US-China Education Review A, May 2025, Vol. 15, No. 5, 361-381

doi: 10.17265/2161-623X/2025.05.006



Exploring Supervision Experiences of Doctoral Students and Supervisors on Completion of Doctoral Dissertations in Selected Public Universities in Kenya

Janet Chepchirchir Ronoh, John Chang'ach, Josephine Musamas Moi University, Eldoret, Kenya

Despite a high demand for a workforce with high levels of research knowledge, skills, and attitude, research has revealed that delay in the completion of a doctoral degree and high attrition rates is still a common experience in many universities today. Studies have shown that stagnation mainly occurs at the dissertation stage of the study, and consequently, stakeholders are now focusing on efforts to understand experiences with an aim of improving completion rates. This study sought to understand the supervision experiences of supervisors and doctoral candidates at the dissertation stage. The study was guided by the objective: to explore supervision experiences of doctoral students and supervisors during the dissertation phase of a doctoral study. The study used Tinto's doctoral persistence theory and Weidman et al.'s graduate socialization framework as a lens to understand participants' experiences. The study employed a qualitative approach, and a purposive sampling strategy was used to select 55 doctoral students and 32 supervisors from four universities. Qualitative data were gathered using a semi-structured questionnaire for students and supervisors and a focus group discussion for supervisors. Qualitative data were coded and analyzed thematically according to Tesch's method of qualitative analysis. The study established that: Effective studentsupervisor collaboration has not been achieved; there are still gaps in communication and feedback between doctoral students and supervisors. Power dynamics between students and supervisors and inadequate supervisor proficiency are still a common experience. Doctoral students showed concerns on weak research back-ground and limited research skills. Experiences of loneliness, inadequate support from advisors, peers and family featured strongly in the findings. The study recommends: prioritization of supervisor capacity building, institutional cultivation of virtues of academic integrity among doctoral students, and implementation of structured research activities such as seminars, conferences, and workshops. The study also advocates for students' guidance on coping strategies that will enable doctoral students strike a balance between research and life experiences. Facilitation of supervision should be enhanced; supervisors should be offered better remuneration and moderation of their workload. Universities should also strengthen student-supervisor collaborations by fostering a formal structure of communication and feedback between students and supervisors.

Keywords: dissertation, doctoral studies, completion, experiences, supervision

Janet Chepchirchir Ronoh, Ph.D. student, Department of Curriculum Instruction and Educational Media, Moi University, Eldoret, Kenya.

John Chang'ach, Ph.D., Professor, Department of Education Foundations, Moi University, Eldoret, Kenya. Josephine Musamas, Doctor, Head of Department of Curriculum Instruction and Education Media, Moi University, Eldoret, Kenya.

Introduction

Completion of a doctoral degree is currently demand-driven; universities are currently faced with a challenge of giving quality research output in addition to attempting to attain high completion rates and meeting the needs and expectations of students despite massification in higher learning institutions (Bacwayo, Nampala, & Oteyo, 2017). There is need for universities to shift the focus from student retention to motivating students to stay and persist to degree completion (Tinto, 2017). Success of doctoral students is often based on effective quality supervision which instils in candidates' research knowledge and empowers students to be autonomous researchers (Igumbor et al., 2020; Mulinge & Arasa, 2013). According to Sharif and Jan (2020), in order to capture the specific needs of supervisors and students in the support process, the support mechanisms should be informed by postgraduate students and supervisors' experiences. Postgraduate research is a guided learning process that requires the input of both the student and the supervisor (Mulinge & Arasa, 2013).

Majid (2017) finds that research supervision is not only a process of academic development but also entails an establishment of a good working relationship between doctoral students and supervisors, and consequently, supervisory relationship mainly determines the extent of satisfaction, success, and disappointment of a supervisee (Katz, 2016; Jairam & Kahl, 2012). An effective cordial working relationship between the supervisor and the student is crucial if universities endeavour to meet international standards of doctoral studies (Shariff et al., 2015 Tahir, Ghani, Atek, & Manaf, 2012). This implies that a research supervisor is a key person throughout the period of a student's Ph.D. journey.

While students' characteristics are paramount in determining the progress and completion of doctoral studies, the role of the supervisor as a study mentor is crucial and cannot be ignored (Uddin, Mamun, Soumana, & Khan, 2017). Lack of constant interaction between supervisor and student impedes doctoral degree progress, and thus, Akparep, Jengre, and Amoah (2017) point out that timely completion of a dissertation has a direct bearing on a cordial relationship between the supervisee and supervisor. For most doctoral students, completing the dissertation is a hurdle that influences study success and attrition (Robinson & Tagher, 2017). Most doctoral students fail to develop independence after completing coursework; they experience isolation, especially when they lose peer and instructors' support (Spaulding & Rockinson-Szapkiw, 2012).

Although most doctoral students complete their coursework on time, majority take more than twice the minimum time allocated to the program because of not completing their research projects on time (Twebaze, 2023). Experiences of doctoral students during a doctoral study have been studied. However, few studies have focused on the experiences of both students and supervisors during the dissertation phase of the study, therefore, aims to explore experiences of doctoral students and supervisors during the dissertation phase of the study.

Study Aim

The aim of this study was to understand supervision experiences of doctoral students and supervisors during the dissertation phase of a doctoral study. It sought to answer the question: What are the experiences of doctoral education students and supervisors on completion of doctoral dissertation?

Research Methodology

The study participants consisted of doctoral students in education at the dissertation stage of their study and education supervisors with experience in supervising at least two doctoral candidates to completion from four

purposively selected public universities. The four participating universities were selected based on having well-established doctoral studies in education departments of: Educational Psychology, Educational Foundations, Curriculum Instruction and Educational Media, Educational Administration Planning and Management for more than 10 years. The study purposively selected 32 supervisors: eight from each university and two from each of the four departments. Simple random sampling was used to select 55 doctoral students who were at the dissertation stage of their doctoral studies from the four public universities. The student sample consisted of those who enrolled between the years 2016-2018, who by the period of data collection of the study were in their fifth and sixth years of study, respectively.

The four universities were given acronyms A, B, C, and D. The supervisors and doctoral students were given acronyms L and S, and the participants' departments: Educational Psychology, Educational Foundations, Curriculum Instruction and Educational Media, Educational Administration Planning and Management, were assigned letters P, F, C, and A, respectively. In the four characters used to identify a participant, the first letter represents the university (A-D), the second letter (S or L) represents student or supervisor respectively, the third letter (P, F, C, or A) represents the department, and the fourth is the numerical number of the respondent.

A semi-structured questionnaire was used to gather qualitative data from doctoral students, whereas a semi-structured questionnaire and a focus group discussion were used to gather qualitative responses from supervisors. A supervisor's focus group discussion was conducted in each of the four universities, and participants comprised two supervisors from each of the four departments of education. Doctoral students who responded to a semi-structured questionnaire were 14 from University A, 12 from B, 13 from C and 16 from D. All the ethical procedures and considerations of conducting research were followed. The qualitative data were coded and analyzed thematically according to Bogdan and Biklen (2007), J. W. Creswell and J. D. Creswell (2018), and Elliott (2018), method of qualitative analysis.

Ethical Consideration

This study adhered to professional ethics and conduct and followed ethical principles that enabled the protection of human participants' rights during and after the process of data gathering. The researcher upheld research ethical issues by first seeking a letter of approval to conduct research from the School of Postgraduate Studies, Moi University, and research approval from the Kenya NACOSTI. Acceptance letters from the education faculties in the four universities under study were also sought. The researcher articulated the study objectives in the research instruments so as to be understood by the respondents, and the signing of participants' informed consent forms and confidential clauses were sought before data gathering commenced. Respondents were treated with utmost respect, informed of all devices used to generate the data and the principles of anonymity and voluntariness. Data gathered were treated with high confidentiality, and verbatim transcriptions, written interpretations, and reports were provided to the participants for verification. The rights of the participants, interests, safety and wishes were considered first and the whole research process upheld integrity.

Data Analysis

This study applied the guidelines of Bogdan and Biklen (2007) and the Tesch method (J. W. Creswell & J. D. Creswell, 2005) on thematic analysis. The researcher transcribed, organized, reduced, and described raw qualitative data that were drawn from the semi-structured questionnaires and focus group discussions. The open coding strategy of breaking down, examining, comparing, conceptualizing, and categorizing qualitative data guided the inductive process of thematic analysis (De Vos, Delport, Fouch & Strydom, 2014). Based on the

methodological approach of Elliott (2018), the qualitative data were coded, and commonly emerging categories and themes were sought and reported.

Literature Review

The role of the supervisor in a doctoral study is to guide students to successfully complete their dissertation; this includes: help students determine a problem and develop it into a topic, provide psychosocial support, monitor the progress of students, assist them to navigate the expectations of different committee members, and coach on intrapersonal skills and strategies of managing time and stress (Vilkinas, 2008; Pearson & Brew, 2002). Rokundo (2020) opines that the doctoral supervision process in contemporary times takes the aptitude of the supervisor, and to a greater extent, is an outcome of formal pedagogical learning (Skakni, 2018). The findings of Van Rensburg, Mayers, and Roets (2016) link doctoral students' progress to supervisor support while Rensburg and Mayers (2016) and Hyatt and Williams (2011) cite precision and effectiveness in doctoral student guidance to be closely related to supervisors' pedagogical and research skills.

According to Joseph and Kalabamub (2018), proper supervision, arrangements, timely feedback to students, frequent advisor-student meetings, good relationships and an early start are key pointers of a possible high rate and timely completion of thesis writing. Mentors have the authority to guide and facilitate students' learning through the provision of further reading materials and constructive feedback (Choi, 2019). Mentors are also equipped with what Halse and Malfroy (2010) call "contextual expertise", where mentors are able to guide students through how to write a genre of academic writing and how to observe the university's requirements of candidacy. Rugut and Chang'ach (2023) state that supervisor expertise is an enriching opportunity that can be developed through capacity building; however, these trainings are not prioritized for implementation even though they form part of the departmental plans in the universities under study. Doctoral research activities involve investigation and problem-solving; supervisors play a key role in facilitation by giving instruction, providing guidance, and monitoring the research progress of the candidates (Hakizimana, 2019). Hakizimana asserts that a working student-supervisor collaboration trains doctoral candidates to be independent researchers, to take responsibilities in the research process, and to be more active and confident while putting into practice the acquired skills and innovations.

Masek (2017) points out that in a reliable supervision relationship, supervisors give freedom for students to make decisions on research directions, are contingent on supervisees' research proposals, and search for evidence of all students' work. According to a study by Devos et al. (2017), approximately one-third of the non-completers were being forced to work in a direction that they did not wish to follow. Doctoral students' freedom in making their own planning and in expressing their opinions is therefore positively associated with study satisfaction (Shin, S. J. Kim, E. Kim, & Lim, 2018). There is need for supervisors to mentor doctoral students to be responsible and to focus on tasks in order to meet timelines in research without extended breaks (Ali & Kohun, 2006; Holsinger, 2008). Studies by S. Anderson and B. Anderson (2012) and Choi (2019) recommend that supervisors should socialize doctoral students into the scholarly community by giving training on how to present at academic conferences and publish scientific research.

Student-supervisor relationship is crucial and studies have revealed that the quality and nature of the relationship is closely related to doctoral students' thesis completion and satisfaction (Apperson, 2019; Shin, S. J. Kim, E. Kim, & Lim, 2018; Woolderink, Putnik, van der Boom, & Klabbers, 2015; Mason, 2012; Bair & Haworth, 2004; Lovitts, 2001). Experiences of poor relationship between a supervisee and a supervisor can lead

to attrition (Corn & Löfstr & Pyh at & 2017; Golde, 2005). Sverdlik, Hall, McAlpine, and Hubbard (2018), Kyvik and Olsen (2014), and Herman (2011) identify insufficient support by the supervisor as a significant factor affecting doctoral attrition and emphasise the importance of a positive relationship between dissertation advisor and doctoral candidate.

Choi (2019) notes that Ph.D. students may often feel anxious, frustrated, and overwhelmed in the journey of dissertation writing as a result of inability to progress towards achieving a doctoral degree; therefore, the emotional support of the supervisors is paramount throughout the doctoral journey. Majid (2017) opines that a supervisor-supervisee relationship with mutual respect, clearly set expectations, personal connections, and shared values is free of pressure and thus yields a positive outcome in the graduate study process if both parties acknowledge that they are learners as well as sources of knowledge. Ali and Kohun (2006) identify social isolation as another factor of attrition in doctoral studies and propose a structured orientation and advisor selection, formal social events, collaboration and face-to-face communication as strategies for social and resource support. Moreover, poor response to technological advances, poor administration, poor student welfare services and frequent student unrest, have significantly contributed to low completion rates, low quality education, training and learning in higher institutions (Wanzala, 2013).

A well-established faculty mentoring programme fosters deeper mentor-mentee relationships, which in turn may enhance the experiences of doctoral candidates and improve doctoral study persistence (Fitzgerald & McNamara, 2021). According to Rugut (2017), continuous flexible and diplomatic negotiations, commitment and support, collaboration and honesty and mutual commitment between the student and supervisors are key to efficient supervision. He reiterates that giving timely feedback, quality guidance, and efficient communication is also crucial to completing doctoral studies.

Studies have revealed that inadequate teaching and supervision are the leading cause of poor-quality dissertations and delayed completion of doctoral studies in African universities today (Mulinge & Arasa, 2013). Ampaw and Jaeger (2012) assert that prior academic preparation is a major factor in doctoral persistence; in some cases, programs often enrol students who do not demonstrate capabilities of success in a doctoral program but are pressured to meet the university objectives of increasing enrolment. According to Sarwar, Shah, and Akram (2018), Rensburg and Mayers, (2016), and Masek (2017), factors that hinder supervision process include: lack of experience by supervisors, high workload, insufficient expertise in the research field, allocation of high number of students to supervise, compromising quality in research work, limited utilization of modern communication tools and supervisors' additional responsibilities. In their research findings, Denis, Colet, and Lison (2019) lament that the practice of doctoral supervision largely remains a privatized practice that lacks collective reflections and regular pedagogical training. Most supervisors attest to having learnt supervision through experience on the job because formal sources of learning, although desired, are limited (Ribau, 2020; Halse, 2011; Halse & Malfroy, 2010). Most East African universities do not have documented guidelines that outline support mechanisms that foster effective supervision (Sharif & Jan, 2020). Administrative support should also include quality control processes as ways of fast-tracking student-supervisor engagement and progress (Firth & Martens, 2008).

Uddin et al. (2017) attribute interference of doctoral study progress and ultimately delay in completion of doctoral dissertation to issues of funding and family engagement, the role of the supervisor and the nature of supervisor/supervisee relationship, preparation for research, psychological challenges and health problems. According to Evans et al. (2018) and Levecqueet et al. (2017), unresolved family and social issues may cause

mental health problems to doctoral candidates. Weidman, Twale, and Stein (2001) assert that relationships with individuals who support doctoral studies such as advisors, family, personal communities, friends, and employers are paramount in completion of a doctoral study. Barasa and Omulando (2018) cite two main reasons for doctoral students' delay in completion of a Ph.D. degree: students' personal life and work circumstances, and funding constraints. Barasa and Omulando assert that most doctoral students are engaged in other life activities such as part-time teaching, other employment, and family commitments, such that they do not keep in touch with their supervisors after completing coursework. Findings of Matheka, Jansen, and Hofman (2020) showed that most full-time Ph.D. students in Kenya are also full-time employees with little financial support, thus experiencing competing demands on their time, which could explain the low completion rates of doctoral studies.

Completion of a dissertation is also determined by positive student qualities such as commitment, maintaining scientific discipline throughout the research process, motivation to publish research articles, participation in academic conferences, and having a conducive interpersonal working student/supervisor relationship (Shin, J. C., Postiglione, G. A., & Ho, K.C., 2018; Bolli, Agasisti, & Johnes, 2015; Groenvynck, Vandevelde, & Van Rossem, 2013; Humphrey, Marshall, & Leonardo, 2012). Whereas the success of doctoral students depends on doctoral students' ability to demonstrate maturity in their thinking, outstanding communication skills both written and verbal, well developed emotional intelligence and high-level resilience, Casey, Taylor, Night, and Trenoweth (2023) and Stubb, Pyhalto, and Lonka (2011) state that lack of socialization in doctoral programs increases attrition risk. Eyangu, Bagire, and Kibrai (2014) highlight a lack of hands-on skills among research students as one of the major challenges in the research process. Eyangu et al. reiterate that there exists a missing link between academic teaching and research experiences that demands a facilitative framework.

According to Overall, Deane, and Peterson (2011), a supervisor's availability and provision of timely feedback are basic factors of supervision that Ph.D. students attach great value to (Abiddin & West, 2007; Pyh ät ö, Vekkaila, & Keskinen, 2015; Woolderink et al., 2015). Research findings have underscored the importance of having both the advisor and student facilitate a meaningful and positive relationship throughout the study to fill academic and research skill gaps that doctoral students come to the programme with (Salinas-Perez, Rodero-Cosano, Rigabert, & Motrico, 2019; Moak & Walker, 2014). Chesnut, Siwatu, Young, and Tong (2015) postulate that dissertation advisors should be trained on how to support students during the final phase of degree completion, graduate student-faculty relationships should be strengthened, and students should be given more opportunities to learn to conduct research and get feedback from their mentors if graduate students' confidence and willingness to conduct future research successfully are to be increased. Doctoral students have shown to value autonomy. Ali, Watson, and Dhingra (2016) and Levecqueet et al. (2017) state that the degree of freedom Ph.D. students have in designing and executing their research is closely related to their success and satisfaction.

In addition, promoting Ph.D. students' communication with their dissertation committee is vital to program success (Ames, Berman, & Casteel, 2018). In their study, Rockinson-Szapkiw, Spaulding, and Spaulding (2016) establish significant relationships between indicators for doctoral student support systems and student satisfaction and recommend that doctoral programs should increase support systems to reduce doctoral student attrition. Therefore, there is a need for university and program-specific officials to evaluate how they can best provide structured and consistent mentorship, including training advisors.

According to Sambrook, Stewart, and Roberts (2008, p. 72), "the purpose of supervision is to steer, guide, and support students through the process of conducting a doctorate". Faculty members' mentoring skills

significantly impact doctoral students' training, performance, and completion of Ph.D. degrees (Hadi & Muhammad, 2019; Allen & Eby, 2007, p. 51). Hadi and Muhammad assert that the desired research mentor characteristics are: responsiveness in research approach, effectiveness in research guidance, supportiveness in research work, commitment to improvement of students' research skills, objective evaluation of students' research work, timely feedback on students' research performance, and frequent availability when needed by research students. Findings of Gube, Getenet, Satariyan, and Muhammad (2017) advocate for a good match between the student and supervisor, both academically and personally. To enhance quality in research and a high rate of Ph.D. study completion, universities should consider training supervisors and providing a code of ethics to guide doctoral students (Barasa & Omulando, 2018). Veluvali and Surisetti (2023) highlight that universities should create opportunities for research collaborations and partnerships that reduce social isolation among doctoral students. Trogisch et al. (2020) add that supervisors should also embrace collaborative supervision, whose benefit is quality research and cohesive exchange of research expertise amongst supervisors and research students.

In a contemporary higher education setting, integrity and credibility issues in research are now more focused on surveillance and enforcement (Dawson, 2021). Dawson asserts that this adversarial approach emphasizes the detection of similarity index by use of software rather than encouraging academic integrity among scholars. According to Wilson and Cutri (2019), academic institutions should not only focus on polished products, as this makes students feel that they are below standards. According to Clarence (2020), it is the responsibility of the educators to have a comprehensive doctoral education program that explicitly teaches integrity skills and enables students to be confident and value integrity, authenticity, and ethics in research and foster timely study completion. In addition, it is important to view academic integrity as a holistic approach, which can be achieved through the integration of policies and surveillance strategies into pedagogical practices of doctoral education programs (Dawson, 2021).

The research writing process and expectations at the doctoral level are complex and challenging; it demands that doctoral students develop specific academic skill sets that are transformed from their earlier studies (Australian Qualifications Framework, 2013). Indeed, failure of students to adhere to the rules of academic integrity, which are often socially and contextually constructed, is termed as academic misconduct that can lead to severe penalties, which range from warnings to low scores on an assignment or, in severe cases, expulsion from the institution (Cutri et al., 2021). With the consequences of academic misconduct, impostor phenomenon, which is a feeling of inadequacy, low self-confidence, anxiety, and having a notion of being a victim of fraud, may be experienced by doctoral students, causing them to experience constant disbelief in success (Lau, 2019). Lau laments that if these feelings are not controlled, they result in heightened anxiety and low self-confidence among doctoral candidates, consequently impacting negatively on the productivity and success of doctoral students. Therefore, there is a need for the creation of a peer learning environment among doctoral students in order to nurture the culture of integrity in academia and improve the academic writing skills of post-graduate students (Cutri et al., 2021).

Findings and Discussion

The objective of the study was to explore supervision experiences of doctoral education students and supervisors in the completion of doctoral dissertations. In order to answer this research objective, qualitative data

gathered from the students' and supervisors' semi-structured questionnaires and supervisors' focus group discussions were thematically analysed and the following themes generated: student-supervisor collaboration, inadequate academic writing skills, academic malpractices, and support mechanisms.

Table 1
Summary of the Findings Addressing the Research Question

Themes	Codes
Student-supervisor collaboration	Effective communication
	Power dynamics
	Supervisor proficiency
Inadequate academic writing skills	Limited research skills
	Weak research background
Academic malpractices	Plagiarism
	Subjective evaluation
Support mechanisms	Faculty and peer support
	Research opportunities
	Family support and social issues

Theme 1: Student-Supervisor Collaboration

In the context of this study, the student supervisor relationship where co-supervision is applicable is a connection between a doctoral student and supervisors during the supervisory process. Participants highlighted different views upon which a student-supervisor relationship is built. These include: (i) effective communication, (ii) power dynamics, and (iii) supervisor proficiency.

Effective communication. All doctoral students across the four universities pointed out that the "goodwill" of the supervisor is a major factor in completing a dissertation. All the students attested that communication and feedback between the student and supervisor at every stage of dissertation writing build a relationship critical to the timely completion of a doctorate. The majority of the doctoral students across the four universities stated that their universities do not have a structured mode of communication between students and supervisors; however, it is based on the common understanding between them. Most students claimed that communication between the majority of doctoral students and supervisors is not effective, claiming that both parties are not responsive. The majority of the student participants concurred that both students and supervisors delay giving feedback, with most responses given after a long time, with several prompts.

The supervisors' views concurred with the students' view stating that student-supervisor communication is ineffective. The majority of the supervisors, on the other hand, confirmed the delay in feedback from supervisors, mostly caused by an overwhelming number of students under one supervisor and other supervisory responsibilities, proposing that doctoral students should be proactive as well to maintain communication with their supervisors. Both student and supervisor participants perceived that effective communication and feedback amongst doctoral students and supervisors have not been achieved. The majority of both the students and supervisors pointed out that there is a need for both parties to develop openness in communication if timely study completion is to be realized. This is evident from the following participant quotations:

"Communication between students and supervisors has always been unstructured, I mean...one that is not monitored by the university but based on the parties' (students and supervisors) agreement. Although it is expected to be a cordial one, sometimes it is not". (ALA1)

"Sometimes physical distance between the supervisor and the doctoral student is too much and expensive, such that meeting physically is not convenient. In this case, if the supervisor fails to respond to emails, fails to read students' work, there will be a missing link and progress will be slowed down..." (CSP2)

"Students also delay in giving feedback when challenged by the tasks assigned, or held up in other responsibilities...supervisors on the other hand delay responding to students' work because they are either too busy with other students' research work, teaching courses, office work or meetings etc." (DLF2)

"Effective communication is the responsibility of both the student and the supervisor; some students go silent for months without informing the supervisor of their writing progress. Student and supervisor openness in communication will stir progress in research work". (BSC3)

"When a doctoral student communicates with a supervisor more often and exchange feedback, it encourages the student to walk the study journey by themselves and enhances honesty in fieldwork in addition, it keeps the supervisor abreast with the students' work and enables the supervisor to give the best advice". (DSA2)

"Mutual trust and clear communication between students and supervisors are essential values for study completion, the supervisor should encourage independence at the same time offer opportunities for development and progress, the helpfulness and timelines of supervisor's comments and feedback should be acted upon promptly for a student to realize early completion of the dissertation". (CLP2)

It is evident from respondents' views in the above quotations that effective communication between doctoral students and supervisors has not been achieved although perceived to be crucial and closely related to dissertation completion and satisfaction (Hadi & Muhammad, 2019; Shin, J. C., Postiglione, G. A., & Ho, K.C., 2018; Shariff et al. 2015; Tahir et al., 2012). Respondents highlighted that when there is a gap in communication between students and supervisors, it disrupts progress in the research work. This is in line with the views of Uddin et al. (2017), who emphasize constant interaction between supervisor and supervisee. Participants also underscore the need for open communication in order to offer guidance when students are facing research challenges. This is also supported by the opinion of Joseph and Kalabamub (2018) who point out that timely feedback to students, effective communication between advisor and student, and a good relationship are key pointers of a possible timely completion of the dissertation. Key to efficient completion of Ph.D. study according to Rugut (2017) is a healthy relationship between the student and the supervisor based on continuous, honesty, flexible, and diplomatic negotiations, student and supervisor commitment, sustained collaborations and supervisor support. He reiterates that giving timely feedback, quality guidance, and efficient communication are also crucial to the timely completion of doctoral studies. A good student/supervisor relationship and a close link are associated with study satisfaction and less intentions of quitting (Van Rooij, Fokkens-Bruinsma, & Jansen, 2019).

Power dynamics. In their responses, most participants raised concern over the power difference between doctoral students and their supervisors as an issue that negatively affects the student-supervisor relationship and academic interaction in the supervision process. The majority of the students pointed out that some supervisors demonstrate superiority in supervision, hence limiting the students' comfort and freedom in sharing study ideas and research challenges freely with advisors. Students also highlighted the power difference between two supervisors in a research project, stating that sometimes it results in conflicts that may end up disrupting the supervision process and progress. The majority of the student respondents also highlighted the issue of conflicting advice from co-supervisors, affirming that at times the feedback from one supervisor contradicts the advice of the other, leaving the student in a dilemma. Students also reported biased critiques of the dissertation by other supervisors during defences arising from supervisors' personal differences. Most of the students stated that a good relationship is one that creates proper academic engagement based on mutual respect and a culture of collaboration between students and supervisors.

The majority of the supervisors, on the other hand, felt that a power difference exists between students and supervisors, as well as between supervisors; however, open communication and continuous consultation should close the gap. Both students and supervisors concurred that developing a good working relationship and

collaborative supervision, a warm relationship that does not instil fear and anxiety in both parties but acts as a medium of continuous consultation, exchange of ideas, and objectively critiquing the study, is key to dissertation completion.

"In some instances, one supervisor may rubbish what the other supervisors have done with you or withdraw from guiding you. So, you are left with only one active supervisor..." (DSC1)

"Some supervisors are subjective in critiquing students' work during defences as a way of undermining and belittling a fellow supervisor with whom he or she has personal differences". (CSA2)

"Some co-supervisors fail to merge corrections given to students, such that the student finds that the feedback from both ends is conflicting and left at a crossroads. Others feel that their advice is superior to the advice of the other supervisor". (ASP3)

"There is always a power difference between students and supervisors and even between supervisors themselves, but the parties should express their expectations in the supervision process in order to accommodate one another and bridge the gap". (CLC2)

From the quotations above, respondents expressed a concern about the power difference between a doctoral student and supervisors and between supervisors themselves, claiming that if the gap is too wide, it may cause friction in the supervisory process, which in turn causes delay in study completion. Doctoral students expressed concern that supervisors' advice is not in harmony, stating that it causes a dilemma for the candidate and may cause the student to give up. This agrees with Van Rooij, Fokkens-Bruinsma, and Jansen (2019) who state that a good student-supervisor relationship and a close link are associated with study satisfaction and less quitting intentions; it is therefore important to have a good match between the student and supervisors, both academically and personally (Van Rooij et al., 2019; Woolderink et al., 2015). Respondents advocated for doctoral students' autonomy in research, claiming that they should be given freedom to share their research ideas. This concern is shared by Devos et al. (2017), whose findings revealed that approximately one-third of the non-completers of doctoral dissertations were being forced to work in a direction that they did not wish to follow. In addition, Shin, S. J. Kim, E. Kim, & Lim, (2018) point out that doctoral students' freedom in making their own planning and in expressing their opinions is positively associated with study satisfaction and relates to timely completion as well.

Supervisor proficiency. Most of the student respondents pointed out that some of the supervisors discourage students from exploring emerging methodologies, restricting doctoral candidates they supervise to use conventional methodologies or the approaches that supervisors themselves used in their studies. This limits doctoral students' interest and ease in conceptualizing the study from their own perspective, causing delays in completion. The majority of the student respondents raised concern about the need for supervisors to decolonize research methodologies in order to contextualize research, stating that this will lead to quality research output and pave the way for early completion of doctoral dissertations. Most student respondents raised concern about situations where both supervisors assigned to a candidate are aligned to one research approach, contrary to the students' approach, claiming that sometimes the student has to seek help from a different specialist related to that approach, slowing down the progress. The majority of the doctoral students also noted that most Ph.D. candidates do not read widely and consequently consult, which makes them hesitant to appreciate different emergent research approaches.

All supervisor respondents on the other hand pointed out that candidates supervised by committed and highly research-skilled supervisors are likely to complete the dissertation on time. They claimed that there is a need to have continuous supervisors' training that will enable them to gain expertise in all areas of research to advise

doctoral candidates appropriately. Most supervisor respondents opined that on-the-job training and capacity building should be encouraged to enlighten supervisors on the current trends in research. Respondents' perceptions were expressed in the following quotations:

"Some lecturers direct their students to use the approach they used in their studies; maybe this is not what you want. You know you don't think the same, and the nature of the problem at hand may be different, so it may disorient your research plan". (CSA1)

"When I began writing my proposal, my draft was a qualitative one but my supervisors insisted that I make it a quantitative study, this disorganised my line of thought for some time because these are two different research orientations". (DSA3)

"Most of the students do not have time to read and make extensive consultations and make decisions in a study early and so, we get confused for a long time fumbling with everything here and there". (CSP2)

"You can never have enough knowledge and skills in research because it keeps evolving and research methods emerge. The majority of supervisors do not have cutting-edge skills in research and supervision as a result of limited training and career development opportunities, such as refresher courses... very few supervisors deliver candidates to graduation". (BLF1)

From the respondents' quotations above, there is a close link between doctoral students' progress and supervisors' research proficiency. This corroborates with Rensburg and Mayers (2016), Hyatt and Williams (2011), and Noonan, Ballinger, and Black (2007), who affirm that supervisors' pedagogical and research skills to provide precise and effective guidance through the dissertation process are connected to timely dissertation completion. Supervisors' responses reveal a perception that highly skilled supervisors give a high-quality supervision that results in early study completion and satisfaction as established by Skakni (2018).

Doctoral students' perception that candidates supervised by committed and highly research-skilled supervisors are likely to complete the dissertation on time is in accordance to the views of Sarwar et al. (2018), Rensburg and Mayers (2016) who opine that factors that hinder supervision process include: lack of experience by supervisors, high workload, insufficient expertise in the research field, allocation of high number of students to supervise, compromising quality in research work, limited utilization of modern communication tools, and supervisors' additional responsibilities. Respondents advocate for supervisor training, a view supported by Rugut and Chang'ach (2023), who point that supervisor expertise should be enriched through implementation of capacity building opportunities.

Theme 2. Inadequate Academic Writing Skills

The results of this theme are presented under the codes: weak research background and limited research skills.

Limited research skills. Most of the student respondents reported having challenges in writing scholarly work, an experience they claim to be causing slow internalization of research concepts. Doctoral student respondents claimed that doctoral dissertation, unlike master's studies, requires that a student makes a new contribution to the already existing body of knowledge through his or her research, a requirement that demands more scientific input to the study. Students attributed limited research skills to poor reading culture, weak support system from faculty and supervisors, including limited access to research resources and limited time to focus on the study. Most supervisor respondents perceived that most doctoral students have not grown academically to become independent and autonomous researchers. Most of the supervisors pointed out that the majority of the doctoral students do not read on their own to expand their research knowledge and skills. Participants responded saying:

"There is a gap between knowledge acquired in the course units and putting it into practice. Making choices of research methodologies in a study needs one to have really read deeply but where is that time? Even reading culture is wanting..." (BSA1)

"Many students take a long period of time after coursework to develop a proposal. By the time they begin the real research, they will have forgotten all that was learned that needs to be applied to solve a research problem". (CSP2)

"...limited access to research resources and guidance from faculty members sometimes handicaps students handicapped in research knowledge and skills". (DSF3)

"The majority of doctoral students do not show commitment to the research process by working confidently and independently with minimum guidance. They are swayed away by other walks of life". (ALC3)

It is evident from the participants' responses above that doctoral students experience a limitation in research skills due to limited access to research resources, over-dependence on supervisors, poor reading culture, and weak support system. This, in turn, poses a challenge to doctoral dissertation writing extending to a longer duration than required. This agrees with the findings of Ali et al. (2016) and Levecqueet et al. (2017), whose research findings showed that the extent to which Ph.D. students are autonomous in designing and executing their research is closely linked to their success and satisfaction. This implies that a student who is not autonomous is dependent and chances of success is low.

Literature has demonstrated that a successful process of supervision depends on doctoral students' ability to demonstrate maturity in their thinking, outstanding communication skills, both written and verbal, well-developed emotional intelligence, and high-level resilience (Casey et al., 2023). This implies that doctoral students' research prowess determines the rate at which the study progresses and the time to completion.

Weak research background. Doctoral student respondents described experiences of inadequate research background amongst doctoral candidates. Most respondents perceived that their master's studies did not give the prerequisite knowledge and skills required for their Ph.D. because either it took so long after completion of the master's degree before enrolling for the doctorate degree, or the master's degree did not have the rigour that a doctorate degree required. The majority of the participants attested that they had not published any scholarly work before, stating that there is a relationship between the success of a doctoral student in thesis writing and their research background. Supervisor respondents also raised concern about doctoral students' weak research background, attributing it to students using other individuals to do most of the research activities, such as the collection and analysis of data on their behalf. Participants responded by saying:

"I think my research background is not strong because I took more than six years to enrol to my doctorate studies since I finished my masters and so I had to read a fresh..." (DSF1)

"My Ph.D. degree is one without course work I have to read widely and with focus to build my research foundation, an exercise that requires a lot of commitment". (BSC4)

"Master's degree did not have a requirement of publication and so I was not exposed to writing scholarly work, if I did it would be an advantage. Yes, actually I think someone with a strong research background stands higher chances of success in doctoral degree". (DSA1)

"...many students use other individuals or other researchers to carry out their research especially gathering data and analysing it. You find a student does not understand basic principles of research. Others do not understand their study and during defence some are forced to redo it". (ALA2)

The participants' responses above clearly reveal that most of the doctoral students have a weak research background, which arises from students failing to read extensively and apply the knowledge and skills acquired in research earlier. Respondents' concerns are pointed out by the Australian Qualifications Framework (2013), which states that the research writing process and expectations at the doctoral level are complex and challenging,

and that it demands that doctoral students develop specific academic skill sets that are transformed from their earlier studies. Respondents pointed that most students delegate their student responsibilities such as data collection, analysis, and report writing to research assistance. It is clear that when one has a weak research background, they may end up failing in the thesis defence and delay completing the study. This corroborates the findings of Grover (2007), who points out that writing a doctoral dissertation requires competencies such as efficient absorption of knowledge, integration, well-organized tool deployment, and ultimately, creation of quality knowledge output. This, therefore, implies that doctoral students need to express a minimum threshold of motivation and research competence for success. Herman (2011) and Kyvik and Olsen (2014) also note that candidates' ability or skills are critical. Ampaw and Jaeger (2012) assert that prior academic preparation is a major factor in doctoral persistence although in some cases programs often enrol students who do not demonstrate capabilities of success in a doctoral program but are pressured to meet the university objectives of increasing enrolment.

Theme 3. Academic Malpractices

The third theme is presented under the codes: plagiarism and subjective evaluation.

Plagiarism. The majority of the student respondents revealed that their institutions focus more on detecting academic malpractices, such as plagiarism index on the final product, that is, the dissertation. However, less focus is given to guiding the candidates on general integrity and rigour of the whole research process. Many student participants highlighted that the majority of doctoral students are coupled with a challenge of scholarly language. They expressed that the students learn the art of scientific writing through practice and experience that takes a lot of time.

The majority of the supervisor respondents raised concerns about the quality of doctoral dissertations of some doctoral candidates, claiming that some students hire other individuals to carry out and write the whole manuscript for them. Most supervisors articulated the need to cultivate the virtue of academic integrity among doctoral students. Participants responded saying:

"Most universities are interested in the plagiarism index of the final thesis, assuming that all the ethical considerations have been duly followed, an assumption that may not always be the case..." (ASA1)

"While strict measures are put to punish doctoral candidates who are found having committed academic malpractice such as plagiarism, the students are barely guided and informed on how to go about so as to avoid it". (BSP2)

"The fear of plagiarizing causes anxiety and slows down the student's progress or makes some students engage in other assistance apart from the supervisor in the research project, compromising originality". (DSF3)

"The good thing is that universities have an acceptable plagiarism index currently. Candidates would plagiarize because they don't pay attention to the concept of referencing". (CLC1)

The respondents' quotations above imply that the majority of the doctoral students experience challenges in adhering to the requirements of scholarly language and research integrity. Supervisors and students supported the need to inculcate the virtue of academic integrity in the academia rather than focusing on surveillance and enforcement through detection of similarity index (Dawson, 2021). This agrees with the views of Cutri et al. (2021), who highlight that developing doctoral student's academic integrity entails integrating explicit instructions on academic integrity in teaching and learning as well as in practice, supporting student academic literacy development, and transforming supervisory practices. In addition, Clarence (2020) points out that it is the responsibility of the educators to have a comprehensive doctoral education program that explicitly teaches

integrity skills and enables students to be confident and value integrity, authenticity, and ethics in research and foster timely study completion.

Subjective evaluation. Many doctoral student respondents expressed experiences of unfair evaluation of doctoral dissertations amongst some lecturers, claiming that some supervisors are subjective in their judgment. Most student respondents raised concern over the range of marks awarded by external and internal examiners of dissertations arguing that sometimes there is a huge deviation which suggests that either examiners do not strictly follow the stipulated guidelines and policies of evaluation or there is biasness in the whole process as a result of some examiners being assigned to examine dissertations which do not fall in research areas of their specialization. Respondents also raised concerns that some examiners fail doctoral students during oral dissertation defences because of personal differences between the examiner and the supervisors. The majority of doctoral students also argued that Ph.D. students are not made to understand the criteria for examining a dissertation; they claimed that most students do not know what examiners expect and look for in a dissertation. Most of the students from across the four universities cited the delay of feedback from internal and external examiners examining the thesis after submission, with some doctoral students claiming that sometimes a dissertation may take up to eight months, which causes demoralization to the doctoral candidate.

A few supervisor respondents expressed bias in dissertation evaluation, attributing it to examiners working under pressure as a result of a demand to examine within a short duration. Respondents responded saying:

"In some cases, you find that two examiners award marks that differ by up to twenty marks. This shows that one of the examiners is not an expert in that research area or the examination policies and guidelines are not adhered to..." (CSA1)

"During defence, some panel members aim at failing the student or awarding very low marks as a way of demeaning the students' supervisor, while others highly pass simply because they are supervised by senior professors, a thing that really compromises on quality and satisfaction..." (CSP3)

"Some examiners are aligned to one research approach and when they are examining a dissertation that is aligned to the contrary approach, they tend to be biased in awarding marks. It is not clear to the students what the examiners expect in the thesis". (DSF3)

"Sometimes you are given a dissertation to examine and results are required within a very short time, and you have to rush through it..." (DLA2)

From the respondents' quotations above, it is clear that in some cases, the examination of the dissertation is flawed. It is evident that some doctoral candidates experience unjust evaluation from examiners and defence panel members, leading to the award of marks which is not a true reflection of the student's performance. The respondents' arguments on subjective evaluation are contrary to the views of Choi (2019), S. Anderson and B. Anderson (2012), and Halse and Malfroy (2010) who argue that it is a vital role of an advisor who is also a mentor equipped with "contextual expertise" to socialize doctoral students into the scholarly community by giving training on how to write a genre of academic writing and how to observe the university's requirements of candidacy.

Theme 4. Support Mechanisms

The results of the fourth theme are presented under three codes: faculty and peer support, research opportunities, and family and social support.

Faculty and peer support. Most student respondents asserted that support offered by supervisors and peers to doctoral students at the dissertation stage is key in the Ph.D. study journey. Most students emphasised that supervisors and faculty leadership need to keep in touch with doctoral students monitoring progress and giving

clear guidance at each stage of the dissertation writing in order to avoid confusion and stagnation. They also expressed concerns about the postgraduate guidelines and policies, stating that the faculty leadership should ensure that they are explicit and implemented to the latter. Majority of the students expressed isolation and loneliness in the dissertation phase of the study claiming that they lack motivation, encouragement, and effective guidance from the faculty and fellow students. Student participants proposed the organization of regular research activities that enhance student-supervisor interactions and support.

Almost all student respondents suggested that their universities should consider involving the students in assigning the supervisors, claiming that the move will consider their preferences and stimulate research interest and foster cooperation. The majority of the supervisors also asserted that there is a weak link between doctoral candidates, their supervisors and peers. This is evident from the following participant responses:

"When course work is over, every student develops a proposal and finally a thesis in isolation. At times you feel confused and off track and at this stage if you do not find clear guidance, you lose hope or you pause the study for some time". (BSA3)

"During thesis writing students are lonely because they are far a wide and rarely meet to discuss their challenges. The university should organize common workshops or conferences to bring researchers together for support". (BSF2)

"Sometimes the more you read, the more you get confused, and you reach a point of hopelessness because you have to decide, and you are alone. A supervisor should come in handy to assist at this point". (DSP3)

"When the connection between doctoral candidates and supervisors is weak, and also between a candidate and his peers, the chances of a doctoral student maintaining focus for progress are slim. Faculty should also put in place and strictly implement clear policies and guidelines on postgraduate studies". (BLP1)

The participants' excerpts suggest that a weak support system from the faculty and peers is detrimental to doctoral students' progress in dissertation writing. Although a majority of respondents described a situation of weak support systems in their faculties, they outlined that collaborations between doctoral candidates and their faculty members through workshops and conferences build a solid network that enhances advancement in thesis writing. This concurs with Choi (2019), who notes that Ph.D. students may often feel anxious, frustrated, and overwhelmed in the journey of dissertation writing as a result of inability to progress towards achieving a doctoral degree. Emotional support from the supervisors is therefore paramount throughout the doctoral journey.

The respondents' concern about weak faculty support is affirmed by Sharif and Jan (2020), whose research revealed that the majority of East African universities do not have clearly documented guidelines that outline support mechanisms that foster effective supervision. The respondents' wish for collaboration between students and supervisors in their institutions corresponded with the opinion of Choi (2019), who points out that doctoral students' relationship with lecturers and peers is imperative in attaining their professional careers and directly facilitates the academic and social integration of doctoral students. Universities should therefore shift the focus from student retention to motivating students to stay and persist to degree completion (Tinto, 2017).

According to Sharif and Jan (2020), in order to capture the specific needs of supervisors and students in the support process, the support mechanisms should be informed by postgraduate students' and supervisors' experiences. Administrative support should also include quality control processes as well as ways of fast-tracking student-supervisor engagement and progress (Firth & Martens, 2008). Student respondents expressed concerns about the minimal involvement of doctoral students by faculty when assigning supervisors and proposed involvement, a view that is shared with Gube et al. (2017), who advocate for a good match between the student and supervisor, both academically and personally.

Research opportunities. The majority of the student respondents highlighted limited research opportunities, such as exchange programmes, capacity building in research, and research grants, which would aid students and supervisors in carrying out research activities. Student respondents and supervisors stated that regular seminars and workshops are not regularly organized, pointing out that this situation limits interaction between scholars. The majority of the supervisors expressed experiences of limited capacity building on research, claiming that this negates the need for improved technological skills, understanding of emerging research issues, and preparation of doctoral students for the dissertation tasks. This can be depicted from the following participants' responses:

"...If universities could look-out for local or international collaborations, exchange programmes and benchmark with other universities where success rates are high, that would make doctorate students and supervisors to improve". (DSF3)

"Opportunities are there only that we are unaware or not keen. Other universities apply for research grants for students and supervisors that can aid in facilitating research in universities". (BSC4)

"We say doctoral study is full time but many students are working as they study; this distracts research processes such as data collection denying candidates research opportunities and cause delay". (ASA1)

"One way to reduce doctoral students' isolation is to organize regular seminars and workshops at the departmental level. This will prepare doctoral candidates to be autonomous researchers..." (CLP2)

The participants' responses describe a situation of limited research opportunities in their institutions, which could imply that doctoral students are not continuously prepared for dissertation writing. The interaction between scholars in research enhances the creation and sharing of knowledge and ideas, and the development of applied skills in research, which guide doctoral students in dissertation writing. This is in line with what Veluvali and Surisetti (2023) highlighted, that doctoral students need opportunities that reduce social isolation and allow collaborations and partnerships for mutual benefits. Gardner (2010), Jairam and Kahl (2012), and Stubb et al. (2011) also add that lack of socialization in doctoral programs increases attrition risk among doctoral students. Adequacy of research opportunities, such as accessibility of scholarship and research grants, is critical to completion, as pointed by Hadi and Muhammad (2019), who argue that it is a basis on which doctoral students are persuaded to register in certain higher institutions and achieve timely completion.

Family support and social issues. Family support is contextualised in this study as a situation where a doctoral student is accorded moral, emotional, psychological, and financial support by the immediate family members and dependents during the demanding Ph.D. study. The majority of the respondents cited insufficient support, blaming overwhelming family responsibilities, financial constraints, work, and social issues such as politics as distractors that slow down the dissertation progress of most candidates. The respondents proposed a balance between family responsibilities and study by doctoral students if timely completion is to be achieved. Participants stated as follows:

"As a doctoral student there is usually so much expected from you. You could be a parent, a spouse, have many dependents, and the community too requires your services. Usually, the study is the one compromised. Learning to balance all is actually a success by itself..." (ASF2)

"If one does not get the goodwill of family, even finances and stress will prevent one from attaining the doctorate. Support from family is part of a conducive environment required by Ph.D. candidates all the way". (DSP1)

"Family and personal issues may weigh you down for some time, extending your study period. For my case, sickness cropped in such that I had to consider a health fast, but commitment is all it takes for one to complete". (BSA3)

"Some students are engaged in other responsibilities such that they don't work as advised by the supervisor. Some read supervisors' mails after months and this discourages supervisors. Others pause the study to 'chase' (pursue) other career opportunities such as politics and social issues. They become too much occupied with it and cannot find enough time to research and write". (BLC3)

The majority of the respondents' quotations revealed doctoral students' experiences of failure to balance engagement in social issues, family responsibilities, and study tasks. The participants allude that there is pressure from work, dependents as well as limited support from family. This is supported by Evans et al. (2018) and Levecqueet et al. (2017), who argue that unresolved family and social issues may cause mental health problems such as anxiety and depression among Ph.D. students, which is related to being behind in the study schedule. Weidman et al. (2001) also assert that relationships with individuals who support doctoral studies such as advisors, family, personal communities, friends, employers etc., are paramount in the completion of a doctoral study.

Conclusion

From the study findings on experiences of doctoral education students and supervisors in completion of doctoral dissertation, the following conclusions were drawn: Effective student-supervisor collaboration in dissertation writing has not been achieved; there are still gaps in communication and feedback between doctoral students and supervisors. The manifestation of power dynamics between students and supervisors is evident, and inadequate supervisor proficiency is still a common experience. Findings revealed that doctoral students struggle with scholarly writing and use of scientific language in research due to weak research background and limited research skills. It was also clear that experiences of academic research malpractices among the students, such as plagiarism and subjective evaluation among supervisors, exist. The findings also revealed that doctoral students experience loneliness, pressure from social issues, lack of motivation, and inadequate support from advisors, peers and family. The study established that universities offered limited research activities and alumni associations were dormant. The study recommends: prioritization of supervisor training in order to boost supervisors' expertise on research trends and student mentorship, advocating for the institutional cultivation of virtues of academic integrity among doctoral students and implementation of structured research activities such as seminars, conferences, and workshops. The study also advocates for students' guidance on coping strategies to enable doctoral students to strike a balance between research and life experiences. Facilitation of supervision should also be enhanced; supervisors should be offered better remuneration and moderation of their workload. Universities should also strengthen student-supervisor collaborations by fostering a formal structure of communication and feedback between students and supervisors.

References

- Abiddin, N. Z., & West, M. (2007). Effective meeting in graduate research student supervision. *Journal of Social Science*, *3*, 27-35. Akparep, J. Y., Jengre, E., & Amoah, D. A. (2017). Demystifying the blame game in the delays of graduation of research students in universities in Ghana: The case of university for development studies. *European Journal of Business and Innovation Research*, *5*(1), 34-50.
- Ali, A., & Kohun, F. G. (2006). Dealing with isolation feelings in IS doctoral programs. *International Journal of Doctoral Studies*, 1, 21-33. Retrieved from https://doi.org/10.28945/58
- Ali, P. A., Watson, R., & Dhingra, K. (2016). Postgraduate research students' and their supervisors' attitudes towards supervision. International Journal of Doctoral Studies, 11, 227-241. Retrieved from http://www.informingscience.org/Publications/ 3541
- Allen, T., & Eby, L. (2007). The Blackwell handbook of mentoring: A multiple perspective approach. Malden, MA: Blackwell. doi:10.1111/b.9781405133739. 2007.x
- Ames, C., Berman, R., & Casteel, A. (2018). A preliminary examination of doctoral student retention factors in private online workspaces. *International Journal of Doctoral Studies*, 13, 79-107.
- Ampaw, F., & Jaeger, A. (2012). Completing the three stages of doctoral education: An event history analysis. *Research in Higher Education*, 53(6), 640-660. Retrieved from https://doi.org/10.1007/s11162-011-9250-3

- Anderson, S., & Anderson, B. (2012). Preparation and socialisation of the education. Retrieved from http://www.aabri.com/manuscripts/10569.pdf
- Apperson, A. (2019). Mentorship experiences of doctoral students: Effects on program satisfaction and ideal mentor qualities (Master's theses and doctoral dissertations, Leadership and Counseling, 2019).
- Australian Qualifications Framework. (2013). Australian qualifications framework. Australian Qualifications Framework Council.
- Bacwayo, K. E., Nampala, P., & Oteyo, I. N. (2017). Challenges and opportunities associated with supervising graduate students enrolled in African universities. *International Journal of Education and Practice*, *5*(3), 29-39.
- Bair, C. R., & Haworth, J. G. (2004). Doctoral student attrition and persistence: A meta-synthesis of research. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research, Vol. XIX* (pp. 481-534). Netherlands: Kluwer Academic Publishers.
- Barasa, P. L., & Omulando, C. (2018). Research and Ph.D. capacities in Sub-Saharan Africa; Kenya report. African Network for Internationalisation of Education (ANIE). Retrieved from https://www2.daad.de/medien/derdaad/analysen-studien/research_and_Ph.D._capacities_in_sub-saharan_africa_-_kenya_report.pdf
- Bogdan, R. C., & Biklen, S. K. (2007). Qualitative research for education: An introduction to theories and methods. Boston, MA: Pearson.
- Bolli, T., Agasisti, T., & Johnes, G. (2015). The impact of institutional student support on graduation rates in US Ph.D. programmes. *Education Economics*, 23(4), 396-418.
- Casey, C., Taylor, J., Night F., & Trenoweth, S. (2023). Understanding the mental health of doctoral students. Retrieved from https://eprints.bournemouth.ac.uk/36548/1/Main%20document%20with%20full%20author%20details.pdf
- Chesnut, S., Siwatu, K. O., Young, H., & Tong, Y. (2015). Examining the relationship between the research training environment, course experiences, and graduate students' research self-efficacy beliefs. *International Journal of Doctoral Studies*, 10, 399-418.
- Choi, J. A. (2019). Am I supposed to create information knowledge?: Pedagogical challenges of doctoral mentors. *Educational Process: International Journal*, 8(2), 145-152.
- Clarence, S. (2020). Making visible the affective dimensions of scholarship in postgraduate writing development work. *J Prax High Educ*, 2(1), 46-62.
- Corn ér, S., Löfstr öm, E., & Pyh ät ö, K. (2017). The relationship between doctoral students' perceptions of supervision and burnout. *International Journal of Doctoral Studies*, 12, 91-106.
- Council of Graduate Schools (CGS). (2008). Ph.D. completion and attrition: Analysis of baseline demographic data from the Ph.D. completion project. *Communicator*, 41(6), 1-3. Retrieved from http://www.Ph.D.completion.org//book1.asp
- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Los Angeles, CA: SAGE.
- Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research: Developments, debates, and dilemmas. *Research in Organizations: Foundations and Methods of Inquiry*, 2, 315-326.
- Cutri, J., Freya, A., Karlina, Y., Patel, S. V., Moharami, M., Zeng, S., ... Pretorius, L. (2021). Academic integrity at doctoral level: The influence of the imposter phenomenon and cultural differences on academic writing. *International Journal for Educational Integrity*, 17(1), 63-70.
- Dawson, P. (2021). Defending assessment security in a digital world: Preventing e-cheating and supporting academic integrity in higher education. New York: Routledge.
- De Vos, A., Delport, C., Fouch é, C., & Strydom, H. (2014). Research at grass roots: A primer for the social science and human professions. Pretoria: Van Schaik.
- Denis, C., Colet, N. R., & Lison, C. (2019). Doctoral supervision in north America: Perception and challenges of supervisor and supervisee. *Higher Education Studies*, *9*(1), 30-39.
- Devos, C., Boudrenghien, G., Van der Linden, N., Azzi, A., Frenay, M., Galand, B., & Klein, O. (2017). Doctoral students' experiences leading to completion or attrition: A matter of sense, progress and distress. *European Journal of Psychology of Education*, 32, 61-77.
- Elliott, V. (2018). Thinking about the coding process in qualitative data analysis. Qualitative Report, 23(11), 2850-2861.
- Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36(3), 282-284.
- Eyangu, S., Bagire, V., & Kibrai, M. (2014). An examination of the completion rate of masters programs at Makerere University Business School. *Creative Education*, 5(22), 1913-1920.
- Firth, A., & Martens, E. (2008). Transforming supervisors. A critique of post-liberal approaches to research supervision. *Teaching in Higher Education*, 13(3), 279-289.

- Fitzgerald, A., & McNamara, N. (2021). Mentoring dyads in higher education: It feels lucky, but it's more than luck. *International Journal of Mentoring and Coaching in Education*, 10(3), 355-369.
- Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high-and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *The Journal of Higher Education*, 81(1), 61-81.
- Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *The Journal of Higher Education*, 76(6), 669-700. doi:10.1353/jhe.2005.0039
- Grady, R. K., La Touche, R., Oslawski-Lopez, J., Powers, A., & Simacek K. (2014). Betwixt and between: The social position and stress experiences of graduate students. *Teach Sociol*, 42(1), 5-16.
- Groenvynck, H., Vandevelde, K., & Van Rossem, R. (2013). The Ph.D. track: Who succeeds, who drops out? *Research Evaluation*, 22(4), 199-209.
- Grover, V. (2007). Successfully navigating the stages of doctoral study. *International Journal of Doctoral Studies*, 2, 9-21.
- Gube, J., Getenet, S., Satariyan, A., & Muhammad, Y. (2017). Towards operating within the field: Doctoral students' views of supervisors' discipline expertise. *International Journal of Doctoral Studies*, 12, 1-16.
- Hadi, N. U., & Muhammad, B. (2019). Factors influencing postgraduate students' performance: A high order top-down structural equation modelling approach. *Educational Sciences: Theory & Practice*, 19(2), 58-73. Retrieved from http://dx.doi.org/10.12738/estp.2019.2.004
- Hakizimana, L. (2019). Doctoral research supervision-team approach and perspective of socratic method at the University of Rwanda (UR): Opportunity for innovation. *International Journal of Research in Sociology and Anthropology (IJRSA)*, 5(1), 20-27
- Halse, C. (2011). Becoming a supervisor: The impact of doctoral supervision on supervisors' learning. *Studies in Higher Education*, *36*, 557-570.
- Halse, C., & Malfroy, J. (2010). Retheorizing doctoral supervision as professional work. Studies in Higher Education, 35, 79-92.
- Herman, C. (2011). Obstacles to success—Doctoral student attrition in South Africa. *Perspectives in Education*, 29(3), 40-52. Retrieved from http://www.perspectives-in-education.com/Default.aspx
- Holsinger Jr, J. W. (2008). Situational leadership applied to the dissertation process. *Anatomical Sciences Education*, *1*(5), 194-198. Humphrey, R., Marshall, N., & Leonardo, L. (2012). The impact of research training and research codes of practice on submission of doctoral degrees: An exploratory cohort study. *Higher Education Quarterly*, *66*(1), 47-64.
- Hyatt, L., & Williams, P. E. (2011). 21st century competencies for doctoral leadership faculty. *Innovative Higher Education*, *36*, 53-66.
- Igumbor, J. O., Bosire, E. N., Basera, T. J., Uwizeye, D., Fayehun, O., Wao, H., & Fonn, S. (2020). CARTA fellows' scientific contribution to the African public and population health research agenda (2011 to 2018). *BMC Public Health*, 20(1), 1030.
- Jairam, D., & Kahl, D. H., Jr. (2012). Navigating the doctoral experience: The role of social support in successful degree completion. *International Journal of Doctoral Students*, 7, 311-329. Retrieved from http://www.informingscience.org/Journals/IJDS/Overview
- Joseph, K. S., & Kalabamub, F. (2018). Postgraduate candidates' attrition and completion periods in the master of Project Management Programme, University of Botswana (School of Graduate Studies University of Botswana).
- Katz, R. (2016). Challenges in doctoral research project management: A comparative study. *International Journal of Doctoral Studies*, 11, 105-125.
- Kyvik, S., & Olsen, T. B. (2014). Increasing completion rates in Norwegian doctoral training: Multiple causes for efficiency improvements. *Studies in Higher Education*, *39*, 1668-1682. Retrieved from http://dx.doi.org/10.1080/03075079.2013.801427
- Lau, R. W. K. (2019). You are not your Ph.D.: Managing stress during doctoral candidature. In L. Pretorius, L. Macaulay, and B. Cahusac de Caux (Eds.), *Wellbeing in doctoral education: Insights and guidance from the student experience* (pp. 47-58). Singapore: Springer.
- Levecqueet, K., Anseel, F., Beuckelaer, A., Heyden, J., & Gisle. L. (2017). Work organization and mental health problems in Ph.D. students. *Research Policy*, 46, 868-879.
- Lovitts, B. E. (2001). Leaving the ivory tower: The causes and consequences of departure from doctoral study. Marryland: Rowman and Littlefield.
- Majid, U. (2017). Make or break? The impact of student-supervisor relationships on graduate learning. Retrieved 15/11/2022 from https://www.queensu.ca/con
- Masek, A. (2017). Establishing supervisor-students' relationships through mutual expectation: A study from supervisors' point of view. *IOP Conf. Ser.: Mater. Sci. Eng.*, 226(2017), 012200. Retrieved from https://doi.org/10.1088/1757-899X/226/1/012200

- Mason, M. M. (2012). Motivation, satisfaction, and innate psychological needs. *International Journal of Doctoral Studies*, 7, 259-277.
- Matheka, H. M., Jansen, E. P., & Hofman, W. H. (2020). Ph.D. students' background and program characteristics as related to success in Kenyan universities. *International Journal of Doctoral Studies*, 15(1), 27-36.
- Moak, S. C., & Walker, J. T. (2014). How to be a successful mentor. Journal of Contemporary Criminal Justice, 30(4), 427-442.
- Mulinge, M. M., & Arasa, J. N. (2013). Investigating the quality of postgraduate research in African universities today: A qualitative analysis of external examination reports. *International Journal of Arts and Commerce*, 2(2), 174-193.
- Noonan, M. J., Ballinger, R., & Black, R. (2007). Peer and faculty mentoring in doctoral education: Definitions, experiences, and expectations. *International Journal of Teaching and Learning in Higher Education*, 19(3), 251-262.
- Overall, N. C., Deane, K. L., & Peterson, E. R. (2011). Promoting doctoral students' research self-efficacy: Combining academic guidance with autonomy support. *Higher Education Research & Development*, 30(6), 791-805.
- Pearson, M., & Brew, A. (2002). Research training and supervision development. Studies in Higher Education, 27(2), 135-150.
- Peterson, D. (2016). The FC improves student achievement and course satisfaction in a statistics course: A quasi-experimental study. *Teaching of Psychology*, 43, 10-15.
- Pyh ält ö, K., Vekkaila, J., & Keskinen, J. (2015). Fit matters in the supervisory relationship: Doctoral students' and supervisors' perceptions about supervisory activities. *Innovations in Education and Teaching International*, 52(1), 4-16.
- Rensburg, G. H. V., & Mayers, P. (2016). Supervision of post-graduate students in higher education. *Trends in Nursing*, *3*(1). Retrieved from https://doi.org/10.14804/3-1-55
- Ribau, I. (2020). Doctoral supervisors and Ph.D. students' perceptions about the supervision process in a young European university. *Universal Journal of Educational Research*, 8(1), 36-46.
- Robinson, E. M., & Tagher, C. G. (2017). The companion dissertation: Enriching the doctoral experience. *J NursEduc.*, 56(9), 564-566.
- Rockinson-Szapkiw, A. J., Spaulding, L. S., & Spaulding, M. T. (2016). Identifying significant integration and institutional factors that predict online doctoral persistence. *The Internet and Higher Education*, *31*, 101-112.
- Rugut, C. K. (2017). The nature of postgraduate student-supervisor relationship in the completion of doctoral studies in education: An exploration in two African universities (Doctoral dissertation, Nelson Mandela University, 2017).
- Rugut, C. K., & Chang'ach, J. (2023). Voices of supervisors on thesis supervision practices in universities in Kenya. *The Educator:* A Journal of the School of Education, Moi University, 3(1), 128-149.
- Rokundo, A. (2020). A comparative analysis of a pathway model and manuals to assess efficiency of pedagogical training in doctoral supervision in Uganda. *Innovations in Education and Teaching International*, 57(1), 29-37.
- Salinas-Perez, J. A., Rodero-Cosano, M. L., Rigabert, A., & Motrico, E. (2019). Actions and techniques in supervision, mentorships and tutorial activities to foster doctoral study success: A scoping literature review. *International Journal of Educational Research*, 96, 21-31.
- Sambrook, S., Stewart, J., & Roberts, C. (2008). Doctoral supervision...A view from above, below and the middle! *Journal of Further and Higher Education*, 32, 71-84.
- Sarwar, M., Shah, A. A., & Akram, M. (2018). Identifying factors of research delay at postgraduate level. *Journal of Educational Research, Dept. of Education, IUB, Pakistan, 21*(2), 56-68.
- Shariff, N. M., Ramli, K. I., Ahmad, R., & Abidin, A. Z. (2015). Factors contributing to the timely completion of PhD at the Malaysian public higher educational institutions. *International Journal of Humanities Social Sciences and Education* (IJHSSE), 2(1), 256-263.
- Sharif, S. P., & Jan, A. (2020). Psychometric analysis of a proposed model to determine factors influencing selection of a research supervisor. *International Journal of Postgraduate Studies*, 15, 285-304.
- Shin, J. C., Kim, S. J., Kim, E., & Lim, H. (2018). Doctoral students' satisfaction in a research-focused Korean university: Socio-environmental and motivational factors. *Asia Pacific Education Review*, 19, 159-168.
- Shin, J. C., Postiglione, G. A., & Ho, K. C. (2018). Challenges for doctoral education in East Asia: A global and comparative perspective. *Asia Pacific Education Review*, 19, 141-155.
- Skakni, I. (2018). Doctoral studies as an initiatory trial: Expected and taken-for-granted practices that impede Ph.D. students' progress. Teaching in Higher Education. Retrieved from doi.org/10.1080/13562517.2018.1449742
- Spaulding, L. S., & Rockinson-Szapkiw, A. J. (2012). Hearing their voices: Factors doctoral candidates attribute to their persistence. *Int J Dr Stud, 7*, 199-219.

- Stubb, J., Pyhalto, K., & Lonka, K. (2011) Balancing between inspiration and exhaustion: Ph.D. students' experienced socio-pyschological well-being. *Studies in Continuing Education*, 33, 33-50. Retrieved from http://dx.doi.org/10.1080/0158037X.2010.515572
- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The Ph.D. experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal of Doctoral Studies*, 13, 361-388.
- Tahir, I. M., Ghani, N. A., Atek, E. S. E., & Manaf, Z. A. (2012). Effective supervision from research students' perspective. *International Journal of Education*, 4(2), 211-222.
- Tinto, V. (2017). Reflections on student persistence. Student Success, 8(2), 1-8.
- Trogisch, S., Albert, G., Du, J., Wang, Y., Xue, K., & Bruelheide, H. (2020). Promoting resilience of large international collaborative research programs in times of global crisis. *Ecology and Evolution*, 10(22), 12549-12554. Retrieved from https://doi.org/10.1002/ece3.6835
- Twebaze, R. (2023). Program progression and completion among postgraduate students at Bishop Stuart University. *Bishop Stuart University Journal of Development*, *Education & Technology*, *1*(2), 83-100. Retrieved from https://doi.org/10.59472/jodet.v1i2.27
- Uddin, M. R., Mamun, A., Soumana, A. O., & Khan, M. M. (2017). Factors and predictors of international student's satisfaction in Turkey. *Educational Process: International Journal*, 6(2), 43-52.
- Van Rensburg, G. H., Mayers, P., & Roets, L. (2016). Supervision of post-graduate students in higher education. *Trends in nursing*, 3(1).
- Van Rooij, E., Fokkens-Bruinsma, M., & Jansen, E. (2019). Factors that influence Ph.D. candidates' success: The importance of Ph.D. project characteristics. Studies in Continuing Education, 43, 48-67. doi:10.1080/0158037X.2019.1652158
- Veluvali, P., & Surisetti, J. (2023). Perspective chapter: Alumni engagement in higher education institutions—Perspectives from India. *IntechOpen*. doi:10.5772/intechopen.111457
- Vilkinas, T. (2008). An exploratory study of the supervision of Ph.D./research students' theses. *Innovative Higher Education*, 32(5), 297-311.
- Wanzala, W. (2013). Quest for quality and relevant higher education, training and learning in Kenya: An overview. *Education Journal*, 2(2), 36-49.
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). Socialization of graduate and professional students in higher education: A perilous passage? *ASHE-ERIC Higher Education Report*, 28(3). *Jossey-Bass Higher and Adult Education Series*. San Francisco: Jossey-Bass, Publishers, Inc.
- Wilson, S., & Cutri, J. (2019). Negating isolation and imposter syndrome through writing as product and as process: The impact of collegiate writing networks during a doctoral program. In L. Pretorius, L. Macaulay, and B. Cahusac de Caux (Eds.), *Wellbeing in doctoral education: Insights and guidance from the student experience* (pp. 59-76). Singapore: Springer.
- Woolderink, M., Putnik, K., van der Boom, H., & Klabbers, G. (2015). The voice of Ph.D. candidates and Ph.D. supervisors. A qualitative exploratory study amongst Ph.D. candidates and supervisors: To evaluate the relational aspects of Ph.D. supervision in the Netherlands. *International Journal of Doctoral Studies*, 10, 217-235.