



Reflecting on a Personal Doctoral Study Experience: A Journey to Academic and Professional Maturity

Gilman Jackson Nyamubi

Department of Education, University of Iringa, Iringa, Tanzania

Email address:

gilmubi@yahoo.com

To cite this article:

Gilman Jackson Nyamubi. Reflecting on a Personal Doctoral Study Experience: A Journey to Academic and Professional Maturity. *Higher Education Research*. Vol. 6, No. 3, 2021, pp. 72-77. doi: 10.11648/j.her.20210603.13

Received: April 23, 2021; **Accepted:** May 10, 2021; **Published:** May 26, 2021

Abstract: Doctoral students across African Universities encounter negative and positive experiences in their interaction with their supervisors during the whole doctoral learning process. The doctoral students' well-being, competence attainment and studies timely completion depend on supervisors' active engagement and students' adaptability levels. This study explored the author's experience during the proposal writing stage of his doctoral study at the University of Dar es Salaam, Tanzania, drawing mainly on how the author was an active participant in doctoral learning. It addressed the question: how do doctoral students experience their supervisors' involvement in supervision during the proposal stage of their doctoral programmes? Quantity and quality of supervision significantly impact the doctoral experience. Information that was used to discuss and draw conclusions about the studied issue came from the author's recounting experience and from a critical review of various sources. It was found that supervisors were not involved in selecting students they supervised, which resulted to possibilities of a misfit between supervisors' expertise in the students' learning content area as well as methodology. It also led to supervisors' power relation conflicts based on seniority and methodological mismatch, to the learner's drawback and liminality. The learner's negotiation of the supervisors' relation led to a successful crossing of the threshold, contributing to the learner's academic and professional maturity. An efficient communication between doctoral students and their supervisors form an important facet to the triumphant and well-timed completion of a doctoral journey.

Keywords: Doctoral Study, Academic Maturity, Professional Maturity, Learning Experience, Doctoral Supervision

1. Introduction

PhD students across African Universities experience a variety of situations in their doctoral journeys. According to Niyibizi [1], doctoral students experience both negative and positive experiences, depending on how they interact with their supervisors during the whole doctoral learning process. Arguably, students' reaction to any of these experiences, together with their adaptability levels, inspires their journey towards attaining a doctoral degree.

In addition, studies have shown that the quantity and quality of supervision significantly impact the doctoral experience, especially those related to timely completion, doctoral students' well-being, as well as competence attainment in the whole doctoral undertaking [2-5]. The ability to foster a collegial relationship is a good element to smoothen the progress of students' timely and successful achievement of their doctoral studies. In this, supervisors

need to be well informed about the student's work and show interest in it [6].

Doctoral training at African Universities, just like at any other universities worldwide, gears towards equipping learners with advanced knowledge and workplace skills [7] because it focuses primarily on contributing to the knowledge economy and to link research undertakings with nation's development through innovation and production of original research [8]. Indeed, a doctoral study needs to make a contribution to the body of scholarship and knowledge in a particular field, such as education.

Supervisors are very important individuals in facilitating doctoral education. The fifth Salzburg principle [9] stresses that supervision plays a crucial role to help doctoral students to become early stage researchers in a way that contributes to society through knowledge, competence and skills. In addition, Wellington [10] argues that supervision facilitates students' research skill development that represents a

significant contribution to learning. In this way, supervisors need to be active researchers in order to help doctoral students to be aware of the expected skills to be attained by doing research [9].

The supervisors' active engagement in assisting doctoral students to identify a line of inquiry is very important. According to Agu and Odimegwu [11], the supervisors' active engagement involves continuous interaction and dialogue between the supervisors and the supervisee for the benefit of the later. In the end, it leads to students' satisfaction with doctoral supervision and the resultant quality work [6, 12]. In general, supervisors are expected to provide time, expertise and support to cultivate the doctoral students' research skills and positive attitudes towards the whole doctoral enterprise to ensure the production of a standard thesis [11].

The present study was prepared to reflect on the author's experience during the proposal writing phase of his doctoral journey at the University of Dar-es-Salaam. It draws predominantly on how the author, as an active participant in doctoral learning, made sense of the learning experience. As argued by Chilisa and Preece [13], truth lies within the human experience in the phenomenon under discussion. Indeed, mutual relationship experience improves learners' success and satisfaction throughout the doctoral process [6].

Personal reflection and experience in learning as well as individual strategies to cope with liminality arising from the nature, approach and style of supervision formed the focal point of this study. It explores challenges and prospects of doctoral training at an African University. The study addressed one research question: How do doctoral students experience their supervisors' involvement in supervision during the proposal stage of their doctoral programmes?

Theoretical and empirical studies on doctoral supervision practices in Tanzania are very thin. This study is a modest contribution to the field. The experiences shared in this paper might contribute towards providing an insight to doctoral education practitioners at different levels at African Universities. Its findings might be useful to doctoral students, supervisors, doctoral research committees and the University leadership in general, in the country, and elsewhere in Africa.

2. Literature Review

Experiencing supervisors' engagement in the preparation of a doctoral research proposal is a common practice among students, who at that stage are novice researchers. As such, studies show that in supervision, students expect their supervisors' input in term of knowledge, suggestions, constructive and timely feedback, as well as affective domain aspects such as pastoral support, caring and friendliness [1, 3, 14, 15].

In general, supervision fosters students' advancement in research knowledge and skills as well as the learners' development as scholars in the academic environment. In this way, quality supervision is an important element in the students' contentment with supervision, hence a good

progress in their doctoral journey [16]. Students perceive affirmative discernment of their supervisors' positive contribution in the supervisory tasks, which influences their experiences and doctoral study completion [17]. This is manifested in social support and regular interaction with researchers, including their own supervisors.

In the supervision relationship, doctoral students have high and potential demands which could lead to a retarded progress in their studies. For instance, Cornér, Löfström, and Pyhältö [14] found that lack of supervisory support could lead to student's reduced well-being such as increased risk of burnout. Keefer [18] describes this situation as a learning liminality, that is, a state that shows the learner's situation of isolation from one's previous self that leads to lack of progress in a doctoral activity, such as proposal writing.

In addition, doctoral students could experience ups and downs during their doctoral journeys, especially when they lack resources; hence they experience isolation and loneliness due to unexpected low level of supervisor's involvement in the student's project [14]. Arguably, interruption in the supervisory process could lead to a problem on the student's side due to power dynamics between the supervisors.

In this, the doctoral supervisor is said to build on asymmetrical power relation where by the supervisor gives corrections and directs the student's work [11, 19-21]. The supervisors use power inherent in their position in a way that forces PhD students to learn to live with such misfit and suffer from it without being able to address the problem [1]. The lop-sided power relation increases the vulnerability of students, which places them to a great risk for harm [6, 22].

On the other hand, doctoral supervision could build on the partnership based on a symmetrical relationship between supervisors, and between them and the student. This supervisory relationship is built on a dialogue between the two parts as a key strategy to success [5, 16, 20]. In this, the supervisor regards the students as practicing academic and colleagues, where they are engaged in an open exchange of insights and ideas. In this situation, the supervisor's power is used reasonably [2], leading to the doctoral students' well-being and commitment to studies.

Supervising doctoral students requires a high level of commitment and intensive work as well as forming a life-time professional relationship between the supervisor and the students [23]. In this way, the supervisor fulfills various roles such as confidante, friend, mentor, counselor, career guide and the like [3, 24]. Indeed, a negotiated learning space provides room for enhanced relationship convergence [6].

Doctoral supervisors face increasing complexities and research methods diversities which could make or break a PhD [14]. In this, supervisors take for granted what makes the supervision process successful. It is assumed that supervisors are aware of the supervision aspects that are likely to lead to the student's success [3]. However, supervisors' lack of understanding regarding the appropriate research methods to be used by the students in their research proposals could hinder their success [5]. Other aspects such

as supervisor's low support, uncaring and lack of involvement in the students' work are a result of supervisors' limited attention and support in the learners' progress [3, 8].

To solve these anomalies, Pyhäntö, Vekkaila and Keskinen [25] propose that constructive feedback and social support to the learners are necessary strategies towards bringing students' well-being and happiness in the doctoral program. Successful students' learning needs supervisors' creation of a focused academic work environment in a way that will interpret any would be students' attitudinal and situational barriers in research methods [24]. This, at the end, might foster the student-supervisors' work relationship.

Generally, supervisors perceive their supervisory tasks as personal focused guidance while students perceive the same as controlling and task focused [14]. This discrepancy between the students' and supervisors' conception of the supervision roles and tasks could be a result of supervisory practices across fields of study.

Pyhäntö, Vekkaila and Keskinen [25] are of the opinion that in the humanities and social sciences, students tend to work closely with their supervisors in a way that they benefit from a productive interpersonal interaction while in the natural sciences, a collective model of supervision is used in which students work in research groups. In this, students benefit from close interaction, collegial and a supportive culture [5]. All in all, the positive interaction between students and their supervisors contributes significantly towards students' persistence in the supervision they receive.

Supervisors and doctoral students are members of a complex interactive system in which norms, values and shared practices are constantly constructed and negotiated [25]. Arguably, a community with a pronounced ethical value basis and a strong sense of ethics supports its member in a way that enhances mutual benefits and a common goal towards PhD training and learning. Frick [6] presents that supervisors need to ensure morally justifiable pedagogical interactions and constructive criticism during the supervision process. It is therefore expected that respect for autonomy (to both supervisors and students) could form a basis for many ethical codes of a proposal writing endeavor.

As argued by Vilkinas [24], being a supervisor is not limited to meeting and discussing the students' research progress. It includes, *inter alia*, managing the doctoral process in a creative way to monitor, nurture, and foster students' growth in research skills so as to motivate them to produce a high quality research work. A doctorate is largely about process of the learners' personal development, preparing them through providing apprenticeship demeanor, including guidelines for professional and novice researchers in such a process as doctoral learning that gives personal satisfaction [10]. This improves learners' knowledge base and skills in research.

Addressing student-supervisor procedural negativism as well as methodological misfits would help to inform the development of doctoral programmes in African Universities. It may create a conducive learning and supervisory environment to enable students to complete their doctoral training successfully, thus, prepare them for a career.

3. Methodology

Qualitative information reflecting the author's experience during proposal writing in his doctoral journey was attained through recounting his experience with assigned supervisors, indicating how the author negotiated the relationship with the supervisors. The researcher's personal experience is important [26] as it contributes significantly to the work being undertaken. In this study, it was a useful tool in recounting and reflecting the author's doctoral study experience at the proposal writing stage. In this way, reflecting meaningfully on the author's experience and relate this experience to the doctoral learning literature provides practical and existential knowledge on doctoral students' academic growth at the African university.

In addition, the documentary research method was used. According to Possi [26], the use of the documentary method focuses on analysing the documents that contain information or data on the phenomenon one wishes to study. It involves identifying, categorizing, analysing and interpreting data or information [27]. Documents from a variety of sources in doctoral education, doctoral learning experience, doctoral supervision as well as research methods were critically analysed in the scope of the study.

The interpretive systematic review was used. This helped to bring together available research on a given topic in a way that synthesized the content to develop one coherent narrative [27]. As advocated by Genza [28], a systematic review of existing sources helps in advancing knowledge along a particular line of inquiry. Thus, the way doctoral students experience their supervisors' involvement in supervision formed a conceptual thematic focus analysed from empirical and theoretical studies.

As only secondary data already available in the public domain for open consumption was used, no ethical approval was deemed necessary [29]. The study observed all research ethical issues, particularly acknowledging the sources of information, and it assured quality issues, that is, authenticity, credibility, representativeness as well as clarity and comprehensiveness of evidence from the reviewed documents.

4. Findings and Discussion

Two themes emerged out of a reflection on the author's experience during proposal writing, regarding his supervisors' involvement in supervision. They are presented and discussed below.

4.1. Negotiating Supervisors' Claimed Seniority in My Study

During the time when the author was writing the PhD research proposal, at the University of Dar es Salaam, supervisors were not involved in selecting students they supervised. They were given doctoral students to supervise while unaware of supervisees' academic background, research focus or any other unique needs in the supervisory process. It

was the Post graduate coordinator at the School level who did this work, basing mainly on the supervisor's supervision load in a given academic year and the supervisor's area of expertise as related to the student's topic of study.

Upon arrival at the University and as the author completed the registration process, he was given a letter which indicated the two supervisors he was to work with in his doctoral study undertaking, beginning with proposal writing. The two supervisors had different backgrounds in terms of academic specializations as well as in research methods and they held different academic ranks. For successful accomplishment of the research proposal, Botha and Mouton [30] are of the opinion that doctoral student selection needs to involve supervisors in order to ensure complementarity of supervisors' expertise in the students' learning content area as well as methodology to be used in the study by a student.

During the proposal writing stage, the author did not have any opportunity to have a supervision meeting involving both supervisors, because, actually, they did not have a common time and willpower to meet him as a team. Indeed, this worried him a lot. This state of affairs, as noted by Manyike [23], makes it difficult for both students and supervisors to establish a good work relationship for successful supervision. To Burton [31], doctoral students need strong and willing supervisors to thrive and complete their studies.

It came to the author's understanding that the second supervisor was not satisfied with the position he was given in the study, being a senior academic staff at the School of Education. As a result, power relation conflict based on Seniority between the two supervisors was oblivious. The author was caught between these power struggles. As argued by Lee [5], the supervisor acts as a gate keeper who decides which gate to open, when, how and why, particularly during the early stages of the doctoral student's research life.

In one of the feedback meetings with the second supervisor, who did not claim "the right" to be the first supervisor through official means, this supervisor reacted to the author personally as if the student was responsible for such an arrangement (of assigning supervisors their seniority roles in the study). The author shared this experience with the first supervisor, and later reported it to the Post-graduate studies coordinator at the School of Education level. The issue was resolved by reminding the supervisors about their equally shared roles in supervising a doctoral student, regardless to their seniority in the field.

Both supervisors were required to work cooperatively in accordance to the University's Post-graduate programme guidelines and regulations, which oblige supervisors to help the student "swim across the uncharted waters to the shore", and to ensure that the candidate maintains satisfactory progress [32]. These guidelines further require supervisors to provide the student with adequate advice and encouragement on the thesis project. As regards proposal writing, doctoral supervisors at the University of Dar es Salaam have a responsibility to help the student formulate an appropriate research proposal in a way that contributes to new knowledge of factor theory [32].

After this incidence, the author learned to work cautiously with the supervisors, who seemed to be incompatible right from the beginning of his doctoral journey. The junior staff (the first supervisor) however, was cooperative, although the author felt it difficult to cross this threshold. This is in line with Frick's [6] argument that in most cases, supervisors and students enter the supervisory relationship with unequal knowledge experience.

The success of a doctoral student depends much on an established personal relationship with supervisors, which can effectively be realized through smooth communication between both parts [23] to improve the quality of the student's work. Lee [5] is of the opinion that the student's emotional intelligence and flexibility play a large part in working with supervisors through to successful completion of the doctoral project. Indeed, collaboration between supervisors and students is a key to smooth progression in doctoral learning [31].

As an experienced supervisor of students' dissertations at the Master's and doctoral levels, the author's own experience when he was a doctoral student had informed his supervision approach and style in the need to ensure quality output of the supervision work. This supports Lee's [5] argument that supervisors' own experience during their own doctoral studies informs their current practices as they seek to emulate, add or avoid their own experiences. In addition, this supports Cornér, Löfström, and Pyhältö's [14] findings that doctoral students are sensitive to problems involving experience of inequality in the supervision process.

In this way, when the supervisors reduce the supervisory relationship to a private matter, they increase the risk which is exploitive and abusive to students [22]. The author's experience with two supervisors with unequal power and working relationship is not in line with Pyhältö, Vekkaila and Keskinen's [25] argument that having an opportunity to use different supervisory resources promotes the students' satisfaction with supervision in a way that could reduce chances of attrition. Indeed, students who go through a smooth mentorship succeed in their doctoral study journeys [31], thus, a good supervisor-student work relationship facilitates the student's academic growth.

4.2. Balancing Supervisor's Paradigmatic and Methodological Differences

As mentioned in the previous section, the author's supervisors had different backgrounds in terms of the content area of his study as well as methodological stances. In the two separate meetings with his supervisors regarding what was the appropriate methodology to use in the study, the author's again found himself in a threshold situation. Initially, this formed an impending situation for his progress in the proposal writing endeavor. Botha [8] argues that to pass a doctoral threshold, the collaboration between the candidates and their supervisors is of paramount importance.

In one of the proposal progress meetings, one supervisor categorically insisted that the author was to design his study basing only on the quantitative paradigm, and not a mixed

methods design as planned, which he had actually found useful in his study. This was because the supervisor was not competent in qualitative research methods, the second aspect in the mixed methods design. Bennaars [33] is of the opinion that most educational researchers in Africa have inclined to quantitative methods and were highly positivistic in orientation, and that this mode of study has been widely encouraged in African Universities.

Having experienced a similar encounter in the first case, the author did not allow himself to suffer in silence. He informed his supervisors on the requirements of the University's Post-graduate programme guidelines and regulations regarding their role in the study. This is line with Burton's [31] findings that adult learners have autonomy and reflection embedded in their experiences with it, to be motivated to add value to their academic lives.

Löfström and Pyhältö [22] argue that supervisors' roles require an ethical dimension in which the supervisor needs to respect the human dignity and autonomy of the student. Burton [31] adds that doctoral students seek to work with like-minded individuals who can provide them with invaluable insights, leading to their achievement in learning.

After a discussion with both supervisors, it was agreed that the author should use the mixed methods approach in his work, as he had planned. This helped him to benefit from the expertise of each supervisor, and as a strategy to enrich his study from both orientations. Wellington [10] argues that the choice of the study methodology and research approach should be guided by the nature of the research problem. In the process, both supervisors were satisfied and they appreciated the author's methodological approach.

In this way, using an appropriate approach in research methodology, that is, the mixed methods and reading a lot to seek originality in this area not only was beneficial to the author, but as it was the case to Niyibizi [1], it enabled him to move forward. In the doctoral journey, students may face marginalized and excluded by their supervisors, resulting to apprehensive experience in their journey towards the unknown, which according to Frick [6], is an inevitable element in the development of an original research.

Incompetence with regard to subject matter and methodology can stop benefitting students in a way that can harm them. It also includes lack of pedagogical knowledge [22]. PhD supervision requires supervisor's ability and attitudes that lie outside the bounds of the subject discipline and methodological orientations [34]. Thus, as an integrator, the supervisor plays various roles to facilitate the learner's progress at a particular situation of his or her doctoral journey [24]. Indeed, a safe supervisory relationship enhances students' learning, creativity and problem-solving [6].

Doctoral studies are not only about learning research skills and acquiring knowledge; they are also about becoming a full member of a scholarly community and developing an identity as a scholar [22]. To be successful, doctoral students need to be self-motivated to approach their learning as individuals by taking ownership of personal responsibilities [31]. In this way, the author experienced a will to work harder with a high

level of academic commitment, which helped him to complete the research proposal writing within the University's planned time, and it contributed to his academic and professional maturity as an academic staff in an African University.

5. Conclusions and Recommendations

This study explored the author's experience of his proposal writing to his PhD study at the University of Dar es Salaam. It reflected the way the learner's negotiation of the supervisors' relation led to the successful cross of a threshold, arising from supervisors' power conflicts and methodological differences.

It is concluded that: First, doctoral students could face discouraging experiences in their PhD learning journeys. Supervisors' power struggles are practices which form an aspect of the students' learning liminality. Second, supervisors' expertise differences in terms of their research methodological base as well as learners' content area form a foundation in a supervisory relationship between supervisors, and with the supervisee on other hand. A smooth communication between these parts is very important to the successful and timely completion of the student's doctoral journey.

This study contributes to the doctoral supervision knowledge in Tanzania. It has shed light on what could be done to improve doctoral supervision through well trained, committed and dedicated supervisors. It is hoped that further studies could build on the present findings. Thus, a study is called for to include the voices of both supervisors and doctoral students from a wide range of doctoral study perspectives.

This study has limitations in that it is based on the author's recounted experience with assigned supervisors during the early stages of his doctoral journey, thus, the findings cannot be generalized. Additionally, because this recounted experience was implicit in nature, the findings may not be transferable to other areas of a similar context.

Acknowledgements

This paper has been developed from the DIES/CREST capstone assignment (when the Author was a student in the online course for Doctoral supervision at African University, May 2019 to August 2019). Special acknowledgements to Professor Ian Botha, who provided critical comments that helped to shape this article to its present shape.

References

- [1] Niyibizi, E. (2018). Every Supervisor tells me his or her own things: A personal lived experience with working with two PhD Supervisors. *Rwandan Journal of Education*, 4 (2), 24-32.
- [2] Pyhältö, K., Vekkaila, J., & Keskinen J. (2012). Exploring the fit between doctoral students' and supervisors' perceptions of resources and challenges vis-à-vis the doctoral journey. *International Journal of Doctoral Studies*, 7, 395-414.

- [3] Gatfield, T. (2005). An Investigation into PhD Supervisory Management Styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy and Management*, 27, (3), November 2005, 311–325.
- [4] Åkerlind, G & McAlpine, L. (2017). Supervising doctoral students: Variation in purpose and pedagogy. *Studies in Higher Education*, 42 (9) 1686–1698.
- [5] Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, 33 (3) 267–81.
- [6] Frick, L. (2019). Supervisory models and styles. *Course material of Module 4 of the DIES/CREST training course for supervisors of doctoral candidates at African Universities*. Stellenbosch University.
- [7] Nsanganwimana, F. (2018). Students' motivations and socio-professional integration as drivers of doctoral program completion: A reflection on personal experience. *Rwandan Journal of Education*, 4 (2), 33–43.
- [8] Botha, J. (2019). The nature, purpose, standard and format of the doctoral degree. *Course material of Module 2 of the DIES/CREST training course for supervisors of doctoral candidates at African Universities*. Stellenbosch University.
- [9] EUA. (2010). *Salzburg II recommendations: European Universities' achievements since 2005 in implementing the Salzburg principles*. Brussels: EUA.
- [10] Wellington, J. (2013). Searching for 'doctorateness'. *Studies in Higher Education*, 38 (10), 1490–1503.
- [11] Agu, N & Odimegwu, C. O. (2014). Doctoral dissertation supervision: Identification and evaluation models. *Education research International*, 2014, 1–9.
- [12] Ndanguza, D & Mutarutinya, V. (2017). A model perception on the independence of PhD students in promoting the research capability at University of Rwanda. *Rwandan Journal of Education*, 4 (1), 4–12.
- [13] Chilisa, B. & Preece, J. (2005). *Research methods for adult educators in Africa*. Cape Town: Pearson.
- [14] Cornér, S, Löfström, E, & Pyhältö, K. (2017). The relationships between doctoral students' perceptions of supervision and burnout. *International Journal of Doctoral Studies*, 12, 91–106.
- [15] Jairam, D, & Kahl, D. H. (2012). Navigating the doctoral experience: The role of social support in successful degree completion. *International Journal of Doctoral Studies*, 7, 311–329.
- [16] Hunter, K. H, & Devine, K. (2016). Doctoral students' emotional exhaustion and intentions to leave academia. *International Journal of Doctoral Studies*, 11, 35–61.
- [17] Turner, G. (2015). Learning to supervise: Four journeys. *Innovations in Education and Teaching International*, 52 (1), 86–98.
- [18] Keefer, J. M. (2015) Experiencing doctoral liminality as a conceptual threshold and how supervisors can use it. *Innovations in Education and Teaching International*, 52 (1), 17–28.
- [19] Lee, A. (2018). How can we develop supervisors for the modern doctorate? *Studies in Higher Education*, 43 (5), 878–890.
- [20] Kiley, M. (2015) 'I didn't have a clue what they were talking about': PhD candidates and theory. *Innovations in Education and Teaching International*, 52 (1), 52–63.
- [21] Paglis, L. L, Green, S. G, & Bauer, T. N. (2006). Does adviser mentoring add value? A longitudinal study of mentoring and doctoral student outcomes. *Research in Higher Education*, 47 (4), 451–476.
- [22] Löfström, E & Pyhältö, K. (2012). The supervisory relationship as an arena for ethical problem solving. *Education research International*, 2012, 1–11.
- [23] Manyike, T. V. (2017). Postgraduate supervision at an open distance e-learning institution in South Africa. *South African Journal of Education*, 37 (2), 1–11.
- [24] Vilkinas, T. (2002). The PhD process: The supervisor as the manager. *Education and Training*, 44 (3), 129–137.
- [25] Pyhältö, K, Vekkaila, K, & Keskinen, J. (2015). Fit matters in the supervisory relationship: Doctoral students and supervisors' perceptions about the supervisory activities. *Innovations in Education and Teaching International*, 52 (1), 4–16.
- [26] Possi, M. (2019). Analysing single-subject research designs in special needs education: Some examples and applications. *Papers in Education Development*, 37 (1), 1–30.
- [27] Hallinger, P. (2017). Surfacing a hidden literature: A systematic review of research on educational leadership and management in Africa. *Educational Management Administration & Leadership*, 20 (10), 1–23.
- [28] Genza, G. M. (2021). But what is leadership? A systematic review of the leadership concept in view of heightened educational leadership in Africa. *Journal of Education and Practice*, 12 (9), 127–137.
- [29] Ndarukwa, P., Chimbari, M. J. & Sibanda, E. N. (2019). Protocol on a systematic review of qualitative studies on asthma treatment challenges experienced in Sub-Saharan Africa. *Systematic Review* 8, 149.
- [30] Botha, J. & Mouton, J. (2019). The preparation phase: Selection, supervisor allocation, and supervising the doctoral proposal. *Course material of Module 5 of the DIES/CREST training course for supervisors of doctoral candidates at African Universities*. Stellenbosch University.
- [31] Burton, E. (2020). Factors leading to educators to pursue a doctorate degree to meet professional development needs. *International Journal of Doctoral Studies*, 15, 75–87.
- [32] UDSM. (2018). *General regulations and guidelines for postgraduate programmes*. DVC-Academic: Dar-es-Salaam.
- [33] Bennaars, G. A. (1995). Philosophy and educational research. In K. Mwingira and S. P. Wamahiu (eds). *Issues in educational research in Africa*. Nairobi: East African Educational Publishers.
- [34] Bagaka, J. G, Badillo, N, Bransteter, I & Rispinto, S. (2015). Exploring student success in a doctoral program: The power of mentorship and research engagement. *International Journal of Doctoral Studies*, 10, 323–342.