RESEARCH ARTICLE:

Collaborative Supervision Pedagogy for Increased Postgraduate Student Success: The Importance of Writing Camps as an Alternative Supervision Programme

Raymond Emekako[1], Olaitan Shemfe[2] and Peter Merisi[3]

Abstract

A persistent challenge in postgraduate studies is the low retention and throughput rate following initial access, often due to delayed graduation. This issue is frequently exacerbated by the prevailing 'lonely scholar' model typically adopted by academic faculties and research supervisors. This paper proposes an alternative supervisory pedagogy grounded in a multifaceted, collaborative approach. It integrates the structured design of a writing camp with the traditional 'master-apprentice' supervision model. The study seeks to evaluate the effectiveness of this collaborative support system in accelerating the completion of postgraduate research reports – dissertations and research articles – while enhancing the quality of scholarly output. Adhering to established ethical standards in social science research, the study employed a qualitative approach within a descriptive and programme evaluation research design. Thirty-nine pipeline students were purposively selected to participate in a writing camp, based on a defined set of selection criteria. Data were gathered through participant testimonials and a post-camp telephonic survey, then analysed using Atlas.ti (Version 23). Ethical principles – including voluntary participation, the right to withdraw, confidentiality, and anonymity – were rigorously upheld. Findings highlight the substantial benefits of collaborative supervision models in strengthening research and academic writing skills, alleviating the supervisory burden, and incorporating specialist input to enhance the overall quality of student research. The study recommends the early integration of writing specialists into postgraduate supervision to build student confidence and improve throughput rates.

Keywords: *collaborative supervision; supervision model; writing camps; postgraduate students*

Introduction

Universities around the world are under increasing pressure from their respective governments to boost the number of students completing postgraduate degrees, as this is seen as a key driver of the knowledge economy (Botha, 2018). As a result, research supervisors carry the responsibility of navigating the complexities of postgraduate supervision to meet the production targets set by both universities and government bodies (Hendrickse, 2022). In South Africa, the 2030 National Development Plan (NDP) identifies colleges and universities as central to knowledge creation. These institutions are expected to interrogate existing epistemologies and develop innovative ways to apply knowledge in practical contexts (National Planning Commission [NPC], 2010). Expanding knowledge production is critical to achieving South Africa's development objectives (Department of Higher Education and Training [DHET], 2020). To this end, the NDP sets ambitious targets: increasing the proportion of academic staff with doctoral qualifications from 34% to over 75% by 2030 and producing more than 100 doctoral graduates per million of the population annually (DHET, 2020).

However, reaching these goals remains a challenge due to persistently low throughput rates in postgraduate programmes at South African higher education institutions (HEIs). A significant gap exists between enrolment figures and completion rates in postgraduate studies at public universities (Costa, 2019). Research indicates that

[1]North-West University, Raymond.Emekako@nwu.ac.za | https://orcid.org/0000-0002-1236-6662
[2]Walter Sisulu University, oshemfe@wsu.ac.za | https://orcid.org/0000-0003-0996-1505
[3]University of Witwatersrand, peter.merisi@wits.ac.za | https://orcid.org/0000-0001-7753-8034

this gap is influenced by factors relating to both students and supervisors (Tlali *et al.,* 2022). In most postgraduate offices, admission to postgraduate study depends on the availability of research supervisors. Prospective students may identify a potential supervisor within their field of interest and submit a pre-proposal before being accepted. Alternatively, if no preference is indicated, a supervisor may be assigned by the programme director. Once allocated, the supervisor assumes responsibility for mentoring and supporting the student throughout the research process (Ives and Rowley, 2005). This arrangement places significant reliance on the supervisor's research expertise and capacity. While co-supervisors are sometimes appointed, the dominant model follows a master-apprentice structure in which the student's progress is closely tied to the supervisor's guidance. This model, however, can contribute to low completion rates (Saidi, 2024), particularly when supervisors are overburdened and unable to provide sufficient support to all students. Moreover, issues of power imbalance and instances of supervisor misconduct, including bullying, may further complicate the supervisory relationship (Saidi, 2024).

Postgraduate supervision involves guiding early-career or inexperienced academic researchers in conducting independent, high-quality research (Ngulube, 2021). Its purpose extends beyond improving throughput and helping students attain their degrees; it also aims to nurture their academic competence and position them as emerging scholars in their respective fields. Effective supervision, therefore, demands continuous engagement between the supervisor and the student throughout the research journey (Makoni, 2022). At both the master's and doctoral levels, students heavily depend on their supervisors for research direction and support, which is essential for contributing meaningfully to the knowledge economy (Ngulube, 2021). However, supervising postgraduate research is a demanding and multifaceted teaching responsibility, as evidenced by a broad body of literature on postgraduate education (McKenna *et al.,* 2017). Tlali *et al.* (2022) observe that rising enrolment in postgraduate programmes has significantly increased academic staff workloads. In addition to teaching responsibilities, academics must grade assessments, conduct their own research, and contribute to publications. Many also take on administrative duties, serving in positions such as School Directors or Deans. These demands result in high levels of pressure and dissatisfaction, particularly among supervisors with limited research expertise or supervisory experience (Tlali *et al.,* 2022). Additionally, certain difficulties in postgraduate supervision stem from the students themselves. Previous studies have shown that some students pursuing postgraduate courses lack the necessary critical thinking and research skills (Van Rensburg, Meyers and Roets, 2016).

Many individuals struggle with language proficiency, which hinders their ability to understand and engage in academic writing, communication, and conceptual and research methodologies (Van Rensburg *et al.*, 2016). Plagiarism, insufficient computer literacy, and the inability to effectively search for relevant content are also commonly identified as additional challenges faced by students. Furthermore, a significant proportion of postgraduate students opt for part-time education while maintaining full-time employment. Balancing work and studies simultaneously pose a challenge for some students, leading to frustration for both the student and the supervisor (Mutula, 2011). Consequently, this affects their motivation to complete their studies (Kimani, 2014; Lategan, 2014). All these factors have the potential to impede the progress of postgraduate studies and supervision (Tlali *et al.,* 2022; Muraraneza, Mtshali and Bvimbwe, 2020). As an esteemed HEI, characterised by a commitment to engaged scholarship, academic excellence, social responsiveness, and an ethics of care (North-West University [NWU], 2024), the university is steadfast in its pursuit of acquiring, advancing, practically implementing, and disseminating knowledge through its research initiatives. All graduate academic programmes, including structured master's degrees, incorporate a research component (NWU, 2020). In the case of doctoral qualifications, even when coursework is added for value, it does not count as credit towards the awarding of the qualification (Council on Higher Education [CHE], 2013). The research activities of supervisors include not only scholarly inquiries conducted by faculty members that result in publications, but also the guidance and instruction provided to students, which is expected to culminate in the successful completion of dissertations and, depending on institutional requirements, research articles (DHET, 2020). Thus, the supervisory relationship between faculty and students is crucial in achieving postgraduate supervision objectives. The predominant supervision model is the one-on-one method, often referred to as the master–apprentice model, wherein the 'master' assumes both the supervisor and co-supervisor roles. While this model fosters a close relationship between supervisors and students, it has been criticised for its inherent power dynamics, which may render students vulnerable. Reports from the CHE have identified the dominance of the one-on-one model as a contributing factor to low throughput in higher education (DHET, 2020).

The master–apprentice model places considerable pressure on the limited pool of available supervisors, exacerbating the existing challenges highlighted in the Ministerial Statement on university capacity development.

These challenges include postgraduate students who are not adequately prepared to manage the demands of their studies; the heavy workload of academic staff responsible for both teaching and supervising; the absence of mentors and role models; insufficient support from faculty management and designated centres; limited access to research infrastructure and equipment; lack of research and professional networks; inadequate funding for research activities; and the substantial time and involvement required in faculty-level management of teaching and research responsibilities (DHET, 2020). These factors call for a reassessment and a renewed approach to planning postgraduate support at HEIs. In response to ministerial directives, NWU conducted a comprehensive review of its doctoral supervision programme, analysing indicators such as application rates, time to degree completion, dropout rates, graduation rates, and the quality of supervision across various disciplines identified by the institution for this study. These included Science, Engineering and Technology, Health Sciences, Business and Commerce (BC), Education, and Humanities and Social Sciences. The review revealed a decline in student enrolment, a rise in dropout rates – particularly in Law, Humanities, and Theology – and persistently low graduation rates in the Natural and Applied Sciences, Engineering, Education, Law, Humanities, and Theology. Factors cited for these outcomes included supervision-related issues, students' research preparedness at the point of enrolment, administrative inefficiencies, and the high workloads of academic staff (NWU, 2020). It is evident that the current supervision model may no longer effectively respond to the realities of dropout rates and slow student progression in South African higher education, underscoring the urgent need to re-evaluate supervisory pedagogy.

Scholarship from the Department of Science and Innovation (DSI), Universities South Africa (USAf), and the Centre for Research on Evaluation, Science and Technology (CREST), as outlined in the Ministerial Statement for University Capacity Development Grants (UCDGs) (2021–2023), highlights the need for intervention programmes across HEIs to address these challenges. In response, a centralised support project for postgraduate students was developed and implemented as a collaborative initiative between faculties and their appointed supervisors. This initiative aims to strengthen students' research capabilities and enhance throughput rates in participating institutions. This article therefore seeks to:

i.   Explore the challenges facing postgraduate supervision.
ii.   Explore the challenges associated with the traditional supervision model.
iii.   Explore the potential benefits of a collaborative supervision model in addressing the existing supervision challenges.
iv.   Offer recommendations for policy and practice for postgraduate supervision effectiveness.

Pedagogies of Supervision at the Postgraduate Research Hub

The literature presented above demonstrates that the main factors contributing to low throughput in postgraduate studies are supervisor workload, supervision quality, and the research skill sets of postgraduate students necessary for conducting meaningful research. In response to low throughputs at NWU, the Postgraduate Research Support Programme was developed as a project funded through the UCDG and managed by the Centre for Teaching and Learning (CTL). Its primary objective was to reform the supervisory model by working in collaboration with faculties to strengthen the research skill set of registered students through three targeted activities. The programme focused on pipeline students – those who had exceeded the required duration of their studies – including master's students registered for more than two years and doctoral students registered for more than three years.

Activity 1: Support for higher-degree students at critical stages in their research journey

This activity supports postgraduate students throughout their academic progression by coordinating and delivering workshops on the following thematised areas: (i) Proposal development; (ii) Post-proposal intervention: what to look out for; (iii) Literature writing; (iv) The role of a theoretical and conceptual framework in a postgraduate study; (v) Research methodology and development; (vi) Data generation and analysis; (vii) Preparing a thesis for examination; and (viii) Criteria considered by examiners in a postgraduate study research report. The workshops employ a variety of instructional methodologies, including: (i) Invitational workshops, where the instructor presents a focused mini-lesson; (ii) Constructivist workshops, where participants are posed with a provocation or problem to solve, supported by appropriate scaffolding; (iii) Reflection workshops, which combine elements of both invitational and constructivist approaches, where facilitators model their thinking processes – particularly in interpreting feedback – which is critical to student development; (iv) Conference workshops, which prioritise deep learning by creating time and space for facilitators to actively listen to students as they discuss their ongoing work;

and (v) Choice workshops, where students – either within the same discipline or as a cohort – have the autonomy to determine their activities and learning goals. This format builds on foundations laid in earlier sessions. Among these, the invitational workshop was found to be the most effective for introducing new skill sets to students in their postgraduate journey.

Activity 2: Walk-in research hub for one-on-one consultation

The Postgraduate Research Support Hub (PGRS Hub) at NWU, established in 2021, aims to enhance throughput and retention among students, particularly those who have exceeded the required duration of their studies, with a specific focus on black women. As such, it serves as a support centre for postgraduate students. Since its inception, the PGRS Hub has organised workshops on dissertation structure, research methodology, and data analysis methods, as well as writing camps and walk-in consultations. These initiatives complement the one-on-one and co-supervision models by offering advantages found in more collaborative approaches. The walk-in research support hub is particularly geared towards novice researchers pursuing honours, master's, and doctoral degrees. These individuals are typically referred by their supervisors to address specific areas of concern, while also welcoming self-directed and voluntary visits. To realise their potential, these models must promote a culture of care, collaboration, and dedication to research. Furthermore, effective coordination is crucial (CHE, 2023). Skopek, Triventi and Blossfeld (2022) reported a significant increase in student retention and academic progress with enhanced collaborative and structured approaches.

Activity 3: Writing camps

Writing camps are organised to support postgraduate students in completing their research reports, specifically their dissertations, and to promote publications throughout their postgraduate studies. Using a selection criteria system, students are admitted based on recommendations from their supervisors to attend a five-day writing camp. The purpose of the camp is to help students prepare their reports for submission, which may include a chapter in a book, a draft article for publication, or a review of a dissertation chapter. The camp utilises instructional writing strategies. The camp is structured to maximise productivity and enhance scholarly writing skills through a comprehensive blend of goal setting, theoretical foundation, diverse instructional methods, and multimedia learning. This structured support system not only enhances writing skills, but also promotes a collaborative and inclusive learning environment, ultimately contributing to students' academic success and professional development. At the outset of the camp, an inquiry session is organised to ascertain the individual goals and objectives of each student for the duration of the camp and the subsequent post-camp period. Students are requested to clearly articulate their aims, whether they involve working on an article or focusing on their dissertation report for assessment. This distinction ensures tailored support and appropriate grouping, thereby fostering a more concentrated and productive atmosphere. Participants were provided with essential readings that cover crucial aspects of scholarly research. These readings encompass topics such as research ethics, research approaches and designs, and the steps involved in conducting scholarly work. This foundational knowledge establishes a framework for informed and ethical research practices, equipping students with the necessary tools to approach their writing with confidence and integrity.

Various instructional methods are employed throughout the camp to accommodate different learning styles and requirements. Workshops on academic writing are conducted to teach the fundamental principles of clear and effective scholarly communication. These workshops are supplemented by structured discussions in which students can explore their research ideas and receive constructive feedback from both peers and facilitators. The camp also incorporates the use of the Pomodoro Technique, wherein students engage in timed writing sessions of 25 minutes, followed by short breaks. This technique helps eliminate distractions and maintains an environment conducive to focused writing. Additionally, free-writing exercises are included to assist students in overcoming writer's block and cultivating their unique academic voice. One-on-one consultations are offered to provide personalised feedback and guidance. These sessions enable students to address specific challenges and refine their strategies for research and writing. Reflection periods are incorporated into the camp schedule, encouraging students to evaluate their progress, establish new objectives, and internalise the knowledge gained from each day's activities. To enrich the learning experience, carefully selected educational videos are utilised as instructional tools. These videos, including "Just Write", "Keeping a Reading Journal", "The Thesis as an Argument", and "What is Theory?" "Using a Theoretical Framework" are shown at the conclusion of each day. They offer supplementary information and perspectives on fundamental aspects of academic writing and research, promoting a deeper comprehension and active involvement. Moreover, the writing camp combines workshops and conversations

focused on academic writing, incorporating individual feedback and group reflections with a writing strategy called "*Pomodoro*". The Pomodoro Technique involves 25-minute sessions dedicated to reading or writing without distractions. During these sessions, students are expected to refrain from activities such as walking around, multitasking, taking breaks for coffee or lavatory visits, checking emails, or using social media. This creates a focused and uninterrupted work environment with no verbal communication.

After each Pomodoro session, students can engage in one-on-one consultations with a writing adviser or specialist, where they share their written work and receive feedback. The writing advisers and specialists serve as critical readers, helping to enhance the coherence of the students' work and refine their arguments to create a strong, consistent narrative. At the end of each day, there is a group reflection session. These sessions provide postgraduate students with the opportunity to evaluate their achievements and discuss any difficulties encountered during the development of their dissertation or article drafts. The value created by the camp is assessed using the Kirkpatrick model which evaluates training efficacy on four levels: reaction (satisfaction and engagement), learning (knowledge and skill development), behaviour (application in the workplace), and results (impact on organisational outcomes). It focuses on both immediate and long-term benefits (Kirkpatrick and Kirkpatrick, 2006).

The incorporated workshops focus on the following aspects:
- Writing as a social practice, knowledge creation as an identity, and the contribution of text to be evaluated.
- Conducting a forensic examination of scholarly publications while maintaining a personal reading journal.
- Developing a unique writing style within a field, understanding essential ideas, and establishing a coherent argument throughout research writing.
- Choosing a journal, participating in conversations about accreditation, predatory journals, guidelines, and participation in the discourse.

Additionally, writing and advising specialists facilitate conversations. This platform provides postgraduate students with the opportunity to openly discuss their issues and experiences during their research journey, as well as receive valuable advice for achieving success in academic writing.

Activity 4: Theoretical lens – one-on-one and collaborative supervision models

Chiang (2003) and Backhouse (2010) identified the individualistic supervision model as prevalent in postgraduate supervision within the United Kingdom and South Africa, respectively. In contrast, many Australian universities have adopted team supervision (Buttery, Richter and Filho, 2005; Robertson, 2017). The one-on-one model involves a single student collaborating with a supervisor for an extended period while pursuing their studies. Referred to interchangeably as the 'Oxbridge model', the 'master-apprentice model', or 'tutorship' model (Zeegers and Barron, 2012; Carter-Veale *et al.,* 2016; Kiley, 2017; Dominguez-Whitehead and Maringe, 2020), it typically entails the student formulating a research project proposal, often evaluated by a Higher Degree's Committee. Typically, there are no additional requirements for presentations or submissions beyond what the supervisor and student agree on. Consequently, there is a risk that significant issues may go unnoticed until high-stakes assessments (Gao, 2022). The primary challenge with the one-on-one approach lies in the considerable responsibility it places on the supervisor to ensure that the student comprehends the goals of postgraduate study and executes them effectively, potentially compromising the quality of the research (Taylor, Kiley and Holley, 2021). This challenge, including low throughput and an inadequate pool of supervisors, exists in most academic institutions (Dominguez-Whitehead and Maringe, 2020).

The dominance of the one-on-one model in South Africa has been associated with low retention and throughput rates, especially in soft sciences such as the humanities and social sciences (CHE, 2023). Moreover, the co-supervision methodology is adopted, which means that an additional supervisor is often assigned to supplement expertise in specific study areas or to support inexperienced supervisors (Ngulube and Ukwoma, 2019). Although co-supervision has the potential to mitigate power dynamics, it can exacerbate them if supervisors engage in academic competition, neglecting student needs (Taylor *et al.*, 2021). Globally, there has been a marked shift towards more collaborative and structured approaches to postgraduate supervision, driven by rising enrolment numbers and the demand for greater efficiency. Notable examples include cohort models, supervision panels or committees, and research project teams (McKenna *et al.,* 2017). These approaches provide students with valuable opportunities to build methodological competence, engage in scholarly discourse beyond their immediate research topic, and benefit from feedback offered by multiple sources. However, such models also require a significant investment of time and effort from both students and supervisors (CHE, 2023). In the context of developing

countries, particularly in sub-Saharan Africa, structured and collaborative supervision models are seen as more suitable due to the pressing need to strengthen research skills (Manabe *et al.,* 2018). Nevertheless, the introduction of structural frameworks alone is not sufficient to cultivate a robust research culture (CHE, 2023).

Activity 5: Promoting a collaborative research culture for students' gain and success

Existing research on postgraduate education models often highlights the advantages of various programmes. However, it is unlikely that any single model can comprehensively explain the variations in students' experiences or effectively address issues related to student retention and academic progress. The research culture promoted by these models is a crucial factor in their success. Literature asserts the importance of students feeling included, having opportunities for peer learning, having a support system to address study-related issues, and understanding the requirements and milestones of their academic journey (Mutula, 2011; Manathunga, 2012; McKenna *et al.,* 2017; Ngulube, 2021). Postgraduate education conducted in teams or cohorts is more likely to provide such opportunities. Nevertheless, it is possible to incorporate these elements into one-on-one or co-supervision models. Enhancing these models with strategies that promote students' participation in a broader academic community can address their limitations while maintaining their advantages. For instance, integrating research discussions guided by supervisors or other invested stakeholders can foster a sense of inclusion, peer learning, and support, thus enriching the overall academic experience. According to the CHE (2023), many institutions have established specialised centres for postgraduate study that offer workshops, short courses, and writing retreats to foster collaborative environments. NWU responded to this need with the creation of the PGRS Hub to cater for the needs of students challenged with research skills and knowledge to progress and complete their studies.

Research Methodology

This study adopted a qualitative research approach, utilising both descriptive and programme evaluation research designs. It draws on data collected from writing camps conducted in 2023, which were facilitated by writing specialists, research advising experts, and subject-area professionals. The writing camp data is central to the aims of this paper, as it offers a more accurate measure of student throughput compared to data generated from Activities 1 and 2. These earlier activities consisted of invitational workshops aimed at helping students understand the various stages of the research process. The study employed a purposive sampling technique, as the writing camps specifically targeted pipeline master's and doctoral students nominated by their research supervisors. A total of 39 students participated in the 2023 writing camps, all of whom were in the process of compiling their final research reports. Of these participants, 25 were female and 14 were male, reflecting the project's alignment with its objective to prioritise the advancement of female postgraduate students. In terms of faculty distribution, the Faculty of Natural and Agricultural Sciences had the highest number of participants, with 16 students. This was followed by the Faculty of Health Sciences with nine students, and the Faculty of Humanities with seven. The data suggest that collaborative supervision pedagogy is particularly well received in the hard sciences, which accounted for the majority of participants – comprising 24 master's students and 15 doctoral candidates.

Data for this study were collected through video-recorded semi-structured interviews and telephonic surveys. All 39 participants were interviewed and subsequently received a telephonic follow-up survey. The interviews were conducted at the conclusion of the writing camps, with each session lasting approximately 15 minutes. The telephonic follow-ups were conducted one month after the camps ended. As previously mentioned, participant testimonials were recorded during the 2023 writing camps through video interviews, which were later transcribed and analysed using Atlas.ti (Version 23). The primary objective was to evaluate whether the camp successfully equipped postgraduate students with the research and writing competencies required to conduct a well-structured study. The follow-up surveys aimed to track students' academic progress, particularly regarding their readiness for dissertation assessment. Key indicators of success included the submission of full dissertations, draft chapters (such as the introduction, literature review, methodology, findings, discussion, and conclusion), and the number of academic papers submitted or published as a direct result of attending the writing camps. All data from both the interviews and follow-up surveys were systematically analysed using Atlas.ti (Version 23).

Ethical clearance for this study was obtained from the Basic and Social Sciences Research Ethics Committee (BASSREC) at NWU, under ethics number NWU-00977-22-A7-03. Participation was entirely voluntary, with informed consent obtained from all participants. Confidentiality and anonymity were strictly upheld throughout the research process. To preserve anonymity, pseudonyms such as M18 (for master's student number 18) and PhD4

(for doctoral student number 4) were used. Participants were also informed of their right to withdraw from the study at any point during the testimonial and telephonic surveys.

Findings and Discussion

The findings are presented in two main sections. The first section analyses thematic insights drawn from the testimonial video recordings collected during the writing camps. The second section outlines the academic progress of the pipeline students following their participation in the writing camp. The testimonials revealed several key themes, including skill development and improvement, active peer collaboration, the receipt of constructive feedback, the tendency to recommend the programme to others, and overall satisfaction with the structured writing environment.

Theme 1: Skill acquisition and advancement

Postgraduate students are instructed in the art of academic writing, recognising it as a critical skill to be incorporated throughout their research report. Furthermore, these skills can be honed through engagement with fellow students and experienced professionals in the field of writing and their respective disciplines. Drawing from the participants' testimonial video recordings, it was determined that certain abilities had been successfully conveyed, as evidenced by the excerpts below:

> "First of all, I must admit that I struggled a bit with my golden thread, focussing on my master's degree to get all my data together and getting all my theories together to ensure I have a good argument based on theory and evidence. In this camp, I have learnt so much, gained so many skills, and I had the opportunity to get to know a lot of amazing people who are there to listen to you and who are there to advise you" (M18).

> "I have always had issues on how to arrange my arguments logically to show my own standpoint in my dissertation, but after watching those videos and hearing the presenter, I really wish I knew what I know now; I can now handle writer's block by just free writing. I am very grateful" (PhD 5).

Previous studies by du Plessis (2016) and Teng (2021) have highlighted the challenges student writers face regarding language proficiency, effective organisation of ideas, and the concise expression of complex concepts. However, many of these difficulties have been successfully mitigated through the support provided at writing camps. Castle and Keane (2017) identified writing camps as instrumental in developing these skills, albeit to a limited extent. It is important to note that these acquired skills require consistent practice over time to achieve mastery. Participants in the writing camps reported an improved ability to engage in guided writing, demonstrating greater coherence and logical progression in their academic work. This suggests that the collaborative model, when implemented effectively, can complement and enhance the traditional one-on-one supervision approach. Recognising the benefits of collaborative supervision, many academic institutions have established specialised centres for postgraduate education. These centres offer various resources – such as seminars, short courses, and writing retreats – designed to cultivate collaborative environments that support the academic development of postgraduate scholars (CHE, 2023). In alignment with this approach, the establishment of the PGRS Hub reflects a commitment to enhancing student throughput and retention by fostering the development of key academic skills among its cohort of emerging researchers.

Theme 2: Engagement with peers through knowledge sharing

According to the CHE (2023), the collaborative supervision model offers students opportunities to strengthen their methodological skills, gain a broader understanding of issues within their field, and access multiple platforms for presenting their ongoing research. Such models also enable postgraduate scholars to build peer networks and receive feedback from a variety of sources, beyond that of their institutionally assigned supervisors. This benefit is illustrated in a testimonial provided by one of the participants, a master's student.

> "To come here and be with other colleagues and get constructive feedback from people who are not my supervisor has been refreshing … it has been so helpful to know that you are doing something similar or facing a similar challenge as other students and, having the opportunity to speak about, it offers news insights for my study" (M4).

> "I was filled with self-doubt and anxiety, but hearing other colleagues share their experience make[s] me feel I am not alone or left behind. This has help[ed] shape my confidence and not to think less of myself" (M9).

The above assertions illustrate that the camp fosters a sense of inclusion. Participants benefit from the opportunity to learn from their peers, subject matter specialists, and advising experts. Moreover, they are supported by a system designed to address challenges related to their academic or supervisory experiences. This supportive environment helps to counteract the isolation and self-doubt often associated with the one-on-one supervision model – factors that can contribute to anxiety and, in some cases, depression.

Theme 3: Receiving constructive feedback

> "As a beneficiary of the research hub on [the] Mahikeng campus, I attribute my successful completion of my master's studies to the constructive feedback received. Achieving [a] distinction in my master's programme has spurred me to embark on drafting an article derived from my research. I believe that the invaluable interaction with research experts and their feedback significantly contributed to my scholarly development" (PhD10).

> "Getting critical reviews and feedback really helped me to broaden my knowledge" (M3).

Soliciting feedback from knowledgeable individuals enhances student writers' confidence, particularly when the critique is constructive rather than demeaning. Such feedback can significantly bolster their sense of self-assurance. Moreover, establishing clear guidelines for participation – especially in the context of giving feedback – is essential for fostering community environments that prioritise personal growth and rigorous scientific methods, rather than being driven by academic egos. Engaging in explicit discourse on the management of diverse perspectives and feedback is therefore imperative. This discourse recognises the inherent contestability of knowledge production, framing such debates as pedagogically valuable rather than confusing inconsistencies. By cultivating an environment in which students perceive these discussions as essential and enriching aspects of collaborative peer review, educational strategies can better prepare them for scholarly activities such as conference presentations, academic publishing, and broader knowledge dissemination (CHE, 2023). This approach is consistent with the methodology of the PGRS Hub, which avoids forcefully imposing knowledge and instead focuses on nurturing students' critical capacities. Instead of solely criticising supervisors' research abilities, the hub provides constructive suggestions to students, helping them navigate the challenges they face in structuring their dissertation report.

Theme 4: Willingness to recommend the writing camp to fellow students

> "This camp is going to show all the necessary skills that you need to write impeccably, and maybe you know you can get a cum laude when you finally get your master's or thesis. I really think every student should get this opportunity, and not just a selected few" (PhD2).

Another participant expressed:

> "I will recommend the writing camp to anyone who is struggling because it is a great opportunity even for first-time writers to know exactly how they are supposed to approach their writing" (PhD3).

Predictably, it is widely believed that delivering a high-quality service that meets expectations leads to outstanding recommendations. Testimonial participants confirmed that the writing camp was instrumental in enhancing their critical thinking and writing skills. They highly recommend this programme to other pipeline students, as well as to individuals who have struggled with effectively organising their research. Furthermore, regarding skill development after attending the writing camps, it is important to emphasise that merely acquiring these abilities is not enough; it is equally vital to apply these skills after the camp to enhance the progress of pipeline students.

Student academic achievement through the instructional design of the writing camp

To monitor the success rates of students after the camp, the PGRS Hub conducted a telephonic survey to track their academic progress. This survey aimed to measure the impact of the camp using various metrics, such as submissions, intention to submit, and the number of dissertation chapters supported through the camp intervention. These chapters include the introduction, literature review, methodology, findings and discussions,

recommendations, and conclusion. Additionally, the hub tracked the number of articles submitted, accepted, or published following the writing camp.
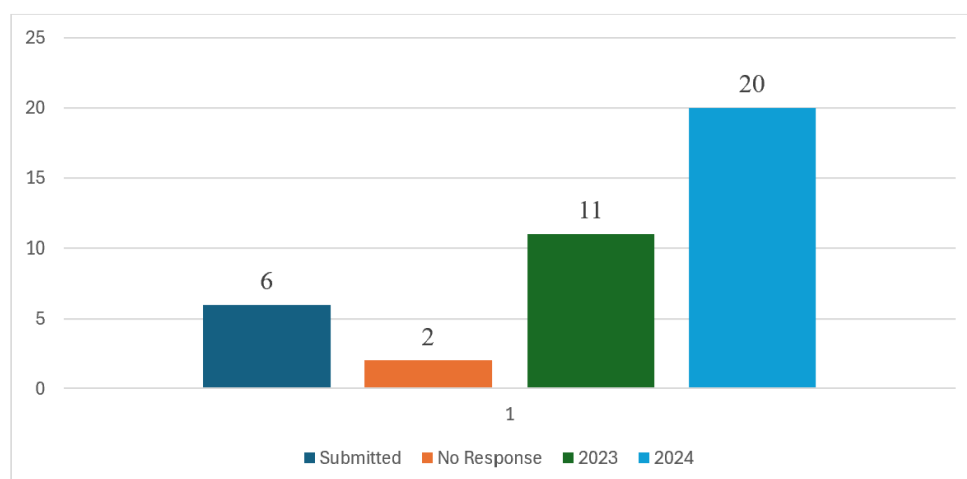

Figure 1: Dissertation submission distribution

Of the 39 pipeline students who attended the writing camp, two students could not be reached by telephone. Responses from the students indicate that out of the 37 students who were accessible, six had successfully submitted their dissertations, while 11 expressed their intention to submit. The remaining twenty students had 2024 as their intended year of submission.
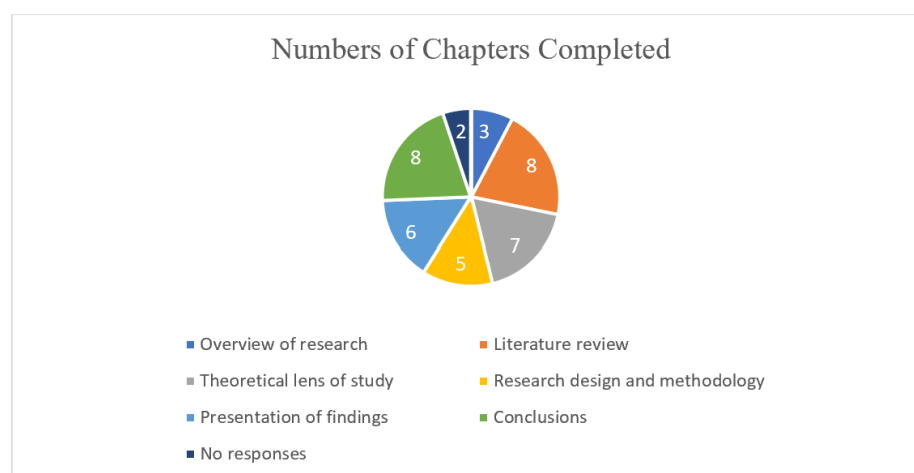
Figure 2: Number of chapters completed

While the proportion of students who successfully submitted their dissertations for external examination may seem relatively low compared to the total population that attended the writing camp, it is important to note that some students attended with the idea of improving sections of their already concluded research report rather than focusing solely on completing their report. Furthermore, despite the low submission rate, an important factor to consider is that students demonstrated progress by successfully completing many chapters of their dissertations after attending the writing camp. These chapters typically included an overview of the research, theoretical framework, literature review, research design and methodology, presentation of findings, and conclusions.
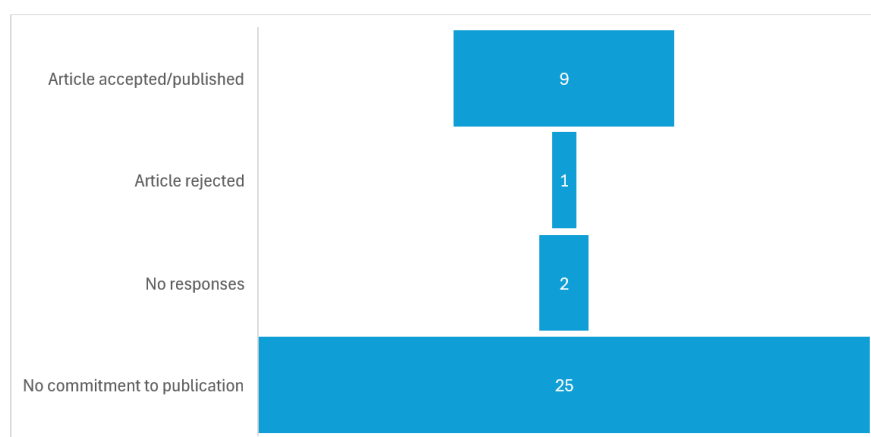
Figure 3: Distribution of submitted articles for publication

The telephonic survey revealed that a total of 10 articles were submitted for publication. Among these, nine journal articles were accepted, while one was rejected. Skopek *et al*. (2022) suggest that the introduction of more collaborative and structured approaches significantly increased motivation to publish. During both the camp and post-camp support, the writing advisers and subject specialists acted as concerned readers, providing valuable feedback, but they had no influence over the choice of journals for publication. This decision rested with the supervisor(s) and the student. Out of respect for ethical considerations, this paper refrains from disclosing the authors and titles of the accepted papers. However, it does outline the instructional strategies employed to support the student researchers (see the heading: 'Instructional design for the writing camp').

Drawing on the findings of this study, several recommendations are proposed to enhance postgraduate student support and supervision. First, universities should consider implementing structured support programmes, such as writing camps and academic development workshops. These initiatives offer dedicated time and space for skill-building and reflection, thereby fostering academic confidence and progress. Additionally, institutions should encourage peer engagement activities, including student symposia, to facilitate knowledge exchange, reduce isolation, and cultivate a sense of academic community. Moreover, a shift from the traditional one-on-one supervision model toward a more collaborative approach is recommended. Integrating writing specialists, subject experts, and peer reviewers into the supervision process can enhance inclusivity and enrich the quality of feedback. This approach not only supports students' academic development but also distributes supervisory responsibilities more equitably, enabling primary supervisors to concentrate on their specific areas of expertise. Finally, institutions should regularly assess the effectiveness of their support structures and supervision models through systematic feedback from both students and supervisors. Such evaluation will ensure that support mechanisms remain relevant, responsive, and aligned with institutional and national priorities for postgraduate success. The implications of this study for research, policy and practice include:

i. **Research:** Future studies should explore how different collaborative supervision models impact postgraduate research across disciplines.
ii. **Policy:** Universities should adopt policies that promote structured support programmes and collaborative supervision frameworks to enhance sustainable and efficient postgraduate research.
iii. **Practice:** Supervisors and institutions should actively implement collaborative initiatives, such as integrating academic writing specialists and promoting interdisciplinary collaboration, to enhance postgraduate students' learning experiences.

Conclusions

Based on the findings, structured support in postgraduate education offers substantial benefits. Firstly, it positively influences skills acquisition and development. These programmes create an organised environment that facilitates the cultivation of various academic and professional skills essential for postgraduate success. Moreover, participation fosters peer engagement and knowledge exchange, which is crucial in addressing the sense of isolation frequently experienced by postgraduate students – often resulting in loneliness, frustration, self-doubt, and anxiety. Through interaction with peers and receiving feedback from both peers and experts, students can mitigate these negative emotions and gain confidence in their abilities. The comparison between the traditional

one-on-one supervision model and participation in structured programmes is particularly revealing. While the one-on-one model has its merits, it can sometimes lead to overreliance on a single supervisor, whose communication style may not always support the student's confidence-building process. In contrast, the collaborative nature of writing camps and academically structured programmes ensures that students receive feedback from a range of sources, including peers and subject-matter specialists. This broader input tends to be more balanced and constructive, fostering inclusivity and a stronger sense of belonging.

Encouraging more postgraduate students – particularly those pursuing their Ph.D. degrees – to participate in writing camps and structured skills development programmes is critical for several reasons. These students represent the future of research and academia, forming the foundation of emerging scholarship. By developing academic writing skills early, they are better equipped to articulate their research ideas and findings, thereby contributing more effectively to their respective disciplines. A collaborative model also helps reduce the supervisory burden. Supervisors are tasked with a wide array of responsibilities, including research oversight, feedback provision, and student mentorship. Empowering postgraduate students to enhance their writing skills independently allows for a more balanced workload, enabling supervisors to focus on providing specialised guidance and expertise. Furthermore, adopting a collaborative supervision approach aligns with the broader goals set out in the NDP, which aims to produce 100 doctoral graduates per million people by 2030. By promoting collaboration among students and supervisors, HEIs can improve throughput and retention rates, ultimately increasing the number of successful graduates. The findings of this study are context-specific and may not be universally applicable across different institutional settings within South Africa or internationally. Future studies could investigate how various institutions adopt collaborative supervision strategies or models to address their unique challenges and contexts.

Declarations

Interdisciplinary Scope: This article takes an interdisciplinary approach by arguing for a methodological change in supervision pedagogy to allow a more collaborative model that brings various specialisation in contact with postgraduate students to increase effectiveness, writing skills development and throughputs using writing retreats.

Author Contributions: Conceptualisation (Emekako); literature review (Shemfe); methodology (Merisi); analysis (Emekako); investigation (Emekako); drafting and preparation (Shemfe); review and editing (Merisi).
All authors have read and approved the published version of the article.

Conflict of Interest: The authors declare no conflicts of interest.

References

Backhouse, J. 2010. Patterns of Practice in South African Doctoral Education: An Empirical Study. *Acta Academica Supplementum,* 1: 1-22.

Botha, R. J. 2018. Student Throughput Trends on Postgraduate Level: An African Case Study. *The Independent Journal of Teaching and Learning,* 13(2): 54-66.

Buttery, E. A., Richter, E. M. and Filho, W. L. 2005. An Overview of the Elements that Influence Efficiency in Postgraduate Supervisory Practice Arrangements. *International Journal of Educational Management,* 19(1): 7-26.

Carter-Veale, W. Y., Tull, R. G., Rutledge, J. C. and Joseph, L. N. 2016. The Dissertation House Model: Doctoral Student Experiences Coping and Writing in a Shared Knowledge Community. *CBE—Life Sciences Education,* 15(3): 34.

Castle, J. and Keane, M. 2017. 'It was an Oasis in a Busy Life, a Busy City': The Centre for Learning, Teaching and Development Writing Retreat. *Journal of Education*, 66: 207-225.

Chiang, K-H. 2003. Learning Experiences of Doctoral Students in UK Universities. *International Journal of Sociology and Social Policy,* 23(1/2): 4-32.

Costa, K. 2019. A Systematic Review of Challenges in Research Supervision at South African Universities. Available: https://doi.org/10.20944/preprints201812.0305.v1 (Accessed 15 November 2023).

Council on Higher Education (CHE). 2013. *The Higher Education Qualifications Sub-Framework*. Pretoria: Government Printer.

Council on Higher Education (CHE). 2023. Models of Postgraduate Supervision and the Need for a Research-Rich Culture. Available: https://www.che.ac.za/file/7269/download?token=CHhcauQL (Accessed 15 November 2023).

Department of Higher Education and Training (DHET). 2020. *Statistics on Post-School Education and Training in South Africa.* Pretoria: Department of Higher Education and Training.

Dominguez-Whitehead, Y. and Maringe, F. 2020. A Cross-National Analysis of PhD Models. *International Journal of Comparative Education and Development,* 22(3): 233-245.

Du Plessis, C. 2016. Inferences from the Test of Academic Literacy for Postgraduate Students (TALPS). *Southern African Linguistics and Applied Language Studies,* 34(1): 1-16.

Gao, X. T. 2022. The Impact of Context-Driven Assessment and Feedback Conceptions on University Students' Approaches to Learning — A Cross-Cultural Perspective. PhD thesis, University of Auckland.

Hendrickse, R. 2022. COVID-19: An Alternative Approach to Postgraduate Supervision in the Digital Age. *South African Journal of Higher Education,* 36(5): 98-118.

Ives, G. and Rowley, G. 2005. Supervisor Selection or Allocation and Continuity of Supervision: Ph.D. Students' Progress and Outcomes. *Studies in Higher Education*, 30(5): 535-555.

Kiley, M. 2017. Reflections on Change in Doctoral Education: An Australian Case Study. *Studies in Graduate and Postdoctoral Education,* 8(2): 78-87.

Kimani, E. N. 2014. Challenges in Quality Control for Postgraduate Supervision. *International Journal of Humanities Social Sciences and Education,* 1(9): 63-70.

Kirkpatrick, D. and Kirkpatrick, J. 2006. *Evaluating Training Programs: The Four Levels*. San Francisco: Berrett-Koehler Publishers.

Lategan, L. O. K. 2014. 'Research Education': A Concept Wider than Postgraduate Supervision? *Journal for New Generation Sciences,* 12(2): 43-58.

Makoni, P. L. 2022. Novice Doctoral Supervision in South Africa: An Autoethnographic Approach. *International Journal of Higher Education,* 11(2): 135-142.

Manabe, Y. C., Nambooze, H., Okello, E. S., Kamya, M. R., Katabira, E. T., Ssinabulya, I., Kaddumukasa, M., Nabunnya, Y., Bollinger, R. C. and Sewankambo, N. K. 2018. Group Mentorship Model to Enhance the Efficiency and Productivity of PhD Research Training in Sub-Saharan Africa. *Annals of Global Health*, 84(1): 170.

Manathunga, C. 2012. 'Team' Supervision: New Positioning in Doctoral Education Pedagogies. In: Lee, A. and Danby, S. eds. *Reshaping Doctoral Education: International Approaches and Pedagogies*. New York: Routledge, 42-55.

McKenna, S., Clarence-Fincham, J., Boughey, C., Wels, H. and van den Heavel, H. eds. 2017. Strengthening Postgraduate Supervision. Available: https://hdl.handle.net/1871.1/7bf42337-97b3-4212-8d2e-315a1a1f0573 (Accessed 7 October 2023).

Muraraneza, C., Mtshali, N. and Bvimbwe, T. 2020. Challenges in Postgraduate Research Supervision in Nursing Education: Integrative Review. *Nurse Education Today*, 89: 104376.

Mutula, S. M. 2011. Challenges of Postgraduate Research: Case of Developing Countries. *South African Journal of Libraries and Information Science,* 77(1): 184-190.

National Planning Commission (NPC). 2010. National Development Plan 2030: Our Future – Make It Work. Available: https://www.nationalplanningcommission.org.za/assets/Documents/ndp-2030-our-future-make-it-work.pdf (Accessed 15 November 2023).

Ngulube, P. 2021. Postgraduate Supervision Practices in Education Research and the Creation of Opportunities for Knowledge Sharing. *Problems of Education in the 21st Century,* 79(2): 255-272.

Ngulube, P. and Ukwoma, S. C. 2019. Mapping Supervision Trends in Doctoral Research in Library and Information Science in Nigeria and South Africa: Implications for Collective Learning. *African Journal of Library, Archives & Information Science,* 29(1): 1-16.

North-West University (NWU). 2020. Manual for Higher Degrees Studies. Available: https://studies.nwu.ac.za/sites/studies.nwu.ac.za/files/files/postgrad/Higher%20Degrees%20Manual_Senate_1Sept2020.pdf (Accessed 8 September 2023).

North-West University (NWU). 2024. North-West University Strategic Plan: Taking the NWU Forward 2024 and Beyond. Available: https://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/i-governance-management/documents/NWU-Strategy-2024-and-beyond.pdf (Accessed 15 November 2023).

Robertson, M. J. 2017. Team Modes And Power: Supervision of Doctoral Students. *Higher Education Research & Development,* 36(2): 358-371.

Saidi, A. 2024. Promoting Access to, and Success in Postgraduate Education in South Africa: A Synthesis of Emerging Issues. *South African Journal of Higher Education*, 38(1): 1-27.

Skopek, J., Triventi, M. and Blossfeld, H-P. 2022. How do Institutional Factors Shape PhD Completion Rates? An Analysis of Long-Term Changes in a European Doctoral Program. *Studies in Higher Education*, 47(2): 318-337.

Taylor, S., Kiley, M. and Holley, K. A. eds. 2021. The Making of Doctoral Supervisors. Available: https://www.routledge.com/The-Making-of-Doctoral-Supervisors-International-Case-Studies-of-Practice/Taylor-Kiley-Holley/p/book/9780367224332 (Accessed 15 October 2023).

Teng, M. F. 2021. Interactive-Whiteboard-Technology-Supported Collaborative Writing: Writing Achievement, Metacognitive Activities, and Co-Regulation Patterns. *System,* 97: 102426.

Tlali, T., Chere-Masopha, J., Sebatane, E. and Khalanyane, T. 2022. Challenges Confronting Postgraduate Supervision at the National University of Lesotho: Supervisors' Perspectives. *International Journal of African Higher Education,* 9(2): 22-39.

Van Rensburg, G. H., Meyers, P. and Roets, L. 2016. Supervision of Postgraduate Students in Higher Education. *Trends in Nursing*, 3(1): 1-14.

Zeegers, M. and Barron, D. 2012. Pedagogical Concerns in Doctoral Supervision: A Challenge for Pedagogy. *Quality Assurance in Education,* 20(1): 20-30.