



Utilization of student support services by undergraduate students in Nursing Education Institutions in South Africa



Thembekile Purity Skakane-Masango ^(a) Ntombifikile Gloria Mtshali ^(b) Sandiso Ngcobo ^{(c)*}

^(a) Doctoral candidate, School of Nursing and Public Health, University of KwaZulu Natal, Durban, South Africa

^(b) Professor, School of Nursing and Public Health, University of KwaZulu Natal, Durban, South Africa

^(c) Professor, Department of Communication, Mangosuthu University of Technology, Durban, South Africa

ARTICLE INFO

Article history:

Received 12 September 2022

Received in rev. form 21 Oct. 2022

Accepted 31 October 2022

Keywords:

Student support, academic success, throughput rates, undergraduate students, nursing education institutions (NEIs)

JEL Classification:

I18, I23

ABSTRACT

This article aimed to investigate the availability and utilization of support services by undergraduate (UG) students in a nursing education institution in South Africa. The article employed a quantitative non-experimental descriptive design, using a self-administered questionnaire, to collect data from 118 participants selected through a non-probability random sampling method. The IBM SPSS software was utilized for data analysis, frequencies to illustrate the availability and utilization of student support services and Spearman's correlation test to determine the relationship between variables. The results showed high awareness of 82.1% to 91.3% for the remedial programs, availability of lecturers for appointments, medical services, and compulsory orientation. Positive correlations were observed between service utilization, school type, place of origin, and parent employment status. The results reflected areas where student support can be improved to address this problem, from pre-enrolment to graduation. There is a need to improve awareness and utilization of the available student support programs through policy formulation and quality enhancement programs for impact and improvement.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

The nursing education institutions (NEIs) have been integrated from provincial departments to the national higher education (HE) sector, as such, their programs must meet the Council on Higher Education (CHE) accreditation criteria, including providing the required student support (Mtshali & Zwane, 2019). Student support is particularly of interest here because it has been pronounced by CHE in its quality audits as playing the pivotal role of improving student academic success (CHE, 2014). In the same vein, the South African Nursing Councils (SANC, 2005) which sets standards for nursing education and training emphasizes student support as one of its criteria. In its annual report, the Department of Higher Education and Training (DHET, 2013) also states as one of its outcome-oriented goal, the improvement of post-school education and training (PSET) through among others, student support. To comply with this criterion, the KwaZulu-Natal (KZN) provincial nursing education institution (NEI), has as one of its strategic plan's objectives to see on the "establishment of an academic support system for students" (SANC, 2020). Concern with student academic success has been brought to the fore because of the noted severe shortage of nurses and midwives. For this reason, ensuring effective student support systems for academic success is deemed as imperative (Ramkilowan, 2014), if we are to ensure that students complete their training on time (Tinto, 2014 & 2017). More so because nurses are part of the health sector which is considered as the most valuable sector for human lives in countries with struggling economies, such as South Africa, if they are to experience growth (Iwu et al., 2021).

In South Africa the Nursing Strategy associates nurse shortage with poor academic success, brain drain, retirements, and natural attrition (DHET, 2013; Health System Trust (HST), 2013). However, attrition is a global problem, with resultant economic implications and shortage of workforce (Roos et al., 2016; Mudaly & Mtshali, 2018). For instance, the 2010 attrition rate in the

* Corresponding author. ORCID ID: 0000-0002-8256-4453

United States of America was at 42% and in the United Kingdom it hovered in the 25-30% range among undergraduate nursing students (Mthimunye & Daniels, 2019). In South Africa the situation is concerning noting that the South African Nursing Council (SANC) (2017) report presented an alarming figure in which 2017 witnessed a case of 82% of student nurses that were repeating the first year of their study nationally. Provincially, Ramkilowan (2014) reported that students in a KZN NEI experience numerous challenges which result in poor academic outcomes. Likewise, students from Technical and Vocational Education and Training (TVET) colleges experience high attrition rates due to inadequate academic support (Zulu & Mutereko, 2020), and a myriad of psychological issues (Muchineripi, 2017).

Evidently, the above-mentioned throughput and attrition issues are both academic and non-academic. Seshabela et al., (2020) grouped them into personal, academic and institutional, and research-related challenges. Though non-academic in nature, socio-economic challenges warrant attention as they affect student performance. Mthimunye and Daniels (2019), drawing from several scholars, caution that the throughput rate among student nurses has not improved in recent years and this should be considered as a serious threat to the health of the nation as it implies a failure among nursing schools to produce the much-needed workforce.

There is therefore the need to strengthen student support services as one of the measures to improve student throughput in the nursing field (Mudaly & Mtshali, 2018). However, research in this area is lacking, which has prompted this article to close this gap by undertaking an investigation on the availability and utilization of support services by undergraduate (UG) students in the NEIs. The focus on students is made important because of a myriad of internal factors that contribute to students' academic challenges, for instance, "student's profile, academic factors, psychological and emotional factors, as well as family factors such as family background and economic and policy related factors" (Mthimunye & Daniels, 2019).

The concern with higher education students is made critical at this point because of the reported anxiety and stress they experienced during the Covid-19 pandemic lockdowns when they were forced to study online with poor or no support from their institutions, families and friends (Halis & Yıldırım, 2022). The insufficient support university students often receive is due to the misconception that they are old enough to take responsibility for their education (Halis & Yıldırım, 2022). There is consensus among scholars that student support services at TVET Colleges are inadequate and receive low prioritization and this negatively affects completion rates (Muchineripi, 2017; Ngubane, 2018). In South Africa availability of student support to all students is a requirement by CHE (Badat & Sayed, 2014; CHE, 2014) and CHE (2020) program accreditation. Moreover, with the transition of NEIs into HE, student support demands strengthening (CHE, 2014 & 2020; Adi Badiozaman et al., 2020; Zulu & Mutereko, 2020). Literature show scarcity of studies on student support services at large in the NEI, however recent studies mostly focused on mentorship and tutorials (Mlaba & Emmamally, 2019; Mhlongo & Masango, 2020; Buthelezi, 2019). Given the challenges of undergraduate (UG) students' academic outcomes, the article sought to investigate the availability and utilization of student support in a KZN NEI's two campuses.

In investigating this area, the article adopted the University of KwaZulu-Natal's (UKZN) academic monitoring and support (AMS) framework, which was developed by the Faculty of Health Sciences in 2006, as an approach to interrogate throughput and attrition challenges in nursing education and training. This student-centered framework has three core support dimensions i.e., Student-centered curriculum, Academic support, and Psycho-social support.

The framework has four phases of support from pre-admission, through training, completion and transition to employment. Firstly, the pre-enrolment phase comprising voluntary peer counseling and career guidance counseling; secondly the integration phase, involving assimilation to university life; thirdly the engagement phase of monitoring academic performance for timeous risk identification and intervention; lastly the transition phase in preparation for the work environment (Mudaly & Mtshali, 2018). However, this article limits itself to the first three phases of the framework as it investigates the availability and utilization of student support services in the selected nursing education institution.

Following this background information on policy and literature, the next part of the article outlines research and methodology. This is followed by findings and their discussion. Finally, the article is concluded.

Research and Methodology

Research design

The study adopted a quantitative approach and a non-experimental descriptive design. In adopting a quantitative approach, the researcher used numerical data to generalize findings to the entire population of UG students and to measure the student support variable, and identify trends (Maree, 2010; Polit & Beck-Tatano, 2016; Creswell & Creswell, 2017). The descriptive design enabled the researcher to describe the phenomenon of student support as it naturally occurs, no experimentation was involved (Polit & Beck-Tatano, 2016).

Research setting and study participants

The research setting is the province of KwaZulu-Natal in South Africa with a focus on two campuses of a KZN NEI representing its catchment areas and offering a four-year Nursing Diploma course. Participants were students from second, third and fourth year of training.

Recruitment process

The non-probability random sampling was employed to purposely select participants who were knowledgeable about the phenomenon being studied (Maree, 2010; Brink et al., 2012, Gray et al., 2016), and were willing to participate. The inclusion criteria for the study were students from second to fourth year of training, first-year students were excluded.

Data collection

Data were collected using a self-administered questionnaire (SAQ) that had two sections. Section A focused on participants' demographic data, which included participants' gender, age, marital status, type of high school attended, number of dependents, parents' highest level of education and type of high school attended. Section B comprised constructs from the conceptual framework which were to determine the availability and utilization of support services during pre-enrolment, integration, and engagement phases. Constructs such as participants' awareness of available student support services and type of support services utilized at different phases in the continuum of student support, including academic, psychosocial, and financial support.

Data were collected over a period of three months from January 2020 to March 2020, before the pronouncement of lockdown. As per arrangement by the researcher, on visiting the campuses for data collection, the study was explained to the participants as well as the rights of the participants before obtaining the written informed consent. Free classrooms were used for completing questionnaires. Completing the questionnaire took 45 minutes up-to an hour. A total of 172 questionnaires were distributed and 118 were returned and sealed in an envelope. The response rate was 69%.

Validity and reliability of the instrument

The validity of the instrument was ensured by presenting it to the research supervisor for guidance and thereafter to the NEI management and research committee for scrutiny. The researcher was advised to improve the technical presentation of the questionnaire to be more user-friendly and to capture the exact age of the participants, not the age range. For test-retest reliability, the researcher administered the instrument twice to a cohort of twelve participants who were drawn from two campuses. There was a three-week interval between the first and second administration of the questionnaire. Reliability was measured using Cronbach's Alpha coefficient to evaluate the internal consistency and accuracy of the instrument. The coefficient score was 0.8, which is an acceptable to good score (Polit & Beck-Tatano 2016).

Analysis and Findings

Statistical analysis was done using the IBM SPSS, and data were presented through descriptive and inferential statistics displayed in frequency tables, standard deviation (SD), and mean. These statistics were presented using figures and percentages. The Spearman's correlation test was employed to determine the relationship between demographic and student support variables (LoBiondo-Wood & Haber, 2014; Polit & Beck-Tatano, 2016).

Ethical clearance was obtained from UKZN's research ethics committee (Ref: HSSREC00000707/2019), and permission to conduct the study was granted by the KZN Department of Health (DoH) and the NEI gatekeepers. Pre-coded questionnaires to identify each site were used and participants were assigned numbers for anonymity.

Findings

The following results and discussion are based on the data collected from the participants. Data collected from 118 participants shows a high response rate of above 65% recommended response rate, which has a relatively small risk of bias (Polit & Beck-Tatano, 2016).

The mean age for participants was 27.6 and ranged from 18 to 45 years, the majority (89%) were females, whilst 11% were males and only 11.9% were married. 39% of participants' parents reached HE level; their employment rate was 50.8%. The results revealed that 33.1% of participants attended rural schools, 45.8% attended township public schools, and the rest were from urban areas.

Availability and utilisation of support services according to the AMS model

Pre-enrolment support phase

Many participants disagreed that they were exposed to careers day (85.5%) and career guidance (84.6%), learned about nursing from the media (70.1%), had role models (65.8%), and an inner desire for nursing (88.1%). The mean for media and role models was 2.80 and 2.79, respectively, and widely distributed SDs of 1.044 and 1.024. Table 1 displays these findings.

Table 1: Pre-enrolment

	Disagree		Agree		M	SD
	Freq.	%	Freq.	%		
Career day	100	85.5	17	14.5	1.62	.878
Career guidance	99	84.6	18	15.3	1.63	.906
Media	35	29.9	82	70.1	2.80	1.044
Role models	40	34.2	77	65.8	2.79	1.024
Inner desire	14	11.9	103	88.1	3.39	.871

Integration phase support

Few participants attended academic counselling (35.1%) and life skills workshops (33.6%), whilst many utilised compulsory orientation (71%), peer mentorship (57.1%) and experienced a supportive campus environment (68.1%). The findings showed wide SDs between 1.041 and 1.181 as per Table 2 below.

Table 2: Integration

	Disagree		Agree		M	SD
	Freq.	%	Freq.	%		
Academic counselling	76	64.9	41	35.1	2.06	1.093
Compulsory orientation	34	29	83	71	2.91	1.103
Peer mentors for juniors	49	42.9	66	57.1	2.65	1.181
Life skills workshop	77	66.4	39	33.6	1.94	1.041
Warm environment	37	31.9	79	68.1	2.73	.999

Engagement phase support

Most participants agreed that support was available for poor-performing students, namely academic support (77%), tutorial support (50.5%), and remedial teaching (80.5%). They also agreed that feedback was given timeously (79.5%) and clearly (75%). Furthermore, clinical peer mentorship was available (64.1%), the curriculum was interactive (73.5%), lecturers encouraged interaction (86.3%) and identified poor performance (50.5%). The SD was high for tutorials and clinical peer mentors, and low for other services. However, few agreed that dedicated persons for support (33.3%) and peer mentorship (31.6%) were available, with a very wide SD of 1.03 and 1.042 respectively. Most participants disagreed that peer psycho-social support, financial support, and spiritual support was available. Few participants agreed that financial support was sufficient (24%), however agreed on receiving financial assistance from family and significant others (50.4%) and that the majority utilized the bursary for other needs (75%). Table 3 below shows these findings.

Table 3: Engagement

	Disagree	Agree	M			SD
			Freq.	Freq.	%	
Dedicated support person	78		66.7	39	33.3	2.09 1.013
Identify struggling students	59		50.5	58	49.5	2.42 .976
Support for poor performance	27		23	90	77	2.97 .845
Tutorials for poor performance	58		49.5	59	50.5	2.42 1.019
Remedial for poor performance	23		19.5	94	80.5	3.13 .846
Dedicated peer mentors	80		68.4	37	31.6	1.97 1.042
Timeous feedback	24		20.5	93	79.5	3.10 .504
Feedback clear fills gaps	29		25	87	75	2.99 .880
Clinical peer mentorship	42		35.9	75	64.1	2.60 1.091
Interactive curriculum	31		26.5	86	73.5	2.87 .952
Lecturers encourage interaction	16		13.9	101	86.3	3.23 .792
Psychosocial support peers	63		53.9	54	44.1	2.31 .951
Spiritual support	78		66.7	39	33.3	2.16 .946
Hospital services	57		54.8	60	41.2	2.42 1.077
Financial support sufficient	89		76	28	24	1.80 .958
Family and significant others	58		49.6	57	50.4	2.45 1.133
Bursary also for other needs	29		25	87	75	3.06 1.167

Discussion

The purpose of the study was to investigate the provision of student support services in a nursing education institution in South Africa, using the academic monitoring and support (AMS) framework.

Pre-entry to NEI support services

This study showed that most participants (70%) were from disadvantaged communities with no exposure to career guidance, suggesting that role models and an inner desire prompted them to study nursing. Similarly, in studying students' orientation and attitudes during training, Ten Hoeve et al., (2017) established that despite being less empathic, students persist due to passion for nursing. A Korean study became a springboard for career guidance following findings that students enrolled in nursing for family and community reasons despite their dislike for the profession (Dos Santos, 2020). The value of support through career counselling results in long-term effects from high graduation rates to employability (Lavecchia, et al., 2020).

This study also showed that most parents did not reach HE level, similarly, Silinda (2018) in studying how psycho-social factors contribute to students' desire for successful completion of studies, revealed that parents' level of education, socio-economic status and lack of preparedness for HE were among the factors determining success. Arquisola and Muanar's (2019) study confirms this influence of family on students whereby students indicate that they expect family support in the form of advice.

Studies reveal hurdles in transitioning to HE. Reflecting on their experiences, medical students lament similar challenges and appraise the value of preparing for transition, for instance, extra-curricular advice and meeting potential peers. The authors also compared academic success in countries offering this support with those who do not (Tamkin, Juma & Shiria, 2016). According to Gray et al., (2019), allied health students perceived transition differently; urban students adjusted well socially, remote students needed more social support whereas mature students preferred more financial support and found transition challenging for balancing study, work, and family. The first-in-family experienced more stress, however, orientation week eased transition and adjustment to varsity (Gray et al., 2019).

Integration phase support

The results showed that fourth-year participants had the lowest percentage for awareness of support services. Although authors assent that early support is pivotal for adjustment in training and retention, however, continuous support is vital to improve completion rates as higher levels of training are more stressful and through engagement with staff and peers, students adjust, thus resulting in retention (Boehm et al., 2017). Roberson (2020), in exploring success through persistence, revealed that a combination of persistence, practice, interest, resilience, and commitment led to success. The study showed that dedicated and focused students had good outcomes, whilst those who were not, had low success rates.

The results also revealed that more than 60% of participants were not exposed to life skills development workshops and academic counselling, however, orientation was available and utilised by most participants. Shikulo and Lekhetho (2020) revealed that orientation was neither available nor attended by participants, yet it enables transition and introduction of students to available services. In another study, students viewed non-participation of management and lecturers in orientation as poor support (Matshotyana et al., 2015). Scholars accede that campus experience correlates with academic performance, the higher the engagement and the higher the academic success (Astin, 1984; Korobova & Starobin, 2012; Schreiber & Yu, 2016).

Engagement phase support

In AMS, academic support includes mentorship, which plays a role in academic support with peer teaching and learning, clinical peer mentoring, and integrated academic support. The study findings on mentoring were disconcerting, participants scored low on awareness of the mentorship program (22%), clinical mentors (27%) and mentors dedicated for poor-performing students (17%). However, 42.9% of participants disagreed that peer mentors were available for assistance. Studies highlight mentorship hurdles experienced by students during integration to HE, especially those from LSES, these situational challenges adversely affect student success (Pather & Chetty, 2016; Sinanan, 2016; Mlaba & Emmamally, 2019).

According to Technical and Vocational Education and Training (TVET), the shift in student profile accessing HE calls for a multidisciplinary team approach comprising health, social, finance, personal, academic and co-curricular in addressing student support. TVET commends a comprehensive, student-centred approach to increase academic success and included in academic support mentorship, tutoring, making up lessons, classroom support, assessments, extra lessons and life skills (TVET, 2020).

The results showed that most participants (68.4%) disagreed there were dedicated persons for student support and junior students' mentorship. Studies reveal that students have negative clinical mentorship experiences due to limited resources and a disjuncture between theory and clinical practices; and thus, a call for NEIs to develop mentorship programmes (Dobrowolska et al., 2016; Mubeezi & Gidman, 2017; Mlaba & Emmamally, 2019).

Various scholars concur that mentoring is a key element in competency development and professional socialization of students (Setati & Nkosi, 2017; Sibiyi et al., 2018) and through mentoring, senior nurses are upskilled in their teaching and supervisory roles (Hattingh & Downing, 2020). In piloting a collaborative mentorship model, authors revealed that students were overwhelmed with

the level of responsibility, although, with support and supervision they accomplished tasks. This model was appraised for promotion of effective team work, development of leadership and organizational skills and identification of effective mentoring strategies (Harvey & Uren 2019). Studies show correlation between mentoring and academic success (Mirbagher Ajorpaz et al. 2016; Guerra-Martín et al., 2017; McNeal 2019), however in military nursing, besides uniqueness of roles based on ranks, mentorship has not been researched much (McNeal et al., 2019). These academic challenges are pivotal in addressing some of the dispositional challenges linked to students' cognitive abilities.

About 50% of participants disagreed that academically struggling students are identified and offered extra tutorials. This concurred with recent findings that the NEI lacked tutorials for poor-performing students, which accounted for high failure rates, authors recommended peer group teaching and tutorials (Mhlongo & Masango, 2020). Studies show a dramatic improvement in pass rate following utilization of extra tutorials (Guerra-Martín et al., 2017; Mudaly & Mtshali, 2018). Therefore, tutoring is a fundamental strategy in improving academic performance (Guerra-Martín et al., 2017).

Layton (2015) argued that the tutorial system is an important teaching and learning intervention with a great potential to improve students' success rates, the small group teaching facilitates learning in a more relaxed environment. Poor academic success in the NEI is attributed to a lack of after-class sessions, the authors argued that slow learners needed more support (Mhlongo & Masango, 2020). Availability of tutorials could have addressed dispositional challenges linked to low cognitive abilities. Our findings revealed that attendance of lecturer appointments was at a similar rate for both male and female students. However, more male than female students utilized the tutorial system and this supports findings that male students tend to engage more academically than female students, who are engaging more in situational challenges (Schreiber & Yu, 2016).

Results revealed that most participants did not use hospital services (54.8%) and spiritual support (66.7%). Studies agree that non-academic factors also lead to student attrition, for instance poor wellness and health, financial and clinical environment demands (Roos et al., 2016, Mudaly & Mtshali 2018). Almost half the number of participants were not aware of medical services, more than 75% did not utilise this service. It emerged from previous studies that students may not utilise available support like mental health services due to the stigma associated with mental illness (Sontag-Padilla et al., 2016; Ebert et al., 2019; Lori & Jordan 2020) and those who did not access services showed low academic achievement (Ebert et al., 2019).

Furthermore, results showed differences in utilisation of support services based on gender, of those who attended extra tutorials, remedial and academic skills workshops, the majority were males, which supports previous findings that more male students engaged with staff for academic matters (Schreiber & Yu, 2016; Sontag-Padilla et al., 2016; Franzidis & Zinder, 2019). In examining factors of college students' use of mental health services, authors (Sontag-Padilla et al., 2016) found that psycho-social support, mentorship, and spiritual support were mostly attended by females. However, literature reveals that female students at HEIs receive inadequate family and social support, instead they are giving such support (Lin 2016), due to their higher social and emotional wellness compared to their male counterparts (Alexia & Steven, 2019; Franzidis & Zinder, 2019).

Results revealed that most participants disagreed that financial counselling was available. Many studies reveal that non-academic challenges like finances negatively impact academic success and vice versa (Buthelezi, 2019; Jacobs et al., 2019; Mhlongo & Masango 2020; Zulu & Mutereko, 2020). Overall, the results showed a significant relationship between student support and academic success, evidenced by a p-value of $< .05$.

Conclusion

The challenges faced by students greatly affected their performance, as reflected by the NEI's graduation and success rates. Attrition rates also negatively impact the funding institutions' finances, HEIs, and the students' livelihoods; this necessitates an urgent alignment of NEI's support services to HE requirements. The results reflected areas where student support can be beefed up to address this problem, from the pre-enrolment stage through to graduation level.

There is a need to improve awareness and utilisation of the available student support program through policy formulation and quality enhancement programs for impact and improvement. Such a program must be made known and accessible to all students and staff. The generalisation of results should bear in mind that the study took place at two of the ten campuses offering the four-year program in one of the nine provinces in South Africa. Future research should therefore extend the number of campuses and provinces involved.

Acknowledgement

All authors have read and agreed to the published version of the manuscript.

Author Contributions: Conceptualization, TPS-M. & NGM.; methodology, TPS-M, validation, NGM.; formal analysis, TPS-M.; investigation, TPS-M.; resources, SN.; writing—original draft preparation, TPS-M. & S.N.; writing—review and editing, submission and correspondence SN.

Funding: This research was not funded.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to restrictions.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Adi Badiozaman, I.F.b., Leong, H. & Jikus, O. (2020). Investigating student engagement in Malaysian higher education: A self-determination theory approach, *Journal of Further and Higher Education*, 44:10, 1364-1378, <https://doi.org/10.1080/0309877X.2019.1688266>
- Alexia, F.F. & Steven, M. Z. (2019). Examining student wellness for the development of campus-based wellness programs. *Building Healthy Academic Communities Journal*, 3, 56-66 <https://doi.org/10.18061/bhac.v3i1.6575>
- Arquisola, M. J., & Muanar, I. A. (2019). The Role of family influence, gender, and entrepreneurial education on Indonesian vocational students becoming entrepreneurs. *International Journal of Research in Business and Social Science*, (2147-4478), 8(5), 104–112. <https://doi.org/10.20525/ijrbs.v8i5.309>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of college student personnel*, 25(4): 297-308. <https://psycnet.apa.org/record/1985-18630-001>
- Badat, S. and Y. Sayed (2014). Post-1994 South African education: The challenge of social justice. *The ANNALS of the American Academy of Political and Social Science*, 652(1): 127-148. <https://doi.org/10.1177/0002716213511188>
- Boehm, J., Cordier, R., Thomas, Y., Tanner, B., & Salata, K. (2017). The first year experience of occupational therapy students at an Australian regional university: Promoting student retention and developing a regional and remote workforce. *Australian Journal of Rural Health*, 25(1): 22-27. <https://doi.org/10.1111/ajr.12252>
- Brink, H., Van de Walt, C. and Van Rensburg, G. (2012). *Fundamentals of research methodology for health care professionals*, South Africa, Juta.
- Buthelezi, P.P. (2019). Experiences of the post-basic nursing students with chronic illness in selected campuses of the KwaZulu-Natal college of nursing. Master's degree, Durban University of Technology, Durban, South Africa. Available at: https://openscholar.dut.ac.za/bitstream/10321/3866/3/Buthelezi_PP_2019.pdf
- Creswell, J. W. & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage publications.
- Council on Higher Education (CHE). (2014). Distance higher education programmes in a digital era: Good practice guide, CHE Pretoria. http://oer4nosp.col.org/id/eprint/47/1/Distance_Higher_Education.pdf
- Department of Higher Education & Training (DHET). (2013). White paper for post-school education and training. Building an expanded, effective and integrated post-school system. Pretoria Available from: <https://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf>
- Dobrowolska, B., McGonagle, I., Kane, R., Jackson, C.S., Kegl, B., Bergin, M. & Cabrera, E. (2016). Patterns of clinical mentorship in undergraduate nurse education: A comparative case analysis of eleven EU and non-EU countries. *Nurse Education Today*, 36: 44-52. <https://doi.org/10.1016/j.nedt.2015.07.010>
- Dos Santos, L. M. (2020). I am a nursing student but hate nursing: The East Asian perspectives between social expectation and social context. *International journal of environmental research and public health*, 17(7): 2608. <https://doi.org/10.3390/ijerph1707260>
- Ebert, D.D., Mortier, P., Kaehlke, F., Bruffaerts, R., Baumeister, H., Auerbach, R.P., Alonso, J., Vilagut, G., Martínez, K.I., Lochner, C., Cuijpers, P., Kuechler, A.M., Green, J. Hasking, P., Lapsley, C., Sampson, N.A. & Kessler, R.C. (2019). WHO World Mental Health-International College Student Initiative collaborators Barriers of mental health treatment utilization among first-year college students: First cross-national results from the WHO World Mental Health International College Student Initiative. *International Journal of Methods in Psychiatric Research*, 28 (2). <https://doi.org/10.1002/mpr.1782>
- Franzidis, A. F. & Zinder, S. M. (2019). Examining Student Wellness for the Development of Campus-Based Wellness Programs. *Building Healthy Academic Communities Journal*, 3(1): 56-66. <https://doi.org/10.18061/BHAC.V3I1.6575>
- Gray, J. R., Grove, S.K. & Sutherland, S. (2016). *Burns and grove's the practice of nursing research-E-book: Appraisal, synthesis, and generation of evidence*, 8th Edition. Elsevier Health Sciences. Elsevier, St. Louis.
- Gray, M., Gordon, S., O'Neill, M. & Pearce, W.M. (2019). First year allied health student transition to a regional university. *Australian Journal of Rural Health*, 27(6): 497-504. <https://doi.org/10.1111/ajr.12581>
- Guerra-Martín, M. D., Lima-Serrano, M. & Lima-Rodríguez, J.S. (2017). Effectiveness of Tutoring to Improve Academic Performance in Nursing Students at the University of Seville. *Journal of New Approaches in Educational Research*, 6(2): 93-102. <https://doi.org/10.7821/naer.2017.7.201>
- Halis, M., & Yildirim, D. (2022). The effect of perceived social support and life orientation on anxiety caused by online education in Covid 19 conditions. *International Journal of Research in Business and Social Science* (2147- 4478), 11(4), 310–322. <https://doi.org/10.20525/ijrbs.v11i4.1809>
- Harvey, S. & Uren, C.D. (2019). Collaborative learning: Application of the mentorship model for adult nursing students in the acute placement setting. *Nurse Education Today*, 74: 38-40. <https://doi.org/10.1016/j.nedt.2018.11.022>
- Hattingh, H. & Downing, C. (2020). Clinical learning environment: Lived experiences of post-basic critical care nursing students. *International Journal of Africa Nursing Sciences*, 13. <https://doi.org/10.1016/j.ijans.2020.100263>
- Health System Trust (HST) (2013). The National strategic Plan for Nurse Education Training and Practice. N. Health. RSA, Pretoria, HST. Available from:

- https://www.hst.org.za/publications/NonHST%20Publications/Strategic_Plan_for_Nurse_Education_Training_and_Practice.pdf
- Iwu, C.G., Udekwe, E., de la Harpe, A.C., & Daramola, J.O. (2021). Descriptive literature review of human resource information systems (HRIS) adoption issues in the health sector, South Africa. *International Journal of Research in Business and Social Science* (2147- 4478), 10(5), 261–275. <https://doi.org/10.20525/ijrbs.v10i5.1284>
- Jacobs, E., Scrooby, B. & Du Preez, A. (2019). Experiences of student nurses regarding the bursary system in KwaZulu-Natal province, South Africa. *Health SA Gesondheid*, 24(0), a1103. <https://doi.org/10.4102/hsag.v24i0.1103>
- Korobova, N., & Starobin, S.S. (2012). A comparative study of student engagement, satisfaction, and academic success among international and American students. *Journal of International Students*, 5, 72-85. <https://doi.org/10.31274/ETD-180810-1555>
- Lavecchia, A.M., Oreopoulos, P., & Brown, R.S. (2019). Long-run effects from comprehensive student support: Evidence from pathways to education. *Econometric Modeling: Microeconomic Studies of Health*. <https://doi.org/10.3386/w25630>
- Layton, D. M. (2015). The role of the tutorial system in enabling students' academic success. *South African Journal of Higher Education*, 29(4): 198-210. <https://doi.org/10.20853/29-4-513>
- Lin, X. (2016). Barriers and Challenges of Female Adult Students Enrolled in Higher Education: A Literature Review. *Higher Education Studies*, 6(2): 119-126. <https://doi.org/10.5539/HES.V6N2P119>
- LoBiondo-Wood, G. & Haber, J. (2014). *Nursing research-e-book: methods and critical appraisal for evidence-based practice* (8th Ed), Elsevier Health Sciences. Elsevier, St. Louis.
- Lori, W. & Jordan, S. (2020) Writing the literature review: Graduate student experiences. *Canadian Journal for the Scholarship of Teaching and Learning*, 11, 1-17. <https://doi.org/10.5206/cjsotl-rcacea.2020.1.8295>
- Maree, K. (2010). *First steps in research* (Revised ed.). Pretoria, South Africa: Van Schaik.
- Matshotyana, N., Rooyen, R.M., & Randt, S.D. (2015). Experiences of first-year nursing students at a public nursing college in South Africa. *Africa journal of nursing and midwifery*, 17, 105-121. <https://doi.org/10.25159/2520-5293/236>
- McNeal, G.J., Tontz, P.A., Smith, T.C., Reyes, J., & Parsons, A. (2019). A pilot intervention using professional nursing mentoring to engage prior corpsman and medic nursing students in academic success. *The journal of the Association of Black Nursing Faculty in Higher Education*, 30(3), 74-80.
- Mhlongo, X. & Masango, T. (2020). Factors contributing to poor performance of student nurses in anatomy and physiology. *African Journal of Health Professions Education*, 12(3): 140-143. <https://doi.org/10.7196/ajhpe.2020.v12i3.1357>
- Mirbagher Ajorpaz, N., Zagheri Tafreshi, M., Mohtashami, J., Zayeri, F. & Rahemi, Z. (2016). The effect of mentoring on clinical perioperative competence in operating room nursing students. *Journal of clinical nursing*, 25(9-10):1319-1325. <https://doi.org/10.1111/jocn.13205>
- Mlaba, Z. P. & Emmamally, W. (2019). Describing the perceptions of student nurses regarding barriers and benefits of a peer-mentorship programme in a clinical setting in KwaZulu-Natal. *Health SA Gesondheid*, 24: 1118. <https://doi.org/10.4102/hsag.v24i0.1118>
- Mthimunye, K.D.T & Daniels F.M. (2019) The development and validation of an intervention for the improvement of academic performance and success of nursing students at a university in the Western Cape, South Africa. *International Journal of Africa Nursing Sciences*, 1-9, <https://doi.org/10.1016/j.ijans.2019.100156>
- Mtshali, N. G. & Zwane, Z.P. (2019). Positioning public nursing colleges in South African higher education: Stakeholders' perspectives. *Curationis*, 42(1): 1-11. <https://doi.org/10.4102/curationis.v42i1.1885>
- Mubeezi, M. P. & Gidman, J. (2017). Mentoring student nurses in Uganda: A phenomenological study of mentors' perceptions of their own knowledge and skills. *Nurse Education in Practice*, 26: 96-101. <https://doi.org/10.1016/j.nepr.2017.07.010>
- Muchineripi, M. (2017). Exploring the effectiveness of psychological support services provided to students at Majuba TVET College, Kwazulu-Natal Province. Masters' dissertation, University of South Africa, Pretoria. Available from: <http://hdl.handle.net/10500/25346>
- Mudaly, P. D. & Mtshali, N.G. (2018). Academic monitoring and support of undergraduate nursing education programme: A middle-range theory. *Curationis*, 41(1): 1-11. <https://doi.org/10.4102/curationis.v41i1.1881>
- Ngubane, P. B. (2018). First time entrants' student support services in contributing to academic success in technical and vocational education and training colleges, University of Zululand. Doctoral thesis. Empangeni, South Africa. Available from: <uzspace.unizulu.ac.za/bitstream/handle/10530/1836...> · PDF file
- Pather, S. & Chetty, R. (2016). A conceptual framework for understanding pre-entry factors influencing first-year university experience: leading article. *South African Journal of Higher Education*, 30(1): 1-21. <https://doi.org/10.20853/30-1-548>
- Polit, F. & Beck-Tatano, C. (2016). *Generating and Assessing Evidence for Nursing Practice*. 10th, Philadelphia, PA, USA: Lippincott, Williams, Wilkins.
- Ramkilowan, S. (2014). Exploring the attrition of student nurses from a four year comprehensive basic nursing education programme in a selected college of nursing in KwaZulu-Natal: a case study approach. Masters' dissertation. Durban, South Africa. Available from: <https://researchspace.ukzn.ac.za/bitstream/handle/...> · PDF file
- Roberson, S. A. M. (2020). Developing student success through persistence: teaching more than content. *Education*, 141(2): 83-100. Available from: <https://www.thefreelibrary.com/DEVELOPING+STUDENT...>

- Roos, E., Fichardt, A.E, MacKenzie, M.J., & Raubenheimer, J. (2016). Attrition of undergraduate nursing students at selected South African universities. *Curationis*, 39(1): 1-8. <https://doi.org/10.4102/curationis.v39i1.1558>
- Schreiber, B. & Yu, D. (2016). Exploring student engagement practices at a South African university: Student engagement as reliable predictor of academic performance. *South African Journal of Higher Education*, 30(5): 157-175. <https://doi.org/10.20853/30-5-593>.
- Seshabela, H., Havenga, Y., & de Swardt, H.C. (2020). Nursing student peer mentorship : the importance of professional relationships. *Africa Journal of Nursing and Midwifery*, 22(1): 1-17. <https://doi.org/10.25159/2520-5293/6964>
- Setati, C. M. & Nkosi, Z.Z. (2017). The perceptions of professional nurses on student mentorship in clinical areas: A study in Polokwane municipality hospitals, Limpopo province. *Health SA Gesondheid*, 22: 130-137. <https://doi.org/10.1016/J.HSAG.2017.01.008>
- Shikulo, L. & Lekhetho, M. (2020). Exploring student support services of a distance learning centre at a Namibian university. *Cogent Social Sciences*, 6(1): 1737401. <https://doi.org/10.1080/23311886.2020.1737401>
- Sibiya, M.N., Ngxongo, T.S., & Beepat, S.Y. (2018). The influence of peer mentoring on critical care nursing students' learning outcomes. *International Journal of Workplace Health Management*, 11, 130 - 142. <https://doi.org/10.1108/IJWHM-01-2018-0003>
- Silinda, F. T. (2018). Academic persistence for undergraduate academics in South Africa. Doctoral thesis, University of South Africa, Pretoria: South Africa
- Sinanan, A. (2016). The value and necessity of mentoring African American college students at PWI's. *Journal of Pan African Studies*, 9(8).155. Available from: http://jpanafrican.org/archive_issues/vol9no8.htm
- Sontag-Padilla, L.M., Woodbridge, M.W., Mendelsohn, J.B., D'Amico, E.J., Osilla, K.C., Jaycox, L.H., Eberhart, N.K., Burnam, A.M., & Stein, B.D. (2016). Factors affecting mental health service utilization among California Public College and university students. *Psychiatric services*, 67 8, 890-7 . <https://doi.org/10.1176/appi.ps.201500307>
- South African Nursing Council (SANC) (2017). South African Nursing Council statistics. Available from: <http://www.sanc.co.za/stats.htm>.
- Tamkin, A., Juma, F. & Shiria, B. (2016). The transition from high school to university: a medical student's perspective. *Advances in medical education and practice*, 7: 517-518. <https://doi.org/10.2147/AMEP.S114753>
- Ten Hoeve, Y., Castelein, S., Jansen, W., Jansen, G.J., & Roodbol, P.F. (2017). Nursing students' changing orientation and attitudes towards nursing during education: A two-year longitudinal study. *Nurse education today*, 48, 19-24. <https://doi.org/10.1016/j.nedt.2016.09.009>
- Tinto, V. (2014). Tinto's South Africa lectures. *Journal of Student Affairs in Africa*, 2(2): 5-28. <https://doi.org/10.14426/JSAA.V2I2.81>
- Tinto, V. (2017). Reflections on student persistence. *Student Success*, 8: 1. <https://doi.org/10.5204/SSJ.V8I2.376>
- South African Nursing Council (SANC) (2005). *Nursing Education and Training Standards*. Available from: <https://www.sanc.co.za/wp-content/uploads/2020/08/Nursing-Education-and-Training-Standards.pdf>.
- Zulu, W.V. & Mutereko, S. (2020). Exploring the causes of student attrition in South African TVET Colleges: A case of one KwaZulu-Natal Technical and Vocational Education and Training College. *Interchange*, 51(4): 385-407. <https://doi.org/10.1007/s10780-019-09384-y>

Publisher's Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.