

Challenges, opportunities and achievements of nurses' research supervision across language borders

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Abstract

Nurse educators and researchers are calling for national and international nursing education research to align resources within and outside the discipline, across borders and geographical distance to create a knowledge base, and to prepare the future generation of nurse researchers who will advance knowledge. This paper explores the challenges, opportunities and achievements that nursing students face when supervised across culture, language borders and distance. A qualitative, exploratory, single descriptive case study was used in the city of Lubumbashi in the Democratic Republic of Congo. A total of 18 participants took part in this study. The participants included 16 master's degree students in nursing, one external supervisor and one interpreter. Data were collected through guided narrative reports, debriefing interviews and examination reports. Data were also analysed through an inductive thematic approach. Challenges that students experienced included language as a barrier to learning and communication, lack of resources and subject knowledge, which resulted in delayed completion of the degree, and negative emotive experiences. Opportunities that sustained the students during the supervisory relationship referred to the existence of a constructive learning climate, competent facilitators, affirmative personal attributes of the students and an optimistic future focused perspective. The success of this programme is reflected by the achievements of ten students obtaining the master's degree and six their postgraduate diplomas. The Open and Distance Learning environment opens up the opportunity to pursue studies over geographical distances. This cohort of nursing students demonstrated that challenges may be overcome through resilience, self-regulation and passion from all stakeholders.

Keywords: Nursing, supervision, research, education, scholarship, open and distance learning.

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Introduction

Nursing as a practice profession requires both practice experts and nursing scientists to expand the scientific basis of patient care. Doctoral and masters' education programmes prepares nurses for practice, leadership and scientific enquiry (AACN, 2006). However, master's and doctoral degree programmes in nursing do not produce a large enough pool of post graduate degree nurses to meet the demand (Rosseter, 2012). This calls for innovative ways to train more master's degree level nursing students. Stakeholders called for national and international nurse education research to align resources within and outside the discipline, across borders and geographical distance to create a knowledge base,

and to prepare the future generation of researchers who will advance this knowledge (Valiga & Ironside, 2012).

International trends in nursing research education have shown to be deficient both in the quality of the research produced and in building disciplinary capacity for research (Valiga & Ironside, 2012). Today there are still few faculties that establish research trajectories to guide research training or support postgraduate students. Support of students currently depend heavily on the expertise, skills and supervisors' time to foster in the candidate the right skills and attitudes towards research (Heath, 2002). Research nurturing that includes facilitating research; mentoring and doing quality assurance of research supervision is one of the most important factors affecting research production and research outputs (MacGregor et al., 2006).

Pearson and Brew (2002) and Zhao (2001) suggest that the conventional model of research education and support has shown itself to be lacking in the face of the rapidly changing education environment. The same could be said of nursing research education. This is more so in the open and distance learning (ODL) context where institutions embark on cross border initiatives to build the capacity of novice nurse researchers. Issues of diversity such as power, gender, culture, language and socio-economic status place exceptional demands on these capacity building enterprises (Erichsen, Bolliger & Halupa, 2012). Supervising remote research students adds additional challenges such as building relationships, access to resources, language, communication and cultural barriers (Sussex, 2008) on supervisors and students alike.

The diversity in values, beliefs, assumptions and practices that the diverse student body around the globe bring into supervision (East, Bitchener & Basturkmen, 2012) emphasises the fact that supervisors should reflect on how students experience and perceive their supervisory practices. Students' experiences of feedback and supervision can either hinder or improve the learning experiences and impact on their throughput. This article explores the challenges, opportunities and achievements that students face when supervised across culture, language borders and distance. This reflection is needed to improve supervisory practices for nursing practitioners and nurse researchers in future.

Globalisation, a phenomenon which turned the world into a global village, encourages educational interaction and collaboration amongst institutions even where great geographical distances separate them. Globalisation, therefore, had a profound effect on developing the open and distance learning (ODL) system (Biao, 2012). While South Africa remains the leader in the field of open and distance learning in Africa, the regions in the west, namely the francophone countries, are neglected because English is mostly the medium of instruction.

There is a dire need to develop research infrastructure at the human, physical and technical levels in Africa, also in West Africa.

Under the auspices of a nursing leader in South Africa and the collaboration of the Sigma Theta Tau Africa Chapter at Large, a project was launched to address the lack of nursing scholarship in Africa. This project was called the CHENMA (Collaboration for Higher Education for Nurses and Midwives in Africa) project, which aimed at strengthening nursing and midwifery expertise in Africa. The countries that were involved in this project included South Africa, Kenya, Tanzania, Niger, Democratic Republic of Congo (DRC) and Rwanda. Seven non-host universities in Southern Africa and five host universities were involved in the CHENMA project. The University of the Free State through its School of Nursing was one of the universities that took part in developing a master's degree programme for nurses in the DRC (the context of this paper) as the DRC's educational system did not yet have plans for such a programme. The project's aims, firstly, were to ensure the sustainability of the programmes through building capacity in order for the host university to take over the offering of the programme in future. Additionally, the project also aimed at implementing a career path for specialist nurses in the health services of Africa to ensure that the human resources remained in the developing countries. Finally, the project's vision was to build an international focus and capacity in Southern African universities.

The two-year part-time Master's degree in Midwifery and Education was launched in 2008 with the aim of preparing the students for the five essential roles of a nursing specialist-scientist, namely clinician, researcher, leader, administrator and educator. The main focus was on the first two roles, the clinician and the researcher. The programme consisted of theoretical and practical core modules as well as research component. Ten students graduated in 2012.

All 16 students enrolled on the programme were French speaking as the DRC is a francophone country. The co-supervisor of all the students, who was also the coordinator of the programme, was English speaking. Thus; supervision was in a language that both parties do not mutually understand. Communication, seen as the cornerstone of successful and productive supervisor / students relationships (Bruce, Stajduhar, Molzahn, MacDonald, Starzomski & Brown, 2008), was done through an interpreter and electronic media. Despite the challenges, 10 of the 16 students obtained their masters degrees. The challenges and the opportunities they faced regarding supervision in this context can give insight to future research capacity development in West and East Africa where language barriers are evident.

Methodology

Research Design

Researchers used a qualitative, exploratory, single descriptive case study design (PlanoClark & Creswell, 2010). A qualitative design enabled the researchers to gain an in-depth understanding of the research phenomena. The phenomena in this case refer to the challenges and opportunities that students faced when they are supervised in an ODL context, but most importantly in a language that both parties do not mutually understand. A qualitative design is also appropriate when little is known about a phenomenon (Brink & Wood, 1998). Case studies focus on contemporary phenomena within real-life contexts (Yin, 2009).

Setting

This study took place in the city of Lubumbashi in the Democratic Republic of the Congo, Central Africa.

Units of analysis

All participants were purposefully selected and volunteered to participate. A total of 18 participants were involved in this study. The participants included 16 postgraduate midwifery nursing students (they formed part of the first cohort of postgraduate midwifery students to enrol for a Master's degree in Midwifery and Education), one external supervisor and one interpreter. The sample was diverse in terms of race and gender. Seven students were female and nine were male. All students were black and French speaking with no English literacy. The students and the interpreter were from the DRC. The interpreter was black and literate in both French and English. The external supervisor was a white female from the Republic of South Africa with no French literacy. The ages of the students varied between 41 and 53 years.

Measures of trustworthiness

The trustworthiness of the data was ensured by the following measures: credibility (triangulation, reflectivity and member checking); applicability (rich descriptions and purposeful sampling); dependability (code, recode procedures); confirmability (triangulation and reflectivity); and authenticity (fairness, awareness, understanding, action and empowerment) (Onwuegbuzie, Leech & Collins, 2008; Maree et al., 2012).

Data collection

Data were collected through 16 guided narrative reports (Forneris & Pedan-McAlpine, 2006; Ness, Duffy, McCullum & Price, 2010) and the study records of the students. The study records were used to capture the final marks of all modules of students. The students wrote the narrative reports in French and later a French language translator, translated them from French into English and then back translated them from English into French again. Two debriefing interviews (Onwuegbuzie, Leech & Collins, 2008) were held with the external supervisor. These interviews were held in English. One interview was held in English with the interpreter after the project.

Data analysis

The authors analysed the data through an inductive thematic approach (Plano Clark & Creswell, 2010). The aim was not to measure and observe variables but to build a complex and holistic picture using the analysis of words and the reporting of the specific views of the students, supervisor and interpreter (Corbin & Strauss, 2008). A consensus discussion was held between the researchers to verify findings and as a means of interpretive convergence (Saldana, 2009).

Ethical considerations

Informed consent was obtained from all participants using a letter containing the necessary information about the research. Confidentiality was also explained in writing in the letters of consent. Participants were also informed that participation was voluntary, and the Institut Supérieur Des Techniques Médicales De Lubumbashi in the DRC granted ethics clearance.

The principle of fairness was used to ensure authenticity. This meant that all the views, perspectives, claims, concerns and voices of participants were heard and accepted (Guba & Lincoln, in Denzin & Lincoln, 2005).

Results

Table 1 provides a summary of the student's results obtained from their study records to illustrate their performance in theoretical and clinical modules as well as their dissertations. A total of 16 students were registered for all required modules. It is important to note that all, but one student, who failed a module at the first opportunity (failed modules indicated with an asterix next to the final mark), did not complete their research project and thus did not graduate with a master's degree. The one student, who failed a module and still managed to graduate, experienced a personal loss just the week prior to the first test. This probably, explains the student's poor first performance.

Table 1: Student results per module.

Students	Midwifery 1	Midwifery 2	Method- ology	Nursing Education	HIV	Nursing Dynamics	Midwifery Practical	Research Dissertation	Type of qualifica- tion
A	53*	72	54	68	64	69	75	-	Diploma
B	50	60	51	50	60	50*	74	-	Diploma
C	60	50	56	62	50	64	74	66	Masters
D	76	56	60	71	66	64	76	85	Masters
E	78	50	50	52	50	63	54	57,5	Masters
F	55	58	60	73	56	51	71	75	Masters
G	54	72	62	70	75	79	81	78,5	Masters
H	56	58	58	63	59	76	66	77	Masters
I	60	50*	56*	59	57	50*	66	-	Diploma
J	65	86	65	76	65	84	75	65	Masters
K	68	64	68	74	78	64	69	81	Masters
L	55*	66	55	71	65	71	78	-	Diploma
M	56	64	50	62	50	76	66	74	Masters
N	55*	58	53	70	65	59	76	-	Diploma
O	55*	72	50	72	61	76	91	70	Masters
P	50*	50	55*	60*	50*	76	64	-	Diploma

*Failed Modules

Tables 2 and 3 provide a summary of the findings from the data collected from the reflection reports that students compiled after the formal supervision relationship ended in order to situate the implications for research supervision in such contexts in empirical data. Challenges that students experienced included language as a barrier to learning and communication, lack of resources, lack of subject knowledge, which resulted in delayed completion of the degree, and negative emotive experiences. Opportunities that sustained the students during the supervision relationship included the existence of a constructive learning climate, competent facilitators, affirmative personal attributes of the students and an optimistic future focused perspective. Participants' quotes are provided in italics in Tables 2 and 3.

Table 2: Matrix of quotational data that indicate the challenges the students experienced

Challenges that the students experienced included language as a barrier to learning and communication, lack of resources, lack of subject knowledge, which resulted in delayed completion of the degree, and negative emotive responses

Language barrier

- Student quote 17. *The language was a big problem. I had two different systems of knowing, the English speaking and the French speaking system.*
- Student quote 18. *It was difficult to understand.*
- Student quote 19. *There was a problem of interpretation and understanding technical words.*
- Student quote 20. *Certain words were badly picked up and the feedback [interpretation] was not correct.*
- Supervisor quote 5. *I totally underestimate the language problem. The interpreter was a teacher and not a nurse. The terminology was a problem, but he was busy with his PhD which helped a lot with research methodology concepts. It was very difficult to always communicate through an interpreter and translations via electronic media. However, the results proved that even our language problem did not discourage us. I think it even motivate me to prove that this is possible.*
- Interpreter quote 1. *The translation left me exhausted. I realised when the translations were incorrect. I did not always have the subject knowledge to translate correctly. Yet, this experience helped me tremendously in my own studies. I learned a lot.*

Lack of resources

- Student quote 21. *This lack of means was for me a big disability to achieve the outcome.*
- Student quote 22. *I encountered a problem of human and material competence [resources].*

Challenges that the students experienced included language as a barrier to learning and communication, lack of resources, lack of subject knowledge, which resulted in delayed completion of the degree, and negative emotive responses

- Supervisor quote 6. *I could not believe how poorly resourced the environment was. Even research books were unavailable. I thought that the students received my e-mails only to find that many could not pay for air time and only receive the e-mail after a month. I had to assist with the literature searches and put the information on CD's to counter the lack of internet access.*

Lack of subject knowledge (research methodology)

- Student quote 23. *A problem is the incomprehension of the language and the subject.*
- Student quote 24. *Qualitative research was left because in our system they always use quantitative research more.*
- Student quote 25. *We need additional training after this period of study.*
- Supervisor quote 7. *All students passed the methodology course, but they did not understand or apply the knowledge. I had to use another approach to assist them.*

Negative emotive responses

- Student quote 26. *I saw myself unsettled in the sequence of the job at hand, leaving me feeling disentangled.*
 - Supervisor quote 8. *I was ill-prepared for the realities that I faced. I felt alone and vulnerable at times. Also stressed.*
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Table 3: Matrix of quotational data indicating the opportunities that sustained the students

Opportunities that sustained the students refer to a constructive learning climate, competent facilitators, affirmative personal attributes of the students and an optimistic future focused perspective

A constructive learning climate

Student quote 1. *The problem was solved by creating a serene climate, a harmony of service.*

Competent facilitators

Student quote 2. *Credit to the facilitators who showed good workmanship of the study domain.*

Affirmative personal attributes of the students

Passion and enthusiasm

- Student quote 3. *I realised that a master's degree weighs heavily, its training requires a lot of enthusiasm and abilities.*
- Supervisor quote 1. *I felt that I need to help these students to make a success. I have never experienced a group of students more eager to obtain a degree. Here are no resources, but they still are enthusiastic and positive. I am passionate about research and supervision and that kept me going.*

Perseverance

- Student quote 4. *The situation taught me that it is sometimes necessary to endure in life to reach the target.*
- Student quote 5. *I drew inspiration from other jobs which seemed to get me closer to the goal.*
- Student quote 6. *I learnt to fit with this situation.*
- Student quote 7. *I learnt to surpass myself.*
- Supervisor quote 2. *I surely wanted to quit many times, but I would have never forgiven myself if I neglected such a positive and willing group of students. I truly experienced what willpower and motivation really means.*

Self-responsibility and self-regulation

- Student quote 8. *I bought a laptop and from time to time I put in units to have the internet with me.*
- Student quote 9. *I mobilised my own funds.*
- Student quote 10. *Personal smartness was needed to succeed.*
- Student quote 11. *I read and went to experts to help and support me.*
- Supervisor quote 3. *I had to improvise and be innovative in my supervisory practice. I could not explain methodology like I normally do. I needed to adjust and use concepts familiar to what is known to the students to demonstrate and explain.*

An optimistic future focused perspective

Envisioning having 'upper knowledge' through continued education and support

- Student quote 12. *We want to develop and have 'upper knowledge'.*
 - Student quote 14. *To continue our knowledge and finding help to reach the outcome.*
 - Student quote 15. *To acquire knowledge.*
 - Student quote 16. *Help me to capture new knowledge.*
 - Supervisor quote 4. *This experience was the most challenging in my academic life. If I can help these students to do research and enable them to continue doing this in Lubumbashi, this will be my personal contribution to scholarship. I want these students to be successful, and therefore I will continue doing what is needed to help them complete their studies and become scholars in Africa.*
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Discussion

The discussion centred on the challenges experienced, and, the opportunities that sustained the students that could be harnessed for future programmes. The implications for future ODL supervisory practices to enhance capacity building and scholarship development in West Africa are also discussed.

Challenges experienced

The most challenging aspect that all students and the supervisor mentioned was the language barrier. Most studies on internationalisation and globalisation emphasise English proficiency by the parties involved as essential (Guerin & Green, 2009), a privilege that this cohort of students and supervisor did not have. If the achievements are considered, it becomes evident that the affective and attitudinal aspects that motivate the students and supervisor (such as resilience and self-regulation) outweigh even the language problem. Even though it required more effort, innovative thinking, focus and commitment, the language problem could be breached by on-line translation support and the valuable support of an interpreter.

The lack of resources is a challenge that can never be underestimated in the ODL environment. Students reflect upon these challenges, but as a participant and supervisor in this study, I have personally experienced that students do not have the fiscal resources to pay for literature and internet access. However, we adopted other ways to overcome the problem of lacking resources. Some of the approaches that contributed to addressing the problems included writing and distributing informative CD's, and students sharing literature among themselves. One student acted as group leader and downloaded communication to all students.

Opportunities that sustained the students

The establishment of a constructive learning environment is an important consideration as students experiences of supervision during master's and doctoral education has been linked to completion and attrition rates internationally (Fenge, 2012). According to the data gathered from students, it was evident that engagement with a community of master's degree students, who all experienced the same challenges, contributed to a positive and constructive learning environment. Although students wrote their own reflection reports, it is clear from the quotes that they referred to "we" and not to "I", indicating the relationship between the cohorts of students. However, the supervisor's role of facilitating the group and creating a creative and constructive environment is important to ensure that students feel safe to share a collaborative learning experience. There must, however, be a useful balance between individual

supervision and facilitating a cohort of students, as the roles might differ slightly (Fenge, 2012).

Supervisors should not only be knowledgeable in research methodology, but also in different supervisory strategies and practices (Pearson & Kayrooz, 2004). Student satisfaction with supervision and degree completion is closely linked. Important factors that influence student satisfaction include competent supervisors in research-related pedagogy like research methods and designs, conduct of research and constructive feedback (Erichsen *et al*, 2012). In the ODL environment where supervision relies heavily on on-line education and feedback, the communication between student and supervisor, whether via e-mail, individually or in a group, remains a most important component in developing the graduate student (Erichsen *et al*. 2012) and ensuring student satisfaction.

Perseverance, academic mind-sets, learning strategies and social skills are non-cognitive factors that influence student performance (McDaniel, 2012). As the students and supervisor's reflection illustrated in this study, perseverance, positive mind-sets and motivation to succeed were factors that influence them to continue despite all the challenges that they have experienced. It became clear that these skills should be encouraged through targeted instructional strategies to prepare students for career development and thus graduate studies.

Implications for future ODL supervisory practices to enhance capacity building and scholarship development in West Africa

There is an urgent need for more master's and doctoral degree nurses to replenish the supply of nursing researchers. Researchers make many advances with the treatment of chronic illnesses around the globe, but continuous research is needed to assist the patients to live with all these illnesses. Many nurses also embark on postgraduate studies late in their careers and therefore it limits their years of productivity as researchers (Anderson, 2012). The ODL environment opens up the opportunity to pursue studies over vast geographical distances, at a convenient time for the learner. Most ODL institutions in Southern Africa, however, restrict this opportunity to English speaking learners, ultimately excluding West African nurses from this opportunity (Biao, 2012).

This cohort of students proved that even without a language that the students and the supervisor mutually understand and with very poor resources, other measures can be utilised to ensure success in developing nursing researchers in West Africa.

The opportunities, especially the non-cognitive factors that the students reflected upon, should be emphasised to ensure that they are taken into account in future ODL supervisory practice. Students should be motivated, open to a peer learning

approach and have perseverance. The supervisors involved should have a strong interest in developing and supporting students, demonstrate a passion for developing scholarship in Africa and be open to alternative and innovative supervisory practices. Supervisors should also acknowledge the lack of resources by not only depending on on-line activities, but include social media, mobile technology and the distribution of CD's to support students when internet access is a problem.

Limitations

A limitation of the study was the small sample. Findings can therefore only be inferred to other context and not generalised. Data from the two French speaking supervisors could not be obtained at the time of this report and might be included in future communication and dissemination.

Conclusion

Future programmes and research could investigate building coaching and mentoring into the supervision programmes to support students both intellectually and emotionally. Such coaching and mentoring should include peer and virtual coaching and mentoring.

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