Similarities and Dissimilarities in Research Supervision and Mentorship in Higher Education

Vincent Chidindu Asogwa, Mpendulo Mathenjwa, & Nokuthula Ngabisa Dlamini
Department of Agricultural Education and Extension, Faculty of Agriculture, University of Eswatini
Correspondence: asovinchidi@gmail.com

Abstract: *Research supervision and mentorship are vital components of quality research in higher education. Unfortunately, academic research supervisors, mentors, supervisees, and mentees misunderstand and interchange these concepts, resulting in the application of incorrect principles, methods, styles, and approaches and poor outcomes. Meanwhile, the two words are dissimilar and thus require different underlying principles, approaches, and regulations to achieve the desired results. This article aims to clarify the similarities and dissimilarities in research supervision and mentorship in higher education to facilitate proper understanding, application and achievement of high-quality research outcomes. The authors draw on relevant literature and their experiences as academic supervisors and mentors to present best understanding for each concept. The implication is that while research supervision and mentoring share a relationship, they have distinct goals that are guided by different principles, approaches, and regulations. Both mentorship and supervision lead to increased research productivity, career advancement, and personal growth for both parties involved. While supervision is often focused on ensuring that the student completes their work to a satisfactory level, mentoring involves a more holistic approach that considers the student's personal and professional development. Their functions are distinct and do not overlap, but both parties should be open to feedback and willing to collaborate to achieve the desired outcomes.*

Introduction

The quality of research supervision and mentoring in higher education is challenged by misconceptions about the two words among supervisors and mentors, supervisees (students), and mentees. While some believe that research supervision engages mentoring, sponsoring, progressing, and coaching, others disagree and argue that mentoring is completely different from supervision in meaning, importance, models, styles, and strategies (Pearson & Kayrooz in Garvis & Pendergast, eds. 2012). Hence, the concern that any academics who misunderstand any of the concepts would misapply their principles, models, styles, and strategies to achieve the desired goal. Research supervision is an interpersonal relationship between research project supervisors and students that is aimed at assisting the student's development in their research work (Harwood & Petrić, 2018). Weld (2012) described research supervision as a relationship that is evaluative, extends over time, and has the simultaneous purpose of enhancing the professional functioning of the junior member(s). In higher education, supervision is an officially established relationship between a supervisor and a supervisee (student) that is designed to equip students with competences such as specialist skills, generalist skills, self-

reliance skills, and team skills in research areas (Asogwa et al., 2014). It aids students at every stage, from the formulation of their research projects through reviewing the literature, establishing methodologies, and discussing results to the presentation and possible publication of the outcome (The University of British Columbia, 2020). Research supervision is an official obligation for the faculty members to supervise the students in their research work for the successful completion of their desired degree (Mathenjwa et al., 2021). Valid supervision leads to the academic development of the student as well as moral, reputational, and financial outcomes for the institution (Harwood & Petrić, 2018). Effective research supervision is crucial for the academic and personal development of students, as it provides them with guidance and support throughout their research projects (Phillips & Johnson, 2022). Moreover, research supervision helps to ensure the quality of research output and contributes to the reputation and success of the institution. It also helps students develop important skills such as critical thinking, problem-solving, and time management, which are essential for their future careers (Alismail & McGuire, 2015). Therefore, it is crucial for academic staff to take their responsibility as research supervisors seriously and to give their students the support and direction they require.

In the context of this study, supervision refers to the procedure through which trained lecturers are formally assigned to support, supervise, oversee, and/or regulate the activities of the postgraduate student in carrying out his or her research work to successfully complete the desired degree. The lecturers, here referred to as the supervisors, are officially assigned supervisory responsibility by the university authority to scaffold the students, known as supervisees, through their research work for quality assurance and sustainable development in higher education. During supervision, the supervisor employs a variety of supervision methods, styles, and strategies, including diagnosis and scaffolding (Kleijn et al. 2015), to guide, mentor, provide information, and facilitate the student's learning as he or she progresses through a research project (Taylor, 2021). The University of Auckland (2010) pointed out that, irrespective of the approaches or styles adopted by the supervisors, research supervision provides:

1. academic support to help develop the knowledge and skills needed to achieve the highest standard of research;
2. regular feedback on the design, management, and analysis of data and information, the presentation of results, thesis content, and drafts;
3. advice on the standard of performance and progress to ensure the timely completion of research work;
4. names and credentials of suitable thesis or dissertation examiners;
5. close and regular contact to support the supervisee(s) from commencement to the award of the intended degree; and
6. Career advice, assistance, and motivation are provided to the supervisee during supervision for successful completion.

On the other hand, research mentorship is a relationship between two people where one of them, the mentor, provides support to the other, the mentee, promoting the development and growth of the latter's skills and knowledge through the former's experience in research (Panopoulos & Sarri, 2013). It entails supporting and encouraging young, willing researchers to manage their own learning in order that they may maximize their potential, develop their skills, improve their performance, and become the person they want to be in the education sector (University of Reading, 2021). It is a voluntary relationship that is aimed at advising, building, and supporting mentees' confidence and transitioning to further education research (Argente-Linares et al., 2016). In this context, mentorship is a voluntary relationship between a mentor and a mentee aimed at assisting, managing, monitoring, advising, and/or controlling

the activities of the mentee for successful competence development in research and professional growth. According to Davis, 2015; Stubb et al., 2011, mentoring helps to minimize researchers' isolation, encourages social support for both mentors and mentees to cope with and overcome research challenges (Byars-Winston et al., 2018), reduces power differentials for mutual learning among young researchers (Byars-Winston et al., 2018; Murdock et al., 2021), and provides a variety of psychosocial and even academic benefits from interacting with and learning from mentors (Holmes, 2018).

Furthermore, research mentorship facilitates knowledge sharing, skills development, academic milestones, and programme support among peer researchers (Lorenzetti et al., 2020). In addition, research mentorship promotes the development and growth of the mentee's research knowledge and skills through the mentor's experience (Argente-Linares et al., 2016). While research mentorship improves the mentor's problem-solving abilities, networking skills, self-confidence, socialisation abilities, and organisational awareness, it also helps the mentees' professional growth, self-reflection, problem-solving capacities, ability to put difficult experiences into perspective, behaviour management skills, and capacity to adapt to the norms and expectations of research and its specific context output (Hobson, 2009). Hansman (2016) affirmed that research mentorship is beneficial for both mentors and mentees as it provides a supportive environment for learning and growth, reduces power differentials, and facilitates knowledge sharing and skill development. It helps to improve the problem-solving abilities, networking skills, self-confidence, and socialisation abilities of mentors while promoting the professional growth and problem-solving capacities of mentees (Sosik, & Lee, 2002). It can as well lead to increased productivity and collaboration in the research community as mentees are able to contribute to ongoing research projects and bring fresh perspectives to the table (Rose, 2005). Additionally, mentorship can help to create a sense of community and support among researchers, which can be especially important for early-career researchers who may feel isolated or overwhelmed in their field (Lyall & Meagher, 2012).

However, a critical examination of the above concepts of research supervision and mentorship reveals that while both are forms of relationship between two or more people, their functions and approaches are distinct and do not overlap in toto. While research supervision is an official responsibility bound by certain principles, rules, and regulations of an educational institution, research mentoring is a voluntary function guided by the conscience and personalities of the parties. Consequently, the misconception of the two words by supervisors, mentors, supervisees, and mentees is not far-fetched but needs to be clarified since their understanding does not only influence attitudes, approaches, methods, and styles applied by the supervisors and supervisees but also affects the entire goal of the relationship and quality of research in higher education. Therefore, to ensure effective research supervision and mentorship for high-quality research in higher education, this study sought to clarify the (a) similarities between research supervision and mentorship and the (b) differences between research supervision and mentorship in higher education.

Statement of the Problem

Although there is no consensus on the conception of research supervision and mentorship, confusion has been noted among many academics about their understanding of supervision and mentorship in higher education. Supervisors, mentors, supervisees, and mentees use both concepts interchangeably as if they were the same, whereas they are not in academic research situations. Dalia (2012) affirmed that "Sometimes the difference between supervision and mentoring gets mixed up or misunderstood." Arnesson and Albinsson (2017) added that there is some confusion between supervision and oversight, even though the concepts describe two different phenomena. Hicks (2010) clarified that when different people take on the roles of supervision and mentorship for an individual at the same time, there is always tension or

anxiety on the part of the supervisor about the mentor's influence and who should have the final say. Even when supervision and mentorship are combined in one person, when the professional supervisor also becomes a mentor, the mentor-mentee relationship conflicts with supervisory obligations and potentially creates a different kind of tension and anxiety, leading to role dissonance.

The implication is that the misconception of research supervision and mentorship affects not only their meaning and applications among the key players but also the intended results. This is because both the supervisors and the mentors misuse different models, methods, and styles to perform their roles in the relationship and, as such, obtain poor results that affect the quality of research in higher education. Consequentially, one of the most pertinent measures to ensure high-quality research in higher education can be to substantially differentiate between research supervision and mentorship for proper understanding and application among the key players in the relationship. As a result, this study was designed to provide a clear understanding of the differences between research supervision and mentorship, highlighting their unique roles and responsibilities in the research process. By doing so, it is expected that this study will contribute to improving the quality of research in higher education by ensuring that both supervisors and mentors perform their roles effectively.

Significance of the Study

This study is important because a clear understanding of the similarities and differences between research supervision and mentorship can help improve the quality of research in higher education. By clarifying these concepts, supervisors and mentors can better understand their roles and responsibilities, which can ultimately lead to more effective supervision and mentoring relationships. Additionally, the study can also help to establish a common language and understanding of research supervision and mentorship in higher education, which can be useful for training programmes and professional development opportunities. Ultimately, this can contribute to a more cohesive and collaborative research community in higher education. Furthermore, the submissions of this study can also inform policy and decision-making in higher education institutions, particularly in terms of the allocation of resources and support for research supervision and mentorship. This can lead to a more structured and effective approach to supporting research activities, which can eventually benefit both individual researchers and the institution as a whole.

Methodology

This study employed a traditional literature review approach to explore the similarities and dissimilarities between research supervision and mentorship in higher education. The authors drew on relevant academic literature as well as their own experiences as research supervisors and mentors to present the best understanding of each concept. The literature review was conducted by searching for peer-reviewed journal articles, books, and other scholarly sources related to research supervision and mentorship in higher education. Databases such as Google Scholar, ERIC, Scopus, and Web of Science were used to identify relevant publications. The search terms included combinations of keywords such as "research supervision", "research mentorship", "higher education", "similarities", and "dissimilarities".

Inclusion criteria:

- Publications focused on research supervision and/or mentorship in the context of higher education
- Peer-reviewed journal articles, books, and other scholarly sources
- Publications in English language
- Publications from the last 6 years (2018-2023)

Exclusion criteria:
- Publications not directly related to research supervision and/or mentorship in higher education
- Non-academic sources (e.g., news articles, blog posts)
- Publications in languages other than English
- Publications older than 6 years (before 2018)

A total of 23 sources were identified, out of which 13 were reviewed and used for this study. The authors carefully analyzed the content of each source to extract relevant information on the definitions, principles, approaches, and regulations associated with research supervision and mentorship. Particular attention was paid to understanding the distinct goals, functions, and outcomes of each concept, as well as the ways in which they are related but ultimately distinct.

The authors used a thematic analysis approach to synthesize the information from the collected literature. They identified and organized the key themes and subthemes that emerged from the sources, such as the purpose of research supervision and mentorship, the roles and responsibilities of supervisors and mentors, the supervision and mentorship processes, and the outcomes and benefits for both parties involved. The review also incorporated the authors' own experiences and perspectives as academic supervisors and mentors to provide a comprehensive and nuanced understanding of the topic. The aim was to clarify the misconceptions and misunderstandings that often arise regarding the concepts of research supervision and mentorship, and to provide guidance on how to effectively implement these practices in higher education to achieve high-quality research outcomes.

Similarities between Supervision and Mentorship

A good similarity between supervision and mentorship is that both require a close and supportive relationship between the mentor or supervisor and the mentee or supervisee, with the aim of helping them achieve their academic and personal goals (Lines, 2022). Both mentorship and supervision lead to increased research productivity, career advancement, and personal growth for both parties involved. Effective communication and mutual respect are key factors in establishing a successful mentoring or supervisory relationship (Regmi, 2021). They involve providing constructive feedback to the mentee or supervisee, which can help them improve their skills and knowledge (Ellison, 2022). The success of the mentoring or supervisory relationship depends on the ability of the mentor or supervisor to provide guidance and support while also allowing the mentee or supervisee to develop their own ideas and skills (Asogwa, 2019). Mentorship and supervision are both crucial in providing guidance and support to individuals, especially in academic and professional settings. By fostering a positive and supportive environment, mentors and supervisors can help individuals reach their full potential.

Moreover, mentors and supervisors have a responsibility to oversee students (mentees and supervisees) as they conduct research to ensure that they follow guidelines correctly (Abdeldayem, 2018). While the role of a mentor is theoretically different from that of a supervisor, supervisors' academic roles frequently develop into a mentoring relationship (Freedman, 2021). They are both expected to offer advice in their field of study and provide direction for research. They set milestones and monitor progress. They also provide feedback, encouragement, and support. A mentor may also be appointed a supervisor, but a supervisor does not become a mentor during the supervision. This means that the roles of a supervisor and a mentor are inextricably linked, except that in mentorship, the mentor is responsible for more than just guiding the students. Therefore, it is crucial for mentors and supervisors to possess strong communication skills, empathy, and a willingness to invest time and effort in their mentees and supervisees. Notwithstanding, it is important to note that while a mentor and

supervisor may have overlapping roles, they still have distinct differences in terms of their responsibilities and approaches to supporting the mentee or supervisee. As a result, understanding the differences between these roles is critical for effectively utilising them for individual success.

Differences between Mentoring and Supervision

While both mentorship and supervision are important for the growth and success of individuals and organisations, they differ in their approach and goals (Nash, 2021). The main difference between mentorship and supervision is that mentorship focuses on the personal and professional development of the mentee, while supervision is primarily concerned with ensuring that the work is completed to a satisfactory standard by the institution (Asogwa, 2019). Mentors often have more flexibility in terms of their approach and can provide more emotional support to their mentees compared to supervisors. While mentorship is focused on personal and professional growth, supervision is more task-oriented and aims to ensure that specific goals are met (Huet & Casanova, 2021). While supervision focuses on ensuring satisfactory completion of work, mentoring takes a more holistic approach that includes personal and professional development, guidance on career paths, networking opportunities, and skill development (Hussey & Campbell-Meier, 2021). That is a mentorship relationship is often more informal and voluntary, while supervision is typically a formal requirement in the workplace. While supervision is often focused on ensuring that the student completes their work to a satisfactory level, mentoring involves a more holistic approach that takes into account the student's personal and professional development (Al Makhamreh & Stockley, 2020). Mentors may provide guidance on personal and professional development, while supervisors focus on ensuring job performance meets organizational standards. Mentors may provide guidance and advice based on their own experiences, while supervisors are responsible for overseeing and evaluating an individual's performance in a specific role (Valentino, 2021). Both mentoring and supervision can be valuable tools for professional development and growth.

Nonetheless, both mentorship and supervision can have a positive impact on the growth and success of the mentee or supervisee, as well as the organisation as a whole. While the feedback provided by a mentor is usually more focused on personal and professional development, the feedback provided by a supervisor is typically more task-oriented and aimed at improving job performance (Asogwa, 2014). Overall, while supervision is important for ensuring that work is completed to a satisfactory level, mentoring can provide additional benefits such as guidance on career development and the opportunity to develop important skills (Jeske & Linehan, 2020). Overall, the distinctions between mentoring and supervision are summarized in the table below.

Table 1: *Summary of differences between mentoring and supervision*

Supervision	Mentorship
The purpose of supervision is to assist students in planning and completing their research projects (theses and dissertations).	The goal of mentorship is to establish the student as an independent researcher.
A supervisor focuses on producing a good and correct research document.	A mentor makes a conscious effort to help students develop into capable, competent and prosperous professionals.
While a supervisor does offer advice, inspiration, and support, they do not generally discuss their own career plans, and the assistance and encouragement they do offer is generally restricted to the realm of research work.	A mentor offers advice, inspiration, emotional support, and role modelling in addition to sharing knowledge about his or her own career path with mentees.
A supervisor only sticks to what is stipulated by his or her job description.	A mentor can offer assistance with developing new research concepts, establishing goals, making contacts, and locating resources.
The supervisor's role is rigid; it adheres to the faculty's guidelines and regulations.	The mentor's role may change as the needs of the mentee change.
Supervisor and supervisee relationships are more formal.	Mentor-mentee relationships are more informal.
Give direction through scaffolding, where the student works independently to find solutions.	Help the mentee solve his or her own problems rather than giving direction.
The supervisor focuses on the research work and not the student's development.	Focus on the mentee's development and resist the urge to produce a clone.
A faculty member's obligation to supervise is part of their job description.	Mentorship may be done by a willing senior in a field, out of free will.

(Harwood & Petrić, 2018; Lorenzetti et al., 2020; Weld, 2012)

Implication

It is crucial for supervisors, supervisees, mentors, and mentees to understand that both research supervision and mentoring are types of academic relationships that offer guidance and direction, establish milestones and track progress, and offer feedback, encouragement, and support in higher education. Effective supervision and mentoring can greatly contribute to the success of students and their research projects, ultimately benefiting the academic institution as a whole. Both research supervision and mentoring have different goals, and in order to achieve those goals, they are both guided by different guiding concepts, strategies, approaches, and tactics. To pursue the goal wisely, academics must have a clear understanding of who they are in any academic interaction or relationship. Understanding the implication of academic relationships is essential to establish a positive and productive environment for both parties involved. It helps in creating a mutual understanding of expectations, roles, and responsibilities, which ultimately leads to better outcomes and success in higher education. Both can be used in higher education by a supervisee or mentor, but they must be referring to distinct people at once. This understanding can be particularly useful in the context of mentorship, where a clear delineation of roles and expectations can help to ensure that the relationship is productive and beneficial for both parties. Additionally, this awareness can also be valuable in collaborative academic projects, where effective communication and mutual respect are essential for success. It is important for policy makers to note that research supervision is typically focused on the successful completion of a specific research project,

while mentoring is more broadly focused on career development and personal growth. The policy makers and stakeholders ought to understand the power dynamics at play in these relationships and to ensure that they are respectful, ethical, and equitable in their interactions. An effective academic relationship evaluation is only possible by administrators of higher education when the nature of the relationship is recognised, and its guiding principles are put into action. It is important for academics and administrators to recognise that research supervision is focused on developing research skills and producing high-quality research, while mentoring aims to support personal and professional development. By understanding these differences, academics can better utilise both approaches to enhance their academic growth and success. It is also crucial for academics to communicate their expectations and goals clearly with their supervisor or mentor to ensure a productive and beneficial relationship. In addition, regular check-ins and feedback sessions can help to ensure that both parties are on the same page and that any issues or concerns can be addressed in a timely manner. Finally, it is important for academics to be open to constructive criticism and feedback from their supervisor or mentor to continuously improve their skills and knowledge. Both parties should be open to feedback and willing to collaborate to achieve the desired outcomes.

Conclusion

Research supervision and mentoring in higher education institutions are challenged by misconceptions of the two words. Mentors and supervisors have a responsibility to oversee students and supervise them as they conduct research. They offer advice and directions, set milestones and monitor progress, and provide feedback, encouragement, and support. Research supervision is an official and interpersonal relationship between research project supervisors and students aimed at assisting the student's development in their research work. Mentoring is a voluntary relationship between a mentor and a mentee aimed at assisting, managing, monitoring, advising, and/or controlling the activities of the mentee for successful competence development in research and professional growth. Research supervision provides academic support, feedback, advice, and motivation for the successful completion of an official research project, thesis, or dissertation. Mentoring, on the other hand, provides a more holistic approach to career development and can involve guidance on various aspects of professional growth, such as networking, career planning, and work-life balance. While research supervision is typically limited to the duration of a specific project or program, mentoring relationships can extend beyond this timeframe and continue throughout one's career. Research mentorship enhances the mentor's problem-solving skills, networking skills, levels of self-confidence, socialisation abilities, and organisational awareness. While research supervision is more structured and focused on academic support, mentoring is a more flexible and personalised approach that can cover a wider range of topics, including career guidance and personal development. Both research supervision and mentoring are crucial for the success of students in their academic and professional pursuits. Moreover, mentoring can provide a safe space for mentees to discuss challenges they may face in their personal and professional lives, and mentors can offer guidance based on their own experiences. This can help mentees navigate difficult situations and make informed decisions about their future.

Acknowledgements

Declaration of Interest

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