satisfaction compared to their psychological, physical and environmental dimensions. The study concluded that the physical well-being of the students is being neglected when

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they are faced with a multitude of stress and workload related to their studies (Faílde Garrido et al., 2019).

One study in China found out that comparing between adolescents who had a stressful life and those who are not, had lower satisfaction. The increased stress among these adolescents was correlated to either lack of coping techniques or an inability to use existing coping strategies (Felicilda-Reynaldo et al., 2019).

Several studies before determined the quality of life of nursing students in Saudi Arabia and elsewhere (Graves et al., 2017; Hosseini et al., 2015; Labrague et al., 2018; Leon-Larios et al., 2019; Mak et al., 2018), however, no study yet focused on specific academic variables and attributes as predictors towards quality of life of a student. It is timely and relevant to understand if any of the academic indices could influence the academic journey of nursing students specifically their sense of well-being while on the journey towards completing their bachelor's degree.

2. Methods

2.1. Aim

The study aimed to; a) determine the demographic profile of the participants as to age, gender, academic classification, nursing related experience, and grade point average (GPA); b) what are the responses of the participants to the Quality of Life Evaluation Scale (QOLES) for Nursing Students; c) what is the degree of relationship between the demographic profile of the participants to their responses to the (QOLES) for Nursing Students Scale, and d) how can academic profiles become predictors of quality of life of nursing students.

2.2. Method

This is a descriptive correlational cross-sectional study using the QOLES for Nursing Students Scale as a tool. There are a total of 412 participants who completely answered the questionnaires.

2.3. Sampling

Cluster sampling was utilized for this study. First, the participants were divided into two clusters which are the female and male campuses under the College of Nursing. After this, a random sample from each year level was obtained. The data were collected from January 2019 to June 2019 from nursing students of a Saudi University.

2.4. The participants

The inclusion criteria in determining the participants were that a) they should be nursing students enrolled in this Saudi University-College of Nursing for the second semester of the academic

year 2018-2019; b) they can be either academically classified as regular or bridging students; c) they have minimal to excellent command of the English language; and d) they consented to participate in the study. Participants who were not in their classes for any reason during the distribution of questionnaires were not included in the study.

2.5. Locale

The participants were students of the College of Nursing of this University located in Northwestern Saudi Arabia. Permission was obtained from the Dean of the College as well as an Ethical Clearance from the Institutional Review Board of the University. Initially, the number of students enrolled for the second semester was determined to ensure that there were enough participants for the study.

2.6. The tool

The Quality of Life for Evaluation Scale or QOLES for Nursing Students was used as the survey tool for this study. It has four domains namely physical health, psychological health, social relationships and environmental health. There are 22 items in the scale distributed throughout the 4 mentioned domains. The physical health domain focused on pain and discomfort, fatigue and energy, rest and sleep as well as working ability. In the psychological domain, it measured the positive attitudes and negative thoughts, self-confidence, memory and concentration. While for the social relationships domain, the questions centered on interpersonal relationships, social support, and social station. Lastly, the environmental health domain determined the issues related to safety, clinical environment, opportunities to acquire skills and knowledge as well as recreation. The distribution of items in each domain is Physical health (six items); psychological health (seven items); social relationships (five items); and four items for environmental health (Cruz et al., 2018).

The scale can be possibly answered using a score of 0 to 5 that signifies their perception in all items of the scale. The score equivalents are 1 (not at all important), 2 (less important), 3 (important), 4 (more important) and 5 (highly important). Each of the items has five answers on a score of 0 to 5 in terms of their reflection on the statements in the scale. Six items were negatively stated so their scores should be counted inversely (Cruz et al., 2018).

2.7. Analysis of data

The Statistical Package for Social Sciences 22 (SPSS-22) was utilized in the analysis of data for this study. For objective 1, frequency and percentage distribution were used to show the participants' profiles. For objective 2, to show the responses of the participants to the different domains of the QOLES

for Nursing Students Scale, mean, standard deviation and both minimum and maximum limits were used to present the results along with the four domains. For objective 3, the relationship between each demographic profile of the participants to their responses to the domains of the scale, the correlational results and p value shows the inferential statistical results of the data and lastly. And objective 4, the academic profiles as predictors of quality of life among nursing students, linear regression was employed where the dependent variable is the domain scores whereas the GPA served as the academic profiles.

3. Results and discussion

3.1. Results

Table 1 shows that the majority (77.7%) of the participants were below 20 years old. The remaining participants were 21-30 years old. Around half of the participants (51.2%) were males. For the academic classification, 320 participants were classified as regular whereas 92 were classified as bridging. Since most of them are regular nursing students (those who have no work experience as nurses, either before or currently) only 22.1% (or 91 out of 412) of them only had nursing related experience. These are the students who are considered bridging. In terms of GPA, most (126) of the participants obtained a grade of B, followed by 115 participants who got a grade of B+. Only 35 and 8 students obtained A and A+, respectively. On the other hand, 8.7% of the participants obtained a grade lower than C.

Table 2 presents the responses of the participant along with the four domains of the QOLES for Nursing Students. As can be seen, the highest average factor score went to the psychological domain (18.80). The lowest factor score for this domain is 15.96 and the highest is 21.04. It is followed by the average factor score for social relationships equal to 15.82, with the highest score of 20.07 and the lowest score of 11.68. Physical and environmental average factor scores are almost close to each other, 3.45 and 3.81, respectively.

Table 3 shows the Relationship of the demographic profile of the participants to their responses to the domains of the scale. It manifests the variables with p -values that are less than 0.05, indicating those variables have significant relationships. These variables are the psychological domain to age and academic classification to the psychological domain. Note that their correlations are negative, suggesting an inverse relationship between these variables. For both age and psychological domains, an inverse relationship means that older respondents (those participants whose age range are 21 to 30 years old) tend to have lower psychological domain scores. Equivalently, those who are younger (below 20 years old) tend to have higher psychological domain scores. For academic classification and psychological domain, an inverse relationship means that those who are

academically classified as bridging students tend to have lower psychological domain scores whereas those who are classified as regular tend to have higher psychological domain scores.

Table 1: Demographic profile of the participants N=412

		Count	Column N %
Age	below 20 years old	320	77.7%
	21-30 years old	92	22.3%
	31-40 years old	0	0.0%
	above 40 years old	0	0.0%
Gender	Male	211	51.2%
	Female	201	48.8%
Academic Classification	Regular	320	77.7%
	Bridging	92	22.3%
Nursing Related Experience	Yes	91	22.1%
	No	321	77.9%
	D	5	1.2%
	D+	31	7.5%
GPA	C	21	5.1%
	C+	71	17.2%
	B	126	30.6%
	B+	115	27.9%
	A	35	8.5%
	A+	8	1.9%

Table 2: Responses of the participants on the different domains of the quality of life for nursing students scale N=412

	Mean	Standard Deviation	Minimum	Maximum
Psychological	18.80	.86	15.96	21.04
Physical	3.45	1.07	.37	6.10
Social Relationship	15.82	1.45	11.68	20.07
Environmental	3.81	.72	1.53	5.98

Table 4 shows how academic profile (GPA) can become a predictor for the quality of life of nursing students along with the four domains namely psychological, physical, social, environmental and environmental. For the psychological domain and GPA, the R^2 is equal to 0.006². This means that only 0.0036% of the total variation of the psychological domain scores can be explained by GPA. As shown below (Sig column), the p -value for GPA is 0.905 > 0.05. This suggests that GPA has no significant contribution in explaining psychological domain scores.

In the physical domain, the R^2 is equal to ~0. This means that almost none of the total variation of the physical domain scores can be explained by GPA. As shown in Table 4, the p -value for GPA is 0.992 > 0.05. This suggests that GPA has no significant contribution in explaining physical domain scores. In terms of the social domain, the R^2 is equal to 0.004. This means that only 0.4% of the total variation of the social relationship domain scores can be explained by GPA. It can be inferred from Table 4 that for the social domain, the p -value for GPA is 0.206 > 0.05. This suggests that GPA has no significant contribution in explaining social relationship domain scores. On the other hand, the environmental domain, the R^2 is equal to 0.003. This means that only 0.3% of the total variation of the environmental domain scores can be explained by

GPA. While for the environmental domain, the p-value for GPA is $0.272 > 0.05$. This explains that the

GPA has no significant contribution in explaining environmental domain scores.

Table 3: Relationship between each demographic profile of the participants to their responses to the domains of the scale
N=412

	Psychological		Physical		Social Relationship		Environmental	
	Corr	p-value	Corr	p-value	Corr	p-value	Corr	p-value
Age	-0.127	0.01	0.046	0.35	-0.055	0.264	-0.088	0.074
Gender	-0.063	0.199	0.045	0.366	0.045	0.366	-0.043	0.381
Academic Classification	-0.127	0.01	0.046	0.35	-0.055	0.264	-0.088	0.074
Nursing Related Experience	0.025	0.609	0.025	0.609	-0.003	0.947	0.057	0.245
GPA	0.006	0.905	0.006	0.905	-0.062	0.206	0.054	0.272

Table 4: Academic profiles (GPA) as predictors of quality of life of nursing students

Dependent Variable (Domain)	R ²	t value	Sig.
Psychological domain	.006	122.935	0.000
		.120	0.905
Physical domain	0.000	18.073	0.000
		-.010	0.992
Social domain	0.004	62.496	0.000
		-1.265	0.206
Environmental domain	0.003	28.573	0.000
		1.101	0.272

3.2. Discussion

Several studies show that between the age of 15-21 years, stressors and stress become one of the major affectations in their quality of life (Ridner et al., 2016; Yang et al., 2019; Torres and Paragas, 2019; Walker et al., 2019). The role of self-efficacy and its association with the life satisfaction and quality of life experiences of adolescents has become more profound (Moksnes et al., 2019). Female nursing students manifest a more dynamic resilience to stress as shown in some studies that relate to their experiences in some health related context. In their advocacy on the use of contraceptives as an example, they exemplify a more positive view of the social relevance of some issues (Moritz et al., 2016). Male is in some other ways resilient to stress while at some instances, the females have a more positive perspective about quality of life especially when the struggles are experienced during a period where the learning environment is more favorable on many occasions (Moura et al., 2016).

Apparently, the psychological domain has the highest number of responses among the four domains of the QOLES questionnaire. This can be explained by the presence of institutional counselors and psych pedagogic support programs in the university. Through these help centers, the negative impact of academic stress to the participants can be minimized. This can become more valuable for students who have a higher vulnerability of having psychological and mental problems (Oztasan et al., 2016).

There are multifactorial causes of how nursing students view life having quality through their academic journey. This can be seen in their health behavior and activity patterns. As provided in some studies, there are relevant causes and factors of how health behaviors continually change overtime among nursing students. Those who are fulltime students were more focused and are less time in social

activities compared to those who enrolled a few units in a semester (Rania et al., 2014). While for the physical and environmental domains having the least score of responses, these can be attributed to the lack of opportunities where students should be involved in physical activities in the schools and socially to their communities. It has been recognized that physical activities that are utilized as stress management activities can provide a sense of wellness among students. If nursing students are to provide health services such as education and nursing care to their clientele, they must be optimally functional to carry on with these tasks (Ridner et al., 2016).

On the other hand, there are activities and social engagements that could provide a more positive perspective on the quality of life among students. In Ecuador, students participate in community projects and activities that seek to enhance collaboration among and within the community and the university. The program sought to determine how these activities can improve and create a positive impact on students having some difficulty adjusting to their academic life (Chu et al., 2015). As reflected in the results, the younger participants have a higher psychological domain compared to the older ones. Previous studies have shown that among the Asian population of nursing students, there is a dramatic increase in the incidence of depression (43.0%). This finding would show that the prevalence of depression among nursing students in any part of the world bears an important message to administrators and policy making bodies. There should changes and reforms in nursing education that address this dilemma. This is to ensure that nursing students' wellbeing is safeguarded even inside academic communities (Souza et al., 2012).

In a study conducted by Graves et al. (2017), work provides a positive experience for adolescents especially those work and study at the same time. However, it takes a toll to their perceived quality of life. It has been ascertained whether employment and studies provide a positive impact on the overall wellbeing of a person or it will only make life more unsatisfying to them (Torres and Paragas, 2019). Several published studies have been compiled to provide a clearer picture of the satisfaction and quality of life among nursing students. It was found out in an integrative review that among several factors, the qualities such as authentic learning, motivation, resilience, support and collaboration are

the key factors towards having a satisfactory learning experience. It has been concluded as well that the academic journey of nursing students becomes more satisfying and fulfilled when they feel a sense of belongingness and received support from their peers and co-students (Tung et al., 2018).

In this study, it showed that GPA, as an academic variable, is not a predictor of quality of life among nursing students. This is supported by a study in the USA where it was found that physiologic indices like rest and sleep when satisfied, can enhance the quality of life of students. Further, it was suggested in the study that promoting the importance of a quality sleep pattern maybe enhance their sense of well-being and general quality of life as students (Walcott et al., 2018). This finding was supported by the study of Oztasan et al. (2016) that when the quality of life is low and unsatisfying for students, the mental symptoms increase. They conducted a survey of university students to determine the incidence of mental health issues related to the quality of life. The results manifest a perfect positive correlation between mental health problems and the low level of quality of life among the student participants (Walker et al., 2016). This is supported partly by the study of Moura et al. (2016) where they determined the factors affecting the difficulties experiences by nursing students. They proposed that a sustainable solution must be put into place such as strategies to augment the academic difficulties and struggles of nursing students during their studies (Aboshaiqah and Cruz, 2019).

4. Conclusion

The quality of life of students, not only nursing students, while in the university is a mix of unrest and steady situations. Nevertheless, students are capable of coping with the changing and enduring climate of academic life. At some point, this can be advantageous to them in order to create in them the values of resilience as well as techniques for survival. However, the university community should be taking apart as well on how to minimize the impact of these events to the students. The school heads and administrators may take precedence in integrating into the nursing curriculum some programs where students can engage (Yang et al., 2019).

Compliance with ethical standards

Ethical clearance

The Ethical Permission of this study was provided by the Institutional Review Board of the University of Hail.

Conflict of interest

The authors declare that they have no conflict of interest.

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