Invest in Research Supervision, Enhance Timely Completion of Postgraduate studies

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Abstract: Postgraduate research supervision and its impact on students’ completion of postgraduate studies continue to pose significant challenges to higher education managers, postgraduate students, university dons, funders of postgraduate education, and all stakeholders. This literature review based article summaries the research findings across six dimensions of postgraduate research supervision: Student-supervisor relationship, Gender and research supervision, Allocating and matching students with supervisors, Pedagogy of research supervision, Roles and responsibilities of postgraduate students and supervisors and Effective supervision. Student-supervisor relationship is noted to have direct and indirect influence on all other dimensions of research supervision and consequently to timely students’ completion of postgraduate studies. It was found out that the reaction and impact of the other six dimensions would be driven by the student-supervisor relationship. Students perceived that good working relationships with their research supervisors have an impact on their research progress. Studies concerning gender and research supervision are limited but the few available indicated that female candidates were largely affected in their progress due to gender-related challenges. It was revealed that effective supervision has a positive impact on timely students’ completion of postgraduate studies. Implications for postgraduate students and supervisors, schools, faculties, and departments of postgraduate education were identified.

Keywords: Research supervision, student-supervisor relationship, effective supervision, postgraduate education, students’ completion

1 Introduction

Several critical issues regarding postgraduate research supervision are documented in different academic papers, policy papers, and university reviews (Kimani, 2014; Ndayambaje, 2018; Abiddin & Ismail, 2011; Kaur & Kaur, 2013; Abiddin & Ismail, 2011; Lee, 2007). As many countries are striving for socio-economic development, both social science and natural science research have to be given priority to gear the development. Good response to research has been manifested by the shift to postgraduate education and research in many countries. Postgraduate research with enhanced supervision is significant in the creation of new knowledge (Kaur & Kaur, 2013). However, the impact of research supervision on students’ completion of postgraduate studies needs to be more explicitly defined. The research topic above is a reflection of the need to put more emphasis in postgraduate research supervision and its relevance is to encourage all key
players in postgraduate education to put more time, focus, support and design compelling strategies to ensure effective research supervision at a postgraduate levels.

The purpose of this article is to review research on research supervision and explore the influence of research supervision on students’ completion of postgraduate studies from a multidimensional perspective. The implications of the article to postgraduate students, research supervisors, schools, institutes, faculties, Institutions of higher learning that provide postgraduate studies and other stakeholders in postgraduate education were highlighted which is highly relevant. The initial review of literature culminated in grouping information regarding postgraduate research supervision in the following six dimensions: Student-supervisor relationship, Gender and research supervision, Pedagogy of research supervision, Allocating and matching students with supervisors, Research supervisors’ and students’ roles and Effective research supervision.

Postgraduate research supervision requires transparency, rigor, competence, motivation, and flexibility to both the supervisee and the supervisor (Kaur & Kaur, 2013; Abiddin & Ismail, 2011; Cekiso et al., 2019). Research supervision significantly influences students’ completion of postgraduate studies as described by lecturers, students, and stakeholders of postgraduate education in many universities (Ali et al., 2019; Eyangu et al., 2014; Akparep et al., 2017; Abiddin & Ismail, 2011). In Africa, several challenges related to research supervision are always experienced by postgraduate students as some university authorities like heads of department, school, and faculty deans have always noted. Students run to supervisors’ allocation officers requesting for change of supervisors, topics, or reporting that supervisors are asking them to change their research areas. According to Abiddin and Ismail (2011), research supervision involves two people (the supervisee and the supervisor) with agreeing and disagreeing interests. For a good outcome, these interests must be adjusted in a way that they can converge to one another and move in one direction. Producing the concept note, research proposal, thesis/dissertation, and successful defense/viva in set timeframes manifests good supervision practices and timely students’ completion of postgraduate studies (Abiddin & Ismail, 2011). Despite the personal challenges postgraduate students face such as family commitment, work commitment, inadequate finances, postgraduate students are challenged in generating new knowledge, producing a sound work and keeping good research standards. This requires a helping hand through research supervision.

The process of postgraduate research supervision should be flexible according to the research interests of the student to keep the motivation and the determination of the student throughout the research process (Massyn, 2018) when a candidate is determined the whole process and structural management of the study becomes easy. According to Ghani et al. (2012), the role of the supervisor is to coach, mentor, guide, and control the quality and on the other hand, the student has a responsibility to ensure proper structural management of the thesis or dissertation.

Accordingly, finding the right research supervisor is paramount to prospective postgraduate students. As it is clear that at postgraduate level, students choose what to do rather than being constrained to dictates (Lubbe et al., 2005), the process of selecting supervisors needs to always involve students. If students participate in selecting supervisors they will choose supervisors who are friendly, approachable, flexible, knowledgeable, and resourceful to them (Ghani et al., 2012). This would enhance mutual understanding through the research journey and eventually enhancing the throughput of postgraduate students. If some supervisors are not frequently selected by students they may choose to revise their modes of operation and strive to retrieve or develop their integrity in research which is not only beneficial to them but also to the students and the
Several studies have been conducted on supervision and students’ completion of postgraduate studies for example (Colbran, 2014; Costea, 2006; Breunig & Penner, 2016; Kaur & Kaur, 2013; Ali et al., 2019; Ndayambaje, 2018; Abiddin & Ismail, 2011; Rensburg & Mayers, 2016). Most of the studies conducted have not provided a clear definition of supervision in particular by giving an inclusive explanation of all dimensions concerning the completion of postgraduate studies. This literature-based article has brought together different dimensions of research supervision from different studies, an in-depth discussion has been conducted to provide a clear understanding of postgraduate research supervision and how it can be utilized to improve on completion rates of postgraduate students.

2 Student-supervisor relationship in research supervision

Literature shows that it is important for the supervisee and the supervisor to keep good relationships in the process of research supervision. The research journey involves stresses and challenges, an effective working relationship, therefore, helps the supervisee and the supervisor to establish and discuss negotiations amongst themselves to enhance the progress in research (Ssentamu-Namubiru & Sajjabi-Bakibinga, 2020; Claudius & Vincent, 2017; Mckinley et al., 2012 Costea, 2006; Sinclair, 2004). According to Pole (2015), student-supervisor relationships make supervision an interactive process that gives room for the change of students’ and supervisors' competences as they move to the next levels of the study. A study by Linde (2012) stresses that from the word go, a postgraduate student and his/her supervisors should work together as partners in scholarship and each one should strive to maintain the partnership. The supervisor should provide leadership in the professional, cognitive, and emotional corners of a postgraduate student (Linde, 2012). White and Coetzee, (2014) note that in the partnership of scholarship the student should perceive the supervisor as the critical friend, even where consistent face to face meetings are impossible, online services should be utilized by supervisors to portray a friendly heart to students (White & Coetzee, 2014). To better understand the concept of student-supervisor relationships it is necessary to have an oversight on collaborative student-supervisor relationship as noted in (Rugut, 2017).

3 Collaborative relationship

As stressed in Gurr (2001), many studies are targeted to postgraduate students but not all give a highlight on a collaborative relationship both the student and the supervisor should get involved during the research process. According to Adams and Noronha (2015) and Colbran, (2014), collaborative relationship in research supervision empowers and equips students to undertake research more and more. Supervisors also ably identify practical strategies that are appropriate in supervising particular students through collaborative relationships with their students. The collaborative relationship strengthens the mutual trust and understanding and promotes autonomy in research (Fan et al., 2018). The supervisor has to regulate support provided to the student to let him/her work on collaboratively shared tasks hence developing autonomous student’s working skills. According to (Lucas et al., 2006), even if the student and the supervisor may have different goals and interests, they should adjust in possible ways to have common pathways for the great products of the thesis/dissertation. In this sense, the thesis/dissertation is like “bed for the married” that by nature joins the couple daily. Therefore, the research work must be treated as a collaboration containing an agent which should be taken care of by both the student and the supervisor and as (Breunig & Penner, 2016) notes the collaborative relationship should be
supervisor-student oriented to support lecturers to shift from the traditional modes of supervision to collaborative approaches.

4 Gender and research supervision

Gender is an important variable when it comes to making relationships between students and their supervisors and interactions within an academic arena. The progress of male and female postgraduate students has been noted to be different most especially when it comes to research (Leder, 1995; Brown & Watson, 2010; Crabb, 2014). According to Leder (1995), female candidates in postgraduate education are reported to be disadvantaged in their working relationships with their male supervisors in informal settings. Paisley (1994) highlighted sexual involvement and harassment in the course of counseling and supervision between the supervisee and the supervisor of the opposite sex. As cited in Leder (1995) sexual both consented and unconsented issues sometimes occur in the process of supervision. This is consistent with several studies that have looked at gender and sexual issues in supervision (Ladany et al., 1997; D. Lee, 1998; Smeby, 2000; Brown & Watson, 2010; Kreider, 2013). It is clear that sexual violations are unethical and undermine the role modeling aspect in research supervision (Kreider, 2013). Supervisors possess a higher potential of controlling such violations because according to Cekiso et al. (2019), they possess higher power control of the whole journey of research supervision compared to students.

However, Brown and Watson (2010) note that female students indicate similar research and academic causes of their delay in completion of postgraduate studies. In a real setting, Brown & Watson (2010) contend that the less percentage of female postgraduate students finishing their studies in time than their male counterparts has been largely attributed to family and baring children destructions. Less female candidates indicate the challenges in having male supervisors (Brown & Watson, 2010). This means that female postgraduate students delay completing research tasks because of family and other responsibilities they have to attend to daily. In such cases, the supervisor’s empathy is paramount to female students who struggle with family and academic demands. Sometimes when delays in progress occur among female candidates, supervisors should bare willingness to support and move “the truck” slowly by slowly to the destination bearing in mind that female candidates have divergent demands they are obligated to fulfill.

5 Allocating and matching candidates and supervisors.

The selection and allocation of research supervisors to postgraduate students is every important component in good supervisory relationships in postgraduate supervision. More often, at doctoral level candidates are always involved in the process of selecting and allocation of their supervisors but at master’s level, this is less common. When students are allowed to select their supervisors they base on their research needs and the working relationships they expect from selected supervisors (Ives & Rowley, 2005). Expertise and supervisors record in working with students (who did Supervisor so and so supervised last year? How did his/her student complete the thesis/dissertation?), are informally always sought before a decision is taken. It is imperative to note that when postgraduate candidates are involved in the selection of supervisors of their choice they feel contented and motivated to work diligently with them (Ives & Rowley, 2005; Momeni et al., 2011; Ismail et al., 2015).

Postgraduate students are so concerned about their Interpersonal relationships with their supervisors even more than the content of their thesis (Teklesellassie, 2019). It is easier to restore, retrieve, and advance the content than it is to retrieve the working relationship with the research
supervisor. Teklesellassie (2019) further notes that good relationships between postgraduate students and their supervisors are paramount in enhancing the thesis/dissertation performance. This should, therefore, encourage schools, faculties, institutes, and departments to consider involvement of students in allocating, matching, and selection of their research supervisors.

Accordingly, the area under investigation cannot be underrated in the allocation of the research supervisors (Momeni et al., 2011). Supervision encompasses a focus on procedural aspects as well as the specialized content of the study area. According to Armstrong et al. (2004), the process of allocating and matching postgraduate students with supervisors has to start with the search for compatibility of both the supervisee and the supervisor in the chosen area of interest. Once they “subscribe” to the same research field there are high chances that they may “speak the same language” hence enhancing the quality of research output. On the other hand, Kimani (2014) puts it forth that where students and supervisors fail to match, disagreements and misunderstandings emerge, and this disadvantage the progress of the study which may cause a delay in completion of the thesis.

6 Pedagogy of research supervision

Learning should not end with classwork, workshops, and seminars, but should be a continuing process even during the supervision (Rugut, 2017) as stated. The research process involves conceptualization, theorization, and operationalization of major concepts which could be a ‘complex process’ (Ssentamu-Namubiru & Sajjabi-Bakibinga, 2020) that require continuous training most especially when the researcher is new in the field. Ssentamu-Namubiru & Sajjabi-Bakibinga, 2020) and Rugut (2017) further argue that continuous teaching and learning during the supervision process develops high involvement of both the student and the supervisor and enhances the student-supervisor relationship. When a researcher chooses to involve in a certain research area, he needs to fully “swim” within that particular area. Area-specific concepts and language have to be essentially mastered and applied well. This requires clear orientation from the field experts which eventually has to be the supervisor or the mentor hence calling for continuous teaching and learning throughout the research process. When the component of teaching and learning within supervision is under looked, (Winchester-seeto et al., 2014) notes that the whole process of research and supervision becomes problematic. According to Wang and Li (2011), postgraduate students in their initial process of research have less confidence and capability in research and portrayal writing and reading challenges which require keen attention on pedagogical needs that should be provided by a supervisor. The pedagogy of supervision should, therefore, be put on the process and the product of the postgraduate degree at the center of supervision (Kandiko & Kinchin, 2012).

7 Roles and responsibilities of postgraduate students and supervisors

Postgraduate students expect a lot from their supervisors when they are allocated to them or when they enroll for doctoral studies. However, In most cases, students experience totally what is different from what they expected from their supervisors (Pole et al., 1997). For instance, Pole et al. (1997) note that doctoral students expect to work regularly with their supervisors on the project with the assumption that the supervisor knows much in the study area but this is not the case in most cases. It is noted that the more the student progresses in the doctoral project the more he should be left to work autonomously by supervisors distancing themselves from the students' work (Crosta & Packman, 2005; Pole et al., 1997). The journey of postgraduate research is moved by both the supervisor and the supervisee. To limit unnecessary expectations and impositions from both sides, it is important to clearly define the roles and responsibilities of each party. According to Vilkinas (2002), supervisors play the managing role in that they ensure that the process of the
project moves on well. Vilkinas (2002) contends that supervisors should keep an eye on the progress and assess the quality of the research project in line with the acceptable standards. From Quinn's model (Vilkinas, 2002), the research process takes the right path if it is well monitored, directed, coordinated, and facilitated by the supervisor.

The supervisor’s support has in several studies been highlighted in driving continued progress and success in postgraduate research especially to doctoral candidates (Jr, 2008; Ismail & Hassan, 2011; Devos et al., 2017). On the same note according to Grady et al. (2015), unsupportive supervisory roles like delays and inappropriate feedback (Teklesellassie, 2019) develops psychological, social, and academic conflicts that strain candidates progress in postgraduate research. Therefore the role of supervisors in research supervision is so critical in determining the outcomes and should be emphasized from the onset of the project for the smooth running of the study.

On the other hand, primary roles and responsibilities of determining the progress and success of the research project lie within the hands of the candidate. The candidate is the stirring of the project and must take innovative and initiative responsibilities to ensure the progress of the project (Knox et al., 2006). The supervisor largely plays a guiding role (Chris & Timothy, 2001; Mansson & Myers, 2012) and guidance becomes lively when the candidate has innovated what to be guided on. The candidates’ voices can be heard when he/she speaks (Spaulding & Rockinson-szapkiw, 2012), “initiate the talk and the supervisor is there to focus the talk”.

Similarly, it is the responsibility of the candidate to maintain and comply with the agreed plans and agreements (Knox et al., 2006). According to Knox et al. (2006), students who do contrary to the agreed-upon plans with their supervisors either because of receiving advice from other individuals negatively affect their working relationships with their supervisors as well the progress of the study. This is supported by Armstrong et al. (2004) and Ismail et al. (2015) who argue that careful planning and scheduling of the research project activities are paramount in the research process.

Postgraduate candidates need to maintain and sustain reflecting and responding to feedback from their supervisors in agreed-upon time. According to Teklesellassie (2019), supervisors are always challenged with busy schedules therefore altering the set time may disadvantage the candidate and the progress of the project. Ward and Brennan (2018) argue that sometimes the supervisor’s response may not be so easy to comprehend. This calls for careful reflections and consultations by the candidate which should be timely managed by both parties (Kimani, 2014). The significance of feedback and responses to feedback is also upheld in (Castanho & Güner-Akdogan, 2012) with the idea that it enables the identification of critical issues and determination of the quality of the project progress.

8 Effective research supervision

Effective supervision is very important in the postgraduate research process. Effective supervision in research does not only zeal on the research supervisor but also on the university structures, policies, and procedures put in place to support effectiveness in research supervision (Kaluyu, 2016; Lee, 2007; Bengtsen, 2014). On the side of the supervisor, to promote effectiveness, supervision should take the line of leading, establishing quality relations, portraying and developing more knowledge and skills in the chosen research area, ensuring seriousness for both the supervisor and the student and being supportive in good and bad times (Kaur & Kaur, 2013; Abiddin & Ismail, 2011). Supervision to be effective, the supervisor should be an expert in a general area of the student, have published and held research grants, and should have registered a
good number of Ph.D. graduates. On contrary, for the supervision to move smoothly and effectively a student must also portray some supporting generic skills to keep the supervisor encouraged and motivated to walk the journey. As noted in the Bayesian Network of factors affecting timely completion of doctoral studies (Pitchforth et al., 2012), students' skills like time management, good command of the language used, good writing skills and expertise in the topic area are important during the supervision process. Besides, timely responses should be done by both parties. Research morals and discipline must be kept intact most especially by the student. Cases where postgraduate students send back the document to the supervisor without attending to the previous raised comments or coping from other peoples work in attending to supervisors comments are discouraging and may demotivate the research supervisor hence hindering the process of supervision in one way or the other.

9 Discussion

Postgraduate research supervision and postgraduate studies completion are two interrelated and connected aspects of postgraduate education globally. Research on postgraduate education clearly shows that research supervision has a great contribution to its output. The primary focus of postgraduate education is research and one to acquire a postgraduate qualification in most cases has to participate in research-related activities. This automatically justifies the role of research supervision as an essential component of postgraduate education. Questions of interest to managers of schools of graduate studies, postgraduate students, postgraduate supervisors are; 1. What are the most important areas of postgraduate research supervision? 2. What is the appropriate time of intervention to ensure effective supervision? Studies have revealed interesting findings that put the student-supervisor relationship at the peak of enhancing good supervisory outcomes (Paisley 1994; Ives & Rowley, 2005; Momeni et al., 2011; Ismail et al., 2015 Costea, 2006; Mckinley et al., 2012; Claudius & Vincent, 2017). The generic skills, endowments and supervisor expertise can well be utilized if there is willingness to share and good working relationships between the candidate and the supervisor.

The spotted gender-related issues in postgraduate research supervision that are seen leaning more on female postgraduate candidates have been seen to have their roots in student-supervisor relationships. Students contend that gender-related challenges are common in female candidates compared to male candidates (Smeyby, 2000; Brown & Watson, 2010; Kreider, 2013). Difficulties in making working relationships with male supervisors in informal settings and family roles have been noted to affect female postgraduate candidates most especially in doctoral studies. In particular, it may not be simple for a female candidate to have discussions at night or meetings over the weekend or in other informal settings about the project with their male supervisors. This is because they may feel insecure or think that colleagues and family members would conceive it as a sexual relationship attempt. This definitely may necessitate that supervisors may have to plan office or laboratory meetings which may not be enough as supervisors may have other commitments to attend. This could delay female candidates to complete in time compared to male candidates.

Effective postgraduate research supervision is a desire to postgraduate candidates, research supervisors, schools of postgraduate studies, Universities, and all stakeholders in postgraduate education. The way all postgraduate education and research stakeholders admire to experience and have effective research supervision is the same way they all have a role to play to ensure the desired results in the supervision and students’ completion of studies. The supervisor has to promote and ensure good performance of his supervisory roles (Kaur & Kaur, 2013; Abiddin & Ismail, 2011) including applying appropriate supervisory pedagogies. The postgraduate candidate should adhere
to acceptable standards and diligently perform their roles and responsibilities as noted in several studies (Knox et al., 2006; Armstrong et al., 2004; Ismail et al., 2015). When the candidate and the supervisor portray good responsibility towards the project it challenges the two to bare motivation towards one another and the project which may eventually contribute to the progress of the research project. Universities, institutes, and schools of graduate study structures and policies are noted to have effects on effective research supervision and timely completion of postgraduate studies (Kaluyu, 2016; Lee, 2007). Therefore, institutions must set effective supportive policies scheduling supervision oriented workshops at particular time frames, mandatory follow-up on the progress of postgraduate students by Heads of department, allocating specific contact hours for postgraduate candidates and their supervisors, and tasking Heads of Departments to ensure that policies are effected.

10 Implications for postgraduate research supervisors and candidates

Postgraduate research supervision and postgraduate Education can be fully operational on the practical support of both postgraduate candidates and postgraduate lecturers or supervisors. The primary focus of postgraduate education is research. This should be considered by all stakeholders most especially students and supervisors. Working relationships, skills, and performance of roles and responsibilities can determine the output, the progress, and the completion of the research project. Therefore the ability to systematically and regularly focus on the research project can enhance the progress and timely completion of the project as well as the studies. Research supervisors’ concern on their candidates' progress can be a driving tool for timely completion of studies. On the other hand, candidates' desire to work diligently and put the focus on all aspects of the project can as well be a driving force for the timely completion of postgraduate studies. As it is noted that differences, conflicts, parallel working relationships, silence in performing one's roles and responsibilities can negatively affect the process of research supervision, supervisors and students may take responsibility of resolving such challenges in the initial stages of the project for better results.

The stand taken by the students and their supervisors to cooperate or confront one another has a strong impact not only on the progress in the research project but also in the achievements to be registered in the whole process of research supervision. Supervisors and students should examine their mode of practice and attitudes to zeal on effectiveness in their roles and responsibilities towards the process of the postgraduate research project. Postgraduate research supervision is all about helping a candidate to become a responsible claimer of their study and achievement. Therefore students should know that supervisors are helping them to develop skills and their strength hence should take full control to determine the progress of their project amidst all circumstances. Departmental strategies to encourage cohesive working relationships need to be explored to aid in enhancing effective supervision and timely completion of postgraduate studies globally.

11 Implications for schools, institutes, and departments of postgraduate studies

Timely completion of postgraduate studies, recognizable student’s and research outputs within the institution and outside the institution builds a great reputation to the department, school, institute, and the University. As Kaluyu (2016), Lee (2007) and Bengtsen (2014) argue, the schools' and departments' roles in ensuring desired completion rates and effective research supervision are paramount in any University. This paper gives a multidimensional perspective of postgraduate research supervision which intends to inform stakeholders on challenges that may arise from different corners. Considerations, strategies and structures should be put in place by school’s/
department’s management to tackle challenges and issues that arise with in all dimensions of postgraduate research supervision.

Schools, directorates of graduate studies’ interventions to develop the expertise of supervisors by scheduling internal seminars for supervisors and empowering them to participate in external conferences that are research supervision oriented is beneficial in supervision practice. Instituting come together meetings, seminars and workshops may guide in allocating and matching candidates with appropriate supervisors and setting pedagogical strategies of research supervision. In some cases, student’s expectations may not match with supervisors’ roles and responsibilities. Therefore the intervention of the department or directorate in defining the roles and responsibilities of students and supervisors as agreed upon in the supervision procedures provides awareness and this can cause a change in students’ practice.

12 Conclusion

Higher education is enamored with the outputs of postgraduate education, in particular by training the personnel and managers of institutions and policy-making bodies. This does not only have an impact on institutions of higher learning but also society. “When graduate schools train lectures, lecturers train professionals and professionals serve the society” therefore it is imperative to invest in ensuring positive throughput of postgraduate candidates to enhance service provision in different endeavors. Stakeholders in postgraduate education frequently emphasize timely students’ completion of postgraduate studies but literature shows that this has remained a challenge with less number of candidates completing their doctoral and master’s programs in time (Skopek et al., 2020; Eyangu et al., 2014; Hadi & Muhammad, 2019; Wamala et al., 2012; Akudolu & Adeyemo, 2018; Botha, 2018; Motseke, 2016). This means that there are silent areas that need attention to enhance students’ completion of postgraduate studies.

Research supervision has been cited to have contributing influences in the timely completion of research projects as well as masters and doctoral studies (Pitchforth et al., 2014; Kimani, 2014; Motseke, 2016; Ndayambaje, 2018) but it has been looked at in broad terms. Several dimensions of research supervision are silent in literature and much focus has been put to student-supervisor relationships. There is therefore a need for realization of all aspects of research supervision for instance but not limited to the pedagogy of research supervision, allocation, and matching of students with potential supervisors, gender-related issues in supervision, and departmental/faculty involvement in research supervision. Researchers on postgraduate research supervision have to increase conceptual considerations and ensure that all noted dimensions are captured for a clear understanding of the implications of research supervision in different contexts. Schools, institutes, directorates, and universities need to work together to develop and implement strategies and policies to enhance timely students’ completion of postgraduate studies and research output.

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