NURSING AND RADIOGRAPHY STUDENTS’ PERCEPTIONS OF THEIR WELLBEING AT THE SCHOOL OF NURSING, UNIVERSITY OF NAMIBIA.


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ABSTRACT
This paper discusses a report of perception of wellbeing among nursing and radiography students at the School of Nursing of the University of Namibia. A mixed method of descriptive, analytical quantitative and qualitative study was conducted to gather data on self-report perception of wellbeing among the study and target population of 440 students with a response rate of 95% (n = 383), through a self-administered questionnaire that focused on the six subcomponents of wellbeing. Descriptive and analytical analysis were applied to describe participants’ perceived wellbeing and to determine possible associations between the perceptions of wellbeing as a dependent variable and the independent variables. The findings indicated a significant overall low level of perceived wellbeing among all students irrespective of the study programme and levels of studies.

KEY WORDS: Nursing, radiography, students, perceptions, wellbeing.

INTRODUCTION
Wellbeing is a concept that entails a variety of diverse meanings, and is influenced by different social contexts. The explanation of this concept by Swartz, De La Rey and Duncan (2006), although focusing more on mental health, includes markers such as realization of own abilities, work productively, being capable of contributing to the community as well as the ability to form a meaningful interpersonal relationships with others. Therefore, wellbeing incorporates health and health needs in their broadest sense. In this regard, the World Health Organization, as quoted by Shih, Gau, Mao, & Chench, (2001) states that health needs should include physical, mental, spiritual and social, domains of an individual.

Nursing and radiography students who pursue their studies at academic institutions also have needs relate to physical, emotional, spiritual and mental challenges in various ways. Many students may also have limited financial (Ratanasiripong, Ratanasiripong & Kathalae, 2012) and social support to rely upon. Therefore, it is imperative that students’ “needs” or wellbeing be taken into account at all the levels as it could positively contribute to a healthy academic life at institutions of higher learning.

This study focused on six sub-components of wellbeing, assumed to be indicative of student wellbeing. These subcomponents are spiritual wellbeing, physical wellbeing, social wellbeing, financial wellbeing, emotional wellbeing and mental wellbeing. It could thus be argued that if these sub-components are not addressed at an optimum level, students would find it difficult to achieve their full potential.

Spirituality is regarded as one of the first life tasks and the core of wellness (Swartz, De la Rey, & Duncan, 2006). Spirituality is however but one of the subcomponents, which are interlinked. As economic status could have an impact on students’ physical and mental health, (Wray & McCall, 2007), so is a supporting family environment, and social networks being linked to social wellbeing (American Psychological Association, 2016) and all of which influence quality of life (Keyes,2007). Optimal student wellbeing enhances effective learning and contributes to the successful advancement of studies. Anecdotal evidence usually derived from the biannual student forums, where students are given an opportunity to raise concerns about aspects that influence teaching and learning and, indirectly, their wellbeing, reveals that nursing and radiography students are often exposed to circumstances which are not supportive to their wellbeing. This information had never been formally documented, and thus the Faculty of Health Sciences had no data on how students perceive their wellbeing. Without specific data on students’ perceptions of their
wellbeing, it was not possible to develop or initiate strategies to support student wellbeing at the School of Nursing. In order to develop effective strategies to address the wellbeing related needs of the students appropriately, cognisance needs to be taken of the way students perceive themselves in relation to these six components of wellbeing. Anecdotal evidence of exposure to circumstances which are not supportive is suggestive of a study, the results of which could assist in the development of a support system to enhance students’ wellbeing at the School of Nursing. The envisaged improved well-being could enable the students to focus better on their studies and eventually a positive impact on their academic performances and even healthier interactions between the students and the academic staff.

**Aim and objectives**

The aim of the study was to determine the perceptions of Nursing and Radiography students regarding their wellbeing during their course of studies at the Faculty of Health Sciences. The objective was to describe the perception of their wellbeing as Nursing and Radiography students at the School of nursing, University of Namibia and to analyze factors that influence the students’ wellbeing.

**2. METHODOLOGY**

A mixed method of descriptive, analytical quantitative and qualitative study was conducted during October 2013 to determine the nursing and Radiography students’ perception of their well-being as students. The study and target population included all 440 Nursing students (both undergraduate and postgraduate) and Radiography students, males and females who were registered for the 2013 academic year at the School of Nursing, University of Namibia, Windhoek campus. However, given the availability of the students during the time of data collection, a convenient 403 students who were accessible, participated in the study. A response rate of 95% (N = 383) was accordingly obtained.

A self- administered questionnaire that focused on the six subcomponents of wellbeing (spiritual, emotional, physical, financial, mental and social) was administered. The subcomponents of the questionnaire were identified from the literature review of the “Wellness Wheel” of the University of Michigan (2015) and items under each component were adjusted and compared to related instrument by Erwee (2013) at the Psychology department of the University of Namibia.

Data were analysed with the assistance of a statistician, using SPSS version 21. Descriptive and analytical analysis were applied to describe their perceived wellbeing and to determine possible associations between the perceptions held by students, the academic year and programme they were registered for, and their gender. As part of the descriptive analysis, the data were categorised into three possible ordinal ratings. The first rating option and the lowest one included responses with no positive perceptions, the second rating option included those with only a few positive perceptions, and the final and highest rating option included those with mostly positive perceptions. Both the descriptive and the analytic analysis focused on the highest and final rating option, as this option was the goal to be attained.

The Pearson correlation coefficient (r), Spearman correlation coefficient and linear regression analysis were used to correlate academic year, programme enrolled for and gender with perceptions.

**3. THE FINDINGS**

In this section, the population will firstly be described, followed by the presentation of self-reports of the students regarding their perceptions of the six items related to wellbeing. The findings indicated that of the 383 respondents, 19.8% (n = 76) were males and 80.2% (n = 307) were females. The description of the population with regard to the academic profile is provided in figure 1.

![Figure 1: Participants’ levels of studies](image-url)
A further analysis revealed that 41.5% (n = 159) of the students was enrolled for the Bachelor in Nursing (Hons), 42% (n = 161) was enrolled in the Diploma in General Nursing Science and Midwifery, and 14% (n = 54) in the Bachelor in Radiography (Hons), while 2.3% (n = 9) was enrolled for postgraduate diploma nursing courses as described below in figure 2.

![Study Programme (n=383)](image)

**Figure 2: Study programmes for the participants**

The next sessions present the quantitative findings on the respondents’ self-reported perceptions of well-being.

### 3.1 Spiritual wellbeing
Assessment of spiritual wellbeing focused on students’ perceptions of their own gratefulness, inner peace and harmony together with joy and optimism. From the data it emerged that 63.7% (n = 244) of the students indicated mainly positive perceptions. From a descriptive point of view, more than a third of the respondents therefore do not experience optimum spiritual wellbeing. No statistically significant differences were found between the students of different academic year groups and their perceptions of spiritual wellbeing (p = 0.712). Likewise, no statistically significant differences were found between respondents’ gender and perception spiritual wellbeing (p = 0.351), or between the study programmes and perceptions of spiritual well-being (p = 0.375).

### 3.2 Physical wellbeing
Physical wellbeing encapsulated three perceptions, namely, involvement in physical activities, following a healthy diet, and inner vitality. In this item, 30.9% (n = 118) of the respondents indicated positive perceptions about physical wellness. More male students reported positive perceptions concerning their physical activity (p = 0.013) (see Table 2). Another statistically significant difference was found between the respondents from the different study programmes and the way they perceived their physical wellbeing. The students from the Bachelor of Nursing (Hons) degree indicated lesser positive perceptions than students from the other programmes (p = 0.031) (see Table 3).

### 3.3 Social wellbeing
Three perceptions relating to social wellbeing were assessed for, namely, perceptions regarding their demeanour, whether they had friends and family to rely on, and finally, whether they were liked. From a descriptive perspective, it emerged that 78% (n = 298) of the students reported positive perceptions. No statistically significant differences were found between the different levels of studies (p = 0.0831), gender (p = 0.526), programmes enrolled for and perception of social wellbeing (p = 0.955).

### 3.4 Financial wellbeing
The item on financial wellbeing focused on perceptions on insurance, standard of living and ability to manage budget/bursary affairs effectively. From a descriptive perspective, it emerged that only 40% (n = 153) of the students had positive perceptions of financial wellbeing. No statistically significant differences were found between the different levels of studies (p = 0.118), as well as none between the respondents of different genders (p = 0.486). There was, however, a statistically significant difference between the study programme and the perceptions of financial wellbeing. Students who enrolled for the Bachelor of Nursing (Hons) degree perceived their financial wellbeing less positively than the Diploma in General Nursing and Midwifery students, the Bachelor of Radiography (Hons) students and the postgraduate students (p = 0.001) (see Table 3).

### 3.5 Mental wellbeing
Mental wellbeing focused on students’ personal perceptions of whether they had a positive attitude towards themselves, others and life in general; whether they adhered to a healthy diet; their perceptions of their memory and their ability to concentrate.
From a descriptive perspective, it emerged that 65.6% (n = 251) of the respondents had positive perceptions of their mental wellbeing. No statistically significant differences were found in terms of mental wellbeing between the different levels of studies (p = 0.0239). However, a statistically significant difference was observed among the students registered for the Diploma in Nursing and Midwifery and the students registered for the postgraduate diploma, as students from these two programmes indicated more positive perceptions of mental wellbeing than the students enrolled for the Bachelor in Nursing (Hons), and the Bachelor in Radiography (Hons) (p = 0.001) (see Table 3).

3.6 Emotional wellbeing
Perceptions of emotional wellbeing focused on aspects such as the management of anger, self-perceptions of being a patient person and personal perceptions regarding their ability to concentrate. In this item, an average 55.9% (n = 214) of the students had mainly positive perceptions. A statistically significant difference was found between the respondents from the different levels of studies (p = 0.022).

The findings also indicated that students registered for the Bachelor in Radiography (Hons) indicated fewer positive perceptions on emotional wellbeing than students in the other three programmes (p = 0.002) (see Table 3).

Positive perception of well-being according to the levels of studies, genders and study programmes are presented individually in tables 1, 2 and 3 respectively.

Table 1: Positive perceptions of well-being according to academic year of the respondents (n = 383)

<table>
<thead>
<tr>
<th>Mostly positive perceptions</th>
<th>First-year students</th>
<th>Second-year students</th>
<th>Third-year students</th>
<th>Fourth-year students</th>
<th>Post graduate students</th>
<th>Average all year groups</th>
<th>Chi-squared tests: Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual wellbeing</td>
<td>65.7</td>
<td>63.5</td>
<td>55.6</td>
<td>71.7</td>
<td>77.8</td>
<td>63.7</td>
<td>0.712</td>
</tr>
<tr>
<td>Physical wellbeing</td>
<td>27.7</td>
<td>30.5</td>
<td>38.5</td>
<td>20.8</td>
<td>62.5</td>
<td>30.9</td>
<td>0.055</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>74.5</td>
<td>74.4</td>
<td>82.2</td>
<td>83.6</td>
<td>87.5</td>
<td>78.0</td>
<td>0.831</td>
</tr>
<tr>
<td>Financial wellbeing</td>
<td>38.6</td>
<td>27.6</td>
<td>40.0</td>
<td>29.1</td>
<td>37.5</td>
<td>40.0</td>
<td>0.118</td>
</tr>
<tr>
<td>Mental wellbeing</td>
<td>55.8</td>
<td>66.9</td>
<td>75.0</td>
<td>63.6</td>
<td>77.8</td>
<td>65.6</td>
<td>0.239</td>
</tr>
<tr>
<td>Emotional wellbeing</td>
<td>43.8</td>
<td>53.9</td>
<td>68.5</td>
<td>61.8</td>
<td>66.7</td>
<td>55.9</td>
<td>0.022*</td>
</tr>
</tbody>
</table>

* Significant at p < 0.05.

Table 2: Comparisons of positive perceptions about their well-being by male versus female students (n = 383)

<table>
<thead>
<tr>
<th>Mostly positive perceptions</th>
<th>Males</th>
<th>Females</th>
<th>Chi-squared tests: Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual wellbeing</td>
<td>55.6</td>
<td>65.5</td>
<td>0.351</td>
</tr>
<tr>
<td>Physical wellbeing</td>
<td>41.9</td>
<td>28.3</td>
<td>0.013*</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>73.0</td>
<td>79.0</td>
<td>0.526</td>
</tr>
<tr>
<td>Financial wellbeing</td>
<td>26.1</td>
<td>35.2</td>
<td>0.486</td>
</tr>
<tr>
<td>Mental wellbeing</td>
<td>62.3</td>
<td>66.5</td>
<td>0.748</td>
</tr>
<tr>
<td>Emotional wellbeing</td>
<td>58.4</td>
<td>55.4</td>
<td>0.874</td>
</tr>
</tbody>
</table>

* Significant at p < 0.05.
Table 3: Positive perceptions of well-being by students from different study programmes (n = 383)

<table>
<thead>
<tr>
<th>Mostly positive perceptions</th>
<th>Bachelor of Nursing</th>
<th>Diploma in Nursing</th>
<th>B Rad</th>
<th>Postgraduate Diploma</th>
<th>Chi squared tests: Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson chi-square</td>
<td>Likelihood ratio</td>
<td>Linear-by-linear association</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiritual wellbeing</td>
<td>64.8</td>
<td>60.9</td>
<td>66.7</td>
<td>77.8</td>
<td>0.373*, 0.261*, 0.284*</td>
</tr>
<tr>
<td>Physical wellbeing</td>
<td>18.8</td>
<td>42.9</td>
<td>26.9</td>
<td>62.5</td>
<td>0.000*, 0.000, 0.031*</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>76.5</td>
<td>79.5</td>
<td>75.5</td>
<td>87.5</td>
<td>0.955, 0.940, 0.810</td>
</tr>
<tr>
<td>Financial wellbeing</td>
<td>25.0</td>
<td>41.3</td>
<td>37.7</td>
<td>37.5</td>
<td>0.001**, 0.001, 0.002*</td>
</tr>
<tr>
<td>Mental wellbeing</td>
<td>62.2</td>
<td>75.5</td>
<td>50.0</td>
<td>77.8</td>
<td>0.001*, 0.000, 0.572</td>
</tr>
<tr>
<td>Emotional wellbeing</td>
<td>52.2</td>
<td>64.2</td>
<td>40.7</td>
<td>66.7</td>
<td>0.002*, 0.004, 0.082</td>
</tr>
</tbody>
</table>

* Significant at p <0.05.

4. DISCUSSION, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The aim and objective of the study was to determine and describe the perceptions of Nursing and Radiography students regarding their well-being during their course of studies. In the next sessions, the findings are discussed and placed in context of relevant existing literatures.

4.1 DISCUSSIONS

The first component to be discussed is spiritual wellbeing. A third of the students did not perceive themselves to be spiritually well. Academic challenges seem overwhelming every day. Since spirituality is regarded as one of the first life task and core of wellness (Swartz, De la Rey, & Duncan, 2006) the findings might imply an impediment with limited optimism and peace at a very basic level of life. An interesting finding was that no differences were found between the respondents from different levels of studies. The findings are in concurrence with findings from a similar study conducted in Iran, where no differences were found between the first and fourth-year nursing students with regard to perception of spiritual wellbeing and spiritual care (Abbas, Farahani-Nia, Givari, & Haghani, 2014). Moreover, and as was the case with the Iranian study, the researchers expect the fourth-year nursing students as a result of their longer experience of awareness of spiritual wellbeing as compared to the first and second year students. A positive perception of well-being by students would have a positive impact on their academic performances.

Furthermore, in a secularly Namibia, Christianity is the major religion practised. Health and disease are therefore often understood and expressed by spiritual symbols and practices. Positive self-perception on the part of a nurse could therefore enhance the delivery of holistic care to the clients.

Physical well-being is the second component to be discussed. The results revealed that less than a third of students performed physical exercises. The findings are supported by those of the study conducted in Hong Kong, which indicate that only 31.2% of students engage in regularly exercise, with males doing more physical activities than females (Lee & Yuen Lokes, 2005).

Poo physical exercises by the study participants is explained by the fact that courses for Nursing and Radiography students take up at least 40 hours a week of their available time for either theoretical or practical requirements (School of Nursing, 2013). Hence, they have less time to perform physical exercises. Therefore, Gibbons, Dempster, and Moutray (2010) in their study on stress, coping and satisfaction among nurses, concludes that student nurses’ long hours of study and their lack of free time deprive them of chances to perform physical exercises to maintain well-being.

The third component was social wellbeing. The clarification of the concept of social wellbeing in this study emphasises the support that the students need in order for them to engage with their studies effectively. In this study, students reported to have social support systems in place. Montes-Berges and Augusto (2007) asserts that students in health-related fields have diverse needs for support because their studies requires mastery of theoretical knowledge and clinical skills while often they have family responsibilities, which may require support from various sources. Therefore, Ugwu and Agwu (2010) conclude that a visit from a friend or interactions in group discussion can facilitate wellbeing and motivation for students in health discipline.

The fourth component was the financial wellbeing of the students. The participants in general did not perceive themselves to be doing well financially. This finding is in line with the findings of an analogous study on the stressors among nursing students by Lo (2002) who also rates financial burden as a second stressor among student nurses. By implications, financial burden does have an impact on students’ physical and mental health (Wray &
McCall, 2007). When the students have financial difficulties, it infringes on their studies as they might have concerns of unsettled tuition fees and the acquisition of study material. Therefore, in a study which focused on determining the attractiveness of Radiography as a career choice in the United Kingdom, financial costs were believed to dissuade many participants from considering a career as a radiographer (Coombs, Park, Sloan-Clarke, Preston, & Wilkinson, 2003).

In the context of this study a positive perception of financial wellbeing by the students other than the Bachelor of Nursing Science students at the SoN, the Bachelor of Nursing Science students are fairly explained by the facts that the Diploma in Nursing and Midwifery students as well as post-graduate students were on study leave, and therefore they received substantially financial incentives from their employers. Furthermore, radiography students are also likely to be financial secured, because given their limited number, they all are likely to be beneficiaries of the government scholarship scheme.

The fifth component of the study focused on mental wellbeing. In congruent with other studies which discovered depression among nursing- and radiography students (Ratanasiripong & Wang, 2011; Ugwu and Agwu 2010), the finding indicated that at least a third of all the respondents did not report having positive perceptions of mental wellbeing a status which could have a negative effect on their cognitive output and academic performances.

Similar to the findings from other studies, (Roos, Viljoen, Van der Merwe, & Fichard, 2015), higher self-reported positive perceptions of mental wellbeing were reported among the participants from the Diploma in Nursing and Midwifery and those from the post-graduate studies. The reason for this difference may be due to the fact that students for a Diploma in Nursing and Midwifery and post-graduates studies are professionals who are familiar with the expectations and had developed support systems, while the undergraduates were still novices with little knowledge on coping. Therefore, the findings confirmed Montes-Berges and Augusto (2007)’s claim that there is a positive correlation between social support and mental health among nursing students.

The final component of the study dealt with emotional wellbeing, which may be a function of wellbeing of other components. The finding revealed that few students perceived themselves to be emotionally well. Thus the findings substantiated the findings by Aitken et al. (2012), which indicates 42% of the nurses surveyed described themselves as “burned out”. Thus a perception of low emotional wellbeing and stress is common among students of health disciplines. This may be a result of exposure to the life-threatening situations of clients or patients. Concurrently, a large percentage of the study participants perceived themselves to be emotionally unwell and as the literature concludes, they are vulnerable to stress (Montes-Berges & Augusto, 2007).

Unlike other studies which claim that qualified radiographers tend to present themselves as confident and cheerful with good self-control, thus scoring higher than other professionals on aspects of wellbeing, (Mackay, Hogg, Cook, Baker, and Dawkes, 2012), the findings from this study has proven differently. Radiography students also present a self-report of perceived lack of emotional wellbeing.

4.2 CONCLUSION
The findings demonstrated an overall low level of perceived wellbeing by nursing and radiography students. An exceptional demonstration of a satisfactory positive perception of spiritual wellbeing (63%) and mental wellbeing (65.9) by post-graduate and Diploma in Nursing and Midwifery rather reflect their professional-based support systems, but not necessary that study environment promotes wellbeing for the students. Therefore, undergraduate nursing and radiography students who do not have professional-based support systems demonstrated lower perception of wellbeing with regard to all six components of wellbeing. The results and subsequent discussion allured to a possible Faculty input at both the teaching and planning level, with mentoring being a possible strategy to provide for the wellbeing of students.

4.3 Recommendations
Given the findings, recommendations were made with regard to teaching, mentoring and recreation for the School of Nursing to provide for the wellbeing of students. Teaching activities, especially clinical practical, should be aligned with the academic year of students to limit early exposure to potentially stressful environments. Mentoring by lecturers or peers could also assist in enhancing emotional, social and mental wellbeing. The importance to actively plan for recreation and for recreation and relaxation time should form part of an initial orientation programme for first-year Nursing and Radiography students.

4.4 Limitations of the study
The inclusion of the narrative responses of students could have added additional depth to the findings.

5. ETHICAL CONSIDERATIONS
Ethical clearance was obtained from the Research and Publication Committee in the School of Nursing.

The questionnaire was distributed by a lecturer to all the students after verbal informed consent had been obtained. The participants were also assured that participation was voluntary and anonymity was - ensured. as the participants were identified by codes. The
questionnaires were collected by the class representatives to ensure anonymity and safe-kept by the researcher.

ACKNOWLEDGMENTS
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CONTRIBUTIONS
All the researchers have made an equally valuable contribution to the writing of this article.

CONFLICT OF INTEREST DISCLOSURE
The researchers declare that they have no financial or personal relationship(s) which may have influenced them inappropriately in the writing of this paper.

REFERENCES