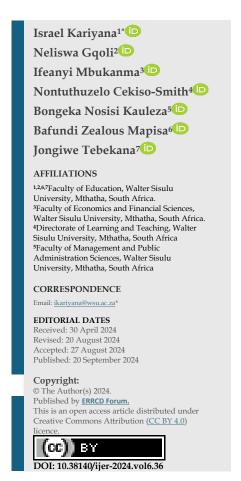


Influence of a Seed-funded Community of Practice on the Development of Academic Staff Research at a Comprehensive University in South Africa



Abstract: This study seeks to explore the influence of a seed-funded project on the research development, professional growth, and collaboration of academic staff. It employed a qualitative reflective inquiry design to elicit the views of participants in the Domain of Emerging Researcher Excellence (DERE). The DERE has a total of 13 members, but for this study, seven participants were selected as a purposive diverse sample representing various disciplines, career stages, and levels of engagement within the Community of Practice (CoP). The findings revealed two main sources of knowledge platforms that helped participants shape their individual research developments. Participants also highlighted the collaborative activities and knowledge-sharing practices prevalent in the DERE. The interdisciplinary project was considered a gateway for professional growth and career trajectories, facilitating mentorship development activities among academics involved in the project. The study concludes that providing seed funding for CoPs can enhance the growth of academic staff research within universities in emerging economies. This initiative has significant implications for fostering a vibrant research culture within institutions, enhancing research capacity among staff, and promoting collaborative engagement across disciplines. Additionally, institutional policies should outline strategies to ensure the long-term sustainability of CoPs beyond seed funding. The study acknowledges the complexity of promoting research capacity for researchers; however, sustainability, seed-funded projects that influence individual professional growth and emerging researcher

career trajectories should be given opportunities to develop their own funding mechanisms so that they do not become extinct once the seed-funding period elapses.

Keywords: Academic staff, community of practice, research development, seed-funded, university.

1. Introduction

The need for academic staff development in South African universities is increasingly critical due to evolving educational demands and institutional accountability. Guàrdia et al. (2021) state that academic development is integral to institutional transformation. It emphasises the importance of continuous professional growth, a concept that should motivate and inspire academic staff to adapt to changing pedagogical landscapes and student needs. O'Connor (2019) argues that the changing academic workforce requires tailored development efforts to recruit and retain young and diverse scholars. Academic staff development not only improves student outcomes but also enhances institutional performance (Maki, 2023).

Programs that emphasise mentorship and support systems for new entrants play a crucial role in making academic staff feel supported and valued. These programs enable a more vibrant and innovative academic community that is prepared for modern educational challenges (Hamilton et al., 2019). Well-supported faculty are more likely to engage in innovative teaching practices and research, ultimately benefiting students (Stone & Springer, 2019). Prioritising staff development enhances educational offerings and strengthens the reputation of institutions. Investing in the professional growth of academic staff is crucial for long-term success and sustainability in higher education (Žalėnienė & Pereira, 2021). This investment fosters a culture of lifelong learning within academic environments, enabling staff to remain relevant and effective in their roles (Guàrdia et al., 2021).

Currently, many university staff members are engaged in research while pursuing their master's and doctoral degrees. Simultaneously, these same faculty members primarily supervise honours students. Among the motivations for staff to supervise post-graduate students are the dual needs for academic promotions and professional growth. However, being a supervisor while also being supervised can be quite daunting for an individual without a proper support base.

In South Africa, there is a national drive to produce 5,000 PhD/doctoral graduates annually by 2030. However, achieving this national target requires a step-by-step approach to change and encourage the mindset of the populace to become scholars. Engaging in doctoral work is challenging (Deshpande, 2016). Doctoral student attrition is a major problem in higher education (Parker et al., 2020). Only half of doctoral students complete their studies within the nominal study period (Jairam & Kahl, 2012). The literature notes that some students struggle to remain motivated (Kimani, 2014; Lategan, 2014). In a qualitative study of 33 doctoral students, Hoskins and Goldberg (2005) found that a lack of connection with doctoral faculty members was a significant challenge. This disconnection was also a major reason for students leaving their doctoral programs.

Undoubtedly, "research and knowledge production continues to be the hallmark of higher education; however, in some contexts, systems are lacking to uphold this hallmark" (Tlali et al., 2022, p. 23). A further challenge highlighted by previous research is that a large percentage of lecturing staff teach and supervise based on their own experiences as students, rather than having a deep understanding of student or adult learning (Wilkinson, 2011; Kimani, 2014). Researchers in this study aimed to provide individual experiences regarding how participants' research development was (re)shaped through participation in a Community of Practice (CoP) called the Domain of Emerging Researcher Excellence (DERE), which was founded and coordinated by the first author. The first three authors held PhD/doctoral degrees, while the remaining participants were all studying toward their PhDs. Therefore, a key focus of this inquiry was to share individual experiences about opportunities and support for academic development through shared conversations.

Doctoral students reported situations where faculty members failed to support or contribute to their welfare, neglecting to respond to students' struggles with research, lack of progress, or insufficient supervision. In these instances, the active engagement of the surrounding academic community was necessary. Some students described feelings of isolation and loneliness during the research process (Roos et al., 2021). All of these issues could lead to unpleasant post-graduate supervision experiences (Muraraneza et al., 2020).

Organisations and institutions thrive on staff who excel in their various pursuits toward realising the entity's vision. However, being a lecturer at a university requires an understanding of and the ability to fulfil responsibilities that include teaching, research, community engagement, and academic citizenship. The University of Cambridge (2010) classifies the main responsibilities of a senior lecturer into teaching, research (publications and active), examinations, administration, post-graduate students, externals, and others. In South Africa, reporting on the formal activities required of academic staff members, Cloete et al. (2022) indicated that when submitting their HEMIS micro-

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staff unit records to the Department of Higher Education and Training (DHET), universities must record, according to a limited set of definitions, the formal (contractual) activities required of each academic staff member during the reported academic year. The reported formal activities must be drawn from the following HEMIS list:

- **Instruction of students:** This includes the preparation of teaching materials, the presentation of these materials (in face-to-face classes or online), organising seminars, tutorials, and practicals, setting and marking assignments and examinations.
- **Research:** This includes work on personal doctorates, involvement in research groups, conducting knowledge-advancing experiments, producing research papers for publication, and attendance and presentations at academic conferences.
- **Public service:** These are activities that are not instruction or research but involve putting the knowledge and skills of the university to public benefit use.
- Academic support: These are department and faculty board-level administrative activities.
- **Institutional support:** These are higher-level administrative activities required by the university.
- Other administrative activities: These are all non-instruction and non-research activities that are not included in public service, academic support, or institutional support.

On the other hand, universities also consist of units that support the faculties, and this complementarity is inevitable. Thus, staff in these units are similarly employed to fulfil their responsibilities in line with their key performance areas (KPAs). However, staff in both the academic and non-academic sectors of the university have the opportunity to pursue further studies while working. Yet, in many instances, staff members find themselves frustrated due to work overload, which conflicts with their desire to reach their full potential, often stemming from inconsistencies or non-adherence to the Workload Policy.

University ranking criteria include a focus on the qualification levels of staff as well as throughput rates at both undergraduate and post-graduate levels. The higher education institution in focus, partly for historical reasons, has a significant number of staff still studying for higher degrees. Conversely, many academic staff members in undergraduate departments are encouraged to assist with the supervision of post-graduate students. As a result, they are not only teaching but also balancing the dual role of being both supervisors and supervisees. Given this reality, there are limited opportunities to support these emerging academics, whether they are studying for higher degrees or supervising post-graduate students, to share lived experiences that could motivate potential productivity. It was for these reasons that the DERE CoP was initiated.

1.1 Literature review

This section reviews the literature related to the study. The synthesis of existing research and scholarly publications aims to elucidate the complex dimensions of Communities of Practice (CoPs) as catalysts for research capacity building and academic advancement within the higher education landscape.

1.1.1 The concept of the seed-funding programme

"University-based seed funds can act as a growth driver for various university programs" (Herber et al., 2017, p. 307). Zuiches (2013) argues that seed grants serve many functions. For instance, they may initiate research and extension educational programs for junior faculty, and they may provide opportunities for senior faculty to redirect research and extension activities into new realms. "The primary goal of any funding mechanism is to provide cash for the company to further develop a product or service" (Herber et al., 2017, p. 306). "Creating incentives to encourage faculty to develop and grow research programs is a strategy often used by administrators in research and knowledge transfer offices" (Zuiches, 2013, p.57). "Unfortunately, the reality is that companies at the seed capital

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stage are typically challenged with executing their business models and delivering on key product development and operational goals" (Gutterman, 2022, p.3). In this instance, seed funding was approved for an interdisciplinary project that aligned with the five strategic goals of the university.

"Communities of practice are an integral part of our daily lives. They are so informal and so pervasive that they rarely come to explicit focus, but for the same reasons, they are also quite familiar. Although the term may be new, the experience is not" (Wenger, 1998, p.7). Harvey et al. (2021, p.1) maintain that "CoPs can serve as vehicles for sustainable professional development in teaching and learning practice." At the university under study, the DERE applied for the seed fund, which was approved by the Directorate of Research and Innovation in 2022. The focus of the CoP was to promote the academic staff development of participating members who were purposively drawn from different departments across various faculties. DERE has the structure of a traditional CoP, as it was founded as a face-to-face CoP; however, it conducts some activities in a blended mode. This study sought to ascertain how recipients were impacted in their personal and professional development through participation in the DERE.

1.1.2 Post-graduate academic staff development

Chireshe (2011) states that effective university academic staff should be intimate, helpful, humane, respectful to students, fair, prepared for lessons, knowledgeable, and able to function well in class. They should also possess a personality that motivates learners. Furthermore, post-graduate research staff development is one of the most important aspects of higher education, focusing on providing comprehensive resources and support to staff and students pursuing advanced degrees. This development usually entails actions aimed at enhancing and advancing staff members' research capacities, output, and influence within an institution. With this training, post-graduate researchers will be better equipped to pursue successful careers in academia or other fields by improving their research, academic, and professional abilities. However, offering ongoing opportunities to mentor new students and emerging supervisors in schools can be challenging without a strong research culture. Thus, post-graduate academic staff development is vital.

According to Erçetin, Açıkalın, and Gün (2018), universities are also scientific institutions that, in addition to conducting research and training human capital, provide services to the community through academic staff nominated for training missions to become scientists capable of working in specific fields and producing quality research. In a productive research environment, post-graduate students can have a greater impact on research output. This implies that developing researchers should be continuously supported and guided through a network of interactions and responsibilities. However, in some universities, post-graduate programmes are inadequately funded, which hinders the full implementation and evaluation of learning plans.

Post-graduate programmes in universities aim to offer more career-specific knowledge to students for professional development. These programmes should be tailored to train individuals and cultivate good research skills for problem-solving (Owan & Offu, 2021). This focus should drive post-graduate programs toward efficiency, increased enrollment, competitiveness, and, ultimately, effectiveness (Eze et al., 2020). Therefore, universities should adopt strategic planning that clearly outlines the vision, mission, core values, and functions of educational programs (Ojha et al., 2020). To ensure the success of post-graduate programs, the university's administrative department needs to work on the strategic plan, provide facilities for instruction, and seek alternative sources of funding.

1.1.3 Balancing workload and post-graduate development

Academic staff members' pursuit of post-graduate growth is a complex undertaking that necessitates a careful balance with the demands of their professional workload (Janib et al., 2021). Furthermore, a vibrant academic environment — where faculty members can meaningfully contribute to both their

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intellectual interests and institutional obligations—requires striking this balance (Chigeda et al., 2022). An overview of the intricate relationship between post-graduate development and workload emphasises the significance of equilibrium for maintaining academic quality. Moreover, finding a balance between workload and post-graduate development becomes even more crucial as academic environments evolve due to technological breakthroughs and new pedagogical techniques (Dai et al., 2023). Academic positions require flexibility and adaptability, encouraging faculty members to seize opportunities for professional growth and lifelong learning amidst dynamic learning environments (Holm-Nielsen, 2018).

Kenny and Fluck (2023) state that for academic professionals to develop holistically, workload and post-graduate development must be balanced. Accordingly, faculty members must engage in professional development, research projects, and ongoing learning. Additionally, they should expand their teaching, administrative, and research responsibilities to stay current with developments in their fields (Zepeda, 2019). Achieving this balance ensures that post-graduate training becomes a vital and enduring component of a career in academia (Li & Horta, 2023).

Smith et al. (2020) identify various challenges in balancing workload and post-graduate development, including time constraints, conflicting obligations, and institutional expectations. According to Kim and Rehg (2018), these challenges may contribute to the difficulties in achieving a balance between workload and post-graduate growth. Consequently, faculty members may feel pressured to prioritise short-term projects over long-term advancement, making it more challenging for them to engage in academic pursuits that foster both personal development and their respective fields. Therefore, a strategy to overcome these challenges is critical.

Whitchurch et al. (2019) note that institutional support, time management abilities, and a deliberate approach to career planning are important tactics for balancing workload and post-graduate development. These strategies can help equate the demands of workload with the needs of post-graduate advancement. Furthermore, creating an environment that prioritises continuous professional growth and provides resources for research endeavours plays a crucial role for institutions (Prastyaningtyas et al., 2023). To maintain a successful equilibrium, faculty members should also embrace collaboration and multidisciplinary engagement opportunities, set realistic goals, and develop efficient time management techniques (Strachan et al., 2023).

O'Regan et al. (2022) reveal that a symbiotic relationship should be developed between workload and post-graduate development rather than viewing them as competing concerns. Participating in post-graduate development can enhance instruction, support innovative research, and rekindle faculty members' passion for their academic work (Yoder et al., 2022). Therefore, meaningful engagement in post-graduate development results in faculty members who are both skilled instructors and active participants in the academic community, benefiting their institutions (Steinert et al., 2019). Thus, fostering a robust and forward-thinking academic community requires finding a balance between workload and post-graduate training. This literature lays the groundwork for a thorough examination of the challenges, solutions, and reciprocal advantages associated with balancing these two crucial aspects of an academic career.

1.2 Rationale of the study

The establishment and sustenance of a vibrant research culture within academic institutions are crucial for advancing knowledge and contributing to academic excellence. Recognising the significance of research development, educational communities have increasingly turned to the concept of Communities of Practice (CoPs) as a catalyst for fostering collaboration, knowledge sharing, and professional growth among academic staff (Bond & Blevins, 2020; Milara et al., 2020). This study specifically explores the impact of participation in a CoP on academic staff research

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development, focusing on the unique context of the Domain of Emerging Researcher Excellence (DERE).

Communities of Practice, as proposed by Fracchiolla et al. (2020) and Milara et al. (2020), are social structures where individuals with shared interests engage in collective learning, knowledge creation, and problem-solving. In the academic realm, the synergy within a CoP has the potential to significantly influence the research trajectory of emerging researchers (Delgado et al., 2021). The Domain of Emerging Researcher Excellence (DERE), as a specific subset within the broader academic community, represents a concentrated effort to nurture and support early-career researchers. Investigating the influence of this specialised CoP on academic staff research development provides a nuanced perspective that can inform institutional strategies and policies aimed at enhancing research outcomes.

Understanding how a CoP, such as the DERE, acts as a catalyst for academic staff research development is essential for institutions committed to fostering a research-oriented environment. Insights gained from this study are expected to guide the optimisation of CoP structures and initiatives, ensuring that they effectively nurture the professional development, growth, and research capacities of emerging researchers within universities.

1.3 Problem statement

The potential benefits of Communities of Practice (CoPs) on academic staff research development have been acknowledged in the literature (Xue et al., 2021; Fracchiolla et al., 2020). However, there is a notable gap in understanding the specific influence of such communities, particularly concerning emerging researchers. The DERE, as a distinct CoP, introduces a unique set of dynamics that warrant exploration. Despite the growing emphasis on supporting early-career researchers by various institutions, there is limited empirical evidence on how participation and engagement in communal settings contribute to the research development of academics with diverse research backgrounds.

Assessing the contribution of such participation to the research development of academic staff will enable this study to fill the existing gap in the literature and provide valuable insights for academic institutions seeking to optimise the impact of CoPs in universities striving for research intensity. Thus, the findings will contribute to evidence-based strategies for enhancing research development initiatives and fostering a supportive environment for academic staff within higher education institutions that share, in some way, operational and geographical landscapes with the one studied.

1.4 Research objective

This study seeks to explore the influence of a seed-funded CoP on the development of academic staff research at a comprehensive university in South Africa.

2 Research Methods

This study employed a qualitative reflective inquiry designed to investigate the influence of a Community of Practice (CoP) on academic staff research development, with a specific focus on the Domain of Emerging Researcher Excellence (DERE). The qualitative reflective inquiry, which was the adopted research design, signifies a methodological approach that prioritises in-depth exploration and reflection on individual experiences (Brown et al., 2021; Hong & Cross Francis, 2020). The DERE had a total of 13 members, but for this study, qualitative data was collected from seven purposively sampled participants. The academic staff who constituted the study sample were actively engaged members of the CoP. The academics were spread across five departments in three faculties and one unit, providing a diverse sample that represented various disciplines, career stages, and levels of engagement within the CoP.

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Three-stage procedures were followed in data collection, where reflective interviews and semistructured interviews were conducted to encourage participants to reflect on their experiences, challenges, and growth within the CoP. Secondly, the participants' reflections were documented in a response journal containing their thoughts, perceptions, and insights related to their involvement in the CoP, with a major focus on research development experiences. Lastly, data transcription involves assigning meaning to the data using key themes and categories.

A constant comparative data analysis method was employed to compare reflections across participants. This method assists in identifying similarities and differences in the reflective experiences of participants (Ding & Liu, 2020; Liu et al., 2020). Rigour and trustworthiness were enhanced through member checking, allowing participants to review and verify the researchers' interpretations of their reflections. Triangulation was employed to compare findings across different reflective methods for validation. Furthermore, the research design of this study placed a strong emphasis on ethical considerations, including ensuring informed consent and confidentiality for participants. Ethical approval was obtained from WSU following the approval of the Research Seed Grant Award 2022/2023. Additionally, participants agreed to be pseudonymised using their departmental or unit abbreviations to reflect the diversity of the group, and consent was given to arrange the authors in alphabetical order, except for the lead authors.

3. Presentation of Results and Discussion

DERE participants come from a wide range of departments and units in the university. Being an interdisciplinary professional development project, participants' abbreviations of the department or unit prefixed pseudonyms. Furthermore, the 'M' or 'F' in MP or FP denotes gender as male or female participants, respectively. Thus, BME-MP refers to a male participant in Business Management & Economics, while AEF-FP refers to an Adult Education Foundations female participant. CPTD-MP1 was the first male participant in Continuing Professional Teacher Development. The major subthemes that emerged are presented.

3.1 Knowledge redistribution among members

It emerged that academic staff members within the interdisciplinary project expressed that there were two main sources of knowledge platforms that helped to shape their individual research developments. Furthermore, they provided specific collaborative activities and knowledge-sharing practices prevalent among them in the Domain of Emerging Researcher Excellence.

3.1.1 Learning through shared experiences

Participants felt that the Community of Practice (CoP) provided learning opportunities when members interacted with each other. This was supported by responses such as, "A platform that provides opportunity to learn and share ideas that enhances research development and growth among academics" (BME-MP). BME-MP's acknowledgement of the activities was, "Research advises and logical contributions towards academic growth of members, post-graduate throughput and research output." In essence, CoPs facilitate the sharing of knowledge, best practices, and experiences among members, leading to a more robust and comprehensive understanding of various academic subjects (Nkambule & Tang, 2024; Salehi et al., 2022). "The project developed me, especially in writing papers for publication. Working with the team members made research easy as we were sharing ideas and deliberations on different ways of paper writing (CPTD-MP1). CPTD-MP1 further elaborated, "In the group we are different categories, some are doing their master's and PhD thesis and others are Doctors and Professors who are developing their research. The students are supervised by their colleagues, suggesting ways of writing their theses. The researchers were advised on how to develop different types of papers i.e. empirical, conceptual and systematic review papers." CPTD-MP2 supported saying the project afforded "Individual research growth [and] confidence emanating from shared experiences of emerging and established colleagues." This quotation from the participant is corroborated by the findings of Alzoubi et al. (2022), which emphasise that

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communities of practice (CoPs) facilitate the dissemination of tacit knowledge that may not be captured in formal publications, yet is essential for both academic and professional development. In terms of activities, "Emerging researchers benefit from individualised attention from established researchers during and after specific group meetings. Knowledge also flows from senior researchers during group meetings or writing retreats" (CPTD-MP2). In line with this, O'Connor (2019) argues that the changing academic workforce necessitates tailored development efforts to recruit and retain young, diverse scholars.

3.1.2 Growth through collaborations

The interdisciplinary project was also considered a gateway for academic growth through collaborative activities. As raised by AEF-FP, [DERE is] "A project that will develop novice researchers in research skills. It will also increase collaboration." AEF-MP added, "The group conducts tailored writing retreats that focus specifically on research methodologies and provide opportunities for interdisciplinary collaboration" "Academic staff members perceive the Community of Practice as beneficial for their individual research development, providing a collaborative environment and mentorship" (IPTE-FP). IPTE-FP also confirmed, "They engage in regular meetings, seminars, peer mentoring, and collaborative research projects to share expertise and improve research skills." Similarly, Hoffmann et al. (2022) and Hedges et al. (2021) underscore that Communities of Practice (CoPs) facilitate collaboration among academics on publications, grant submissions, and research initiatives, thereby fostering multidisciplinary and interinstitutional partnerships. Programs that focus on mentorship and support systems for new entrants are instrumental in ensuring that academic staff feel supported and valued. Such initiatives contribute to the cultivation of a more vibrant and innovative academic community, well-equipped to address contemporary educational challenges (Hamilton et al., 2019).

Accordingly, "The collaborative nature of the community fosters an environment where emerging researchers can exchange ideas, receive constructive feedback, and stay abreast of the latest developments in their respective fields" (DLT-FP). DLT-FP continued, "Common collaborative activities among academic staff members participating in the Domain of Emerging Researcher Excellence include interdisciplinary workshops, joint research projects, and regular knowledge-sharing sessions. These practices contribute to a vibrant academic community where diverse perspectives and expertise are leveraged for collective growth." "Group work collaboration with writing skills, helping each other, and teamwork are prevalent" (PM-FP). Indeed, CoPs collaborate on multidisciplinary workshops, cooperative research initiatives, and knowledge-sharing sessions. These methods foster a thriving academic community that leverages diverse viewpoints and skills (Hoffmann et al., 2022; Hedges et al., 2021). Well-supported faculty are more likely to engage in innovative teaching practices and research, which ultimately benefits students (Stone & Springer, 2019).

3.2 Professional growth and career trajectories

Participants echoed that the CoP was a source of inspiration for their professional growth as well as individual career trajectories. In that respect, DERE was seen as a platform for "Academic contributions and knowledge sharing that result to post-graduate throughput and research output" (BME-MP). "Also, ensuring clear communication about career advancement criteria and promoting a culture of recognition for achievements contributes to a positive DERE environment. No doubt, CoPs assist, mentor, and create professional networks that may result in chances for professional growth (Elkomy & Elkhaial, 2022; Bottoms et al., 2020). The members of DERE are progressing well and their outputs contribute to the institution" (CPTD-MP1). AEF-FP further maintained, "It includes interdisciplinary collaborations [and], mentorship programs" whereas "providing access to mentors, networking, and research resources" (IPTE-FP) was also acknowledged. Prioritising staff development enhances educational offerings and strengthens the reputation of institutions. Investing in the professional growth of academic staff is crucial for long-term success and sustainability in higher education (Žalėnienė & Pereira, 2021).

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Nevertheless, "Through mentorship, networking opportunities, and collaborative projects, members gain organised networking events, or even develop online platforms to foster connections [and] valuable experiences that enhance their research skills, increase visibility within the institution, and open avenues for career advancement" (DLT-FP). Members can participate in planned networking events or develop online platforms by engaging in mentoring, networking, and joint projects. These activities allow them to establish relationships and gain valuable experiences, thereby enhancing their research skills, increasing their institutional exposure, and promoting their career advancement (Elkomy & Elkhaial, 2022; Carroll & Mallon, 2021). "DERE plays a prominent role in assisting us; I can safely say I have managed to submit my first drafts [article and thesis]" (PM-FP). It was maintained that "DERE offers unlimited support to participants as they can determine their potential from within. Many participants have demonstrated confidence as first and sole authors, among some co-publications" (CPTD-MP2). Communities of practice are an integral component of our daily lives. Their informal and pervasive nature often prevents them from receiving explicit attention; however, it is precisely this familiarity that underscores their significance. While the term itself may be relatively recent, the underlying experience is not" (Wenger, 1998).

3.3 Mentorship and community building

The CoP enabled mentorship development activities among academics in the project. This was confirmed by sentiments characterising it as affording "Logical academic advisory services and academic members inclusivity" (BME-MP). "The Community of Practice creates structured mentorship programs, organises networking events, or even develops online platforms to foster connections. The goal of DERE is to build a supportive community where knowledge and experience can be shared" (CPTD-MP1). "The DERE is creating a supportive environment for skills development" (IPTE-FP). In addition to that, "Established researchers within the community often take on mentorship roles, guiding emerging researchers and fostering a culture of collaboration that extends beyond the CoP" (DLT-FP). Supporting DLT-FP, "Established researchers are readily available for all participants at any time. There has been independence to get unconditional support without submission to coerced co-authorship, among other opportunities to which participants have been exposed to" (CPTD-MP2). Similarly, established researchers in the field often volunteer to mentor younger researchers. These mentorship positions not only guide aspiring scholars but also promote collaboration beyond the Community of Practice (Muhayimana et al., 2023; Harty et al., 2020). Additionally, this fosters a culture of lifelong learning within academic environments, allowing staff to remain relevant and effective in their roles (Guàrdia et al., 2021).

3.4 Managing challenges and opening possibilities

Participants also indicated that the CoP was a platform to navigate through challenges that were negative to researcher development. Through DERE, several strategies were employed to overcome these challenges. "Researchers often have demanding schedules. Finding time to actively engage in a CoP, attend meetings, and contribute to discussions can be challenging. Allocating time to actively participate in a Community of Practice (CoP), attend meetings, and contribute to conversations might be a challenge (Elkomy & Elkhaial, 2022; Carroll & Mallon, 2021). "In DERE we use a blend of creativity, resilience, collaboration, and communication skills as strategies to overcome any challenges that might appear" (CPTD-MP2). In agreement, there is "[lack of] time due to the [overwhelming] responsibilities of university" (PM-FP), which demands participants' "Sharing of research experiences and challenges and willingness to welcome logical criticism" (BME-MP). Such experiences have a positive effect, according to Guàrdia et al. (2021), who argue that academic development is integral to institutional transformation. This perspective emphasises the importance of continuous professional growth, a concept that should motivate and inspire academic staff to adapt to changing pedagogical landscapes and student needs.

Furthermore, strategies employed include "peer and mentor support, collaborative problem-solving, and shared experiences" (IPTE-FP; DLT-FP), as well as "seeking advice from experienced colleagues, participating in skill-building workshops, and leveraging the diverse expertise present in the community" (DLT-FP). The

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presence of a crowded workstation impeded the confidence and ability of a first-time author to publish their work. Nevertheless, stories of conquering challenges and the desire to stand out may have motivated novice researchers (Elkomy & Elkhaial, 2022; Bottoms et al., 2020). In sync, CPTD-MP2 also echoed, "Building confidence as a first-time author or publish within an overloaded workspace threatened progress. However, shared stories of thriving against all odds, and the quest to stand out despite circumstances could have motivated participating early-career researchers." "University-based seed funds can act as a growth driver for a variety of university programs" (Herber et al., 2017, p.307).

4. Conclusion and Policy Implications

The study concludes that the provision of seed funding for Communities of Practice (CoPs) can significantly enhance the research capabilities of academic staff within South African universities. By fostering a vibrant research culture, strengthening research capacity, and promoting interdisciplinary collaboration, CoPs can play a crucial role in institutional development. Universities should prioritise the allocation of funds for these CoPs and ensure their sustainability by integrating CoP activities into the institutional framework. This strategic approach would support the long-term advancement of academic staff research and promote a culture of collaborative engagement across disciplines. The findings underscore the importance of CoPs in facilitating collaboration, increasing research output, and enhancing research skills, particularly in areas such as research methodology, grant writing, and publication strategies. Universities are encouraged to allocate resources for the establishment of CoPs and other collaborative platforms while also prioritising capacity-building initiatives, including workshops, seminars, and mentorship programs. Participation in CoPs not only provides academic staff with opportunities for professional development but also positively influences their research productivity, thereby advancing the university's research agenda and reinforcing its reputation as a centre for interdisciplinary innovation.

4.1 Recommendations

The study acknowledges the complexity of promoting research capacity for early career researchers who are at various stages of their academic careers but all belong to the same CoP. The challenges that emanate from difficulties in providing tailor-made solutions to each participant's unique experiences pave the way for further studies about seed-funded CoPs in comprehensive universities in South Africa. However, some of the recommendations from the current study include:

- The need for integrating seed-funded CoPs into institutional structures when they have proven beyond doubt that they positively contribute as reservoirs for participants' individual academic research development.
- It is critical that, in terms of their sustenance, seed-funded projects which influence individual professional growth and emerging researcher career trajectories should be given the opportunity to develop their own funding mechanisms to ensure that they do not become extinct once the seed-funding period elapses. Financial crunch is the greatest threat to the survival of seed-funded projects.
- Time has remained the greatest challenge for DERE participants. With their heavy workloads and calls for duty that require their attention and availability 24/7, it has remained impossible to allocate adequate time for the project. All that may change if the Workload Policy is implemented holistically and measures are taken to relieve academics of incessant overloads to enable them to focus on other aspects of academic life beyond merely learning and teaching.
- Enhancing research capacity development, especially of novice researchers, requires commitment of time outside the normal call for duty. As such, participants are urged to continue to sacrifice their time, as in most cases, prospects for academic growth abound for academics who stretch themselves beyond the ordinary 40-hour working week.

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5. Declarations

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References

- Alzoubi, M. O., Alrowwad, A. A., & Masa'deh, R. E. (2022). Exploring the relationships among tacit knowledge sharing, communities of practice and employees' abilities: The case of KADDB in Jordan. *International Journal of Organizational Analysis*, 30(5), 1132-1155. https://doi.org/10.1108/IJOA-11-2020-2480
- Bond, M. A., & Blevins, S. J. (2020). Using faculty professional development to foster organisational change: A social learning framework. *TechTrends*, 64(2), 229-237. https://doi.org/10.1007/s11528-019-00459-2
- Bottoms, S. I., Pegg, J., Adams, A., Risser, H. S., & Wu, K. (2020). Mentoring within communities of practice. *The Wiley international handbook of mentoring: Paradigms, practices, programs, and possibilities*, 141–166. https://doi.org/10.1002/9781119142973.ch10
- Brown, C., Poortman, C., Gray, H., Ophoff, J. G., & Wharf, M. M. (2021). Facilitating collaborative, reflective inquiry amongst teachers: What do we currently know? *International Journal of Educational Research*, 105, 101695. https://doi.org/10.1016/j.ijer.2020.101695
- Carroll, A.J., & Mallon, M.N. (2021). Using digital environments to design inclusive and sustainable communities of practice in academic libraries. *The Journal of Academic Librarianship*, 47(5), p.102380. https://doi.org/10.1016/j.acalib.2021.102380
- Chigeda, F., Ndofirepi, T. M., & Steyn, R. (2022). Continuance in organisational commitment: The role of emotional intelligence, work-life balance support, and work-related stress. *Global Business and Organizational Excellence*, 42(1), 22-38. https://doi.org/10.1002/joe.22172
- Chireshe, R. (2011). Effective and ineffective lecturers: University students' perspective in Zimbabwe. *Anthropologist*, 13(4), 265–269. https://doi.org/10.1080/09720073.2011.11891207
- Cloete, N., Bunting, I., & van Schalkwyk, F. (2022). *Analyses of the Academic Staffing of SA Public Universities: HE & STI Policy Dialogues Series*. Stellenbosch: DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP).
- Dai, Y., Lai, S., Lim, C.P., & Liu, A. (2023). ChatGPT and its impact on research supervision: Insights from Australian post-graduate research students. *Australasian Journal of Educational Technology*, 39(4), 74-88. https://doi.org/10.14742/ajet.8843
- Delgado, J., Siow, S., de Groot, J., McLane, B., & Hedlin, M. (2021). Towards collective moral resilience: the potential of communities of practice during the COVID-19 pandemic and beyond. *Journal of Medical Ethics*, 1-14. https://doi.org/10.1136/medethics-2020-106764

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- Deshpande, A. (2016). A Qualitative Examination of Challenges Influencing Doctoral Students in an Online Doctoral Program. *International Education Studies*, 9(6), 139-149. http://dx.doi.org/10.5539/ies.v9n6p139
- Ding, Y., & Liu, X. (2020). A comparative analysis of data-driven methods in building energy benchmarking. *Energy and Buildings*, 209, 109711. https://doi.org/10.1016/j.enbuild.2019.109711
- Elkomy, M. M., & Elkhaial, N. H. (2022). The lesson study approach to professional development: Promoting teachers' peer mentoring and communities of practice and students' learning in Egypt. *Teaching and Teacher Education*, 109, 103538. https://doi.org/10.1016/j.tate.2021.103538
- Erçetin, Ş. Ş., Açıkalın, Ş. N., & Gün, F. (2018). Profiles of new university academic staff: Changing views of Turkish post-graduate students between 2002 and 2016. In Ş. Erçetin(Ed.), *Chaos, complexity and leadership* 2016 (pp. 231–242). ICCLS 2016. Springer Proceedings in Complexity. Springer. https://doi.org/10.1007/978-3-319-64554-4_21
- Eze, T. I., Nwakanma, S., & Obidile, J. I. (2020). Post-graduate studies completion time in vocational and technical education programmes in South-South Nigerian Universities: Students' related determinants. *International Journal of Vocational Education and Training Research*, 6(2), 34-40. http://dx.doi.org/10.11648/j.ijvetr.20200602.13
- Fracchiolla, C., Prefontaine, B., & Hinko, K. (2020). Community of practice approach for understanding identity development within informal physics programs. *Physical Review Physics Education Research*, 16(2), 1-29. https://doi.org/10.1103/PhysRevPhysEducRes.16.020115
- Guàrdia, L., Clougher, D., Anderson, T., & Maina, M. (2021). IDEAS for transforming higher education: an overview of ongoing trends and challenges. *International Review of Research in Open and Distributed Learning*, 22(2), 166–184. https://doi.org/10.19173/irrodl.v22i2.5206
- Gutterman, A. S. (2022). *Seed Capital: A Guide to Sustainable Entreneurship*. Sustainable Entrepreneurship Project. file:///C:/Users/Staff/Downloads/FI_B5SeedCapital.pdf
- Hamilton, L. K., Boman, J., Rubin, H., & Sahota, B. K. (2019). Examining the impact of a university mentorship program on student outcomes. *International Journal of Mentoring and Coaching in Education*, 8(1), 19–36. https://doi.org/10.1108/IJMCE-02-2018-0013
- Harvey, J., Dodd, D., Deegan, C., Freeman, O., MacMahon, C., & Williams, H. (2021). Cultivating a Community of Practice model to support and encourage innovative T&L practices to engage practitioners and enhance student success. *Irish Journal of Academic Practice*, 9(2), 3. https://doi.org/10.21427/8TG2-QF02
- Hedges, J. R., Soliman, K. F., Southerland, W. M., D'amour, G., Fernández-Repollet, E., Khan, S. A., Kumar, D., Shikuma, C. M., Rivers, B. M., Yates, C. C., & Yanagihara, R. (2021). Strengthening and sustaining inter-institutional research collaborations and partnerships. *International Journal of Environmental Research and Public Health*, 18(5), 2727. https://doi.org/10.3390/ijerph18052727
- Herber, D. L., Mendez-Hinds, J., Miner, J., Sedam, MC., Wozniak, K., McDevitt, V. L, & Sanberg, P. R. (2017). University seed capital programs: Benefits beyond the loan. *Technology and Innovation*, *18*, 305-314. https://doi.org/10.21300/18.4.2017.305
- Hoffmann, S., Deutsch, L., Klein, J.T., & O'Rourke, M. (2022). Integrate the integrators! A call for establishing academic careers for integration experts. *Humanities and Social Sciences Communications*, 9(1), 1–10. https://doi.org/10.1057/s41599-022-01138-z
- Holm-Nielsen, L.B. (2018). Universities: From local institutions to global systems? Implications for students, staff and institutions. *European Review*, 26(S1), S124-S148. https://doi.org/10.1017/S1062798717000606

- 12 - Kariyana et al., 2024

- Hong, J., & Cross Francis, D. (2020). Unpacking complex phenomena through qualitative inquiry: The case of teacher identity research. *Educational psychologist*, 55(4), 208-219. https://doi.org/10.1080/00461520.2020.1783265
- Hoskins, C. M., & Goldberg, A. D. (2005). Doctoral student persistence in counsellor education programs: Student-program match. *Counsellor Education and Supervision*, 44, 175-187. http://dx.doi.org/10.1002/j.1556-6978.2005.tb01745.x
- Jairam, D., & Kahl, D. H., Jr. (2012). Navigating the doctoral experience: The role of social support in successful degree completion. *International Journal of Doctoral Studies*, 7, 311-329. https://doi.org/10.28945/1700
- Janib, J., Rasdi, R. M., Omar, Z., Alias, S. N., Zaremohzzabieh, Z., & Ahrari, S. (2021). The relationship between workload and performance of research university academics in Malaysia: The mediating effects of career commitment and job satisfaction. *Asian Journal of University Education*, 17(2), 85-99. https://doi.org/10.24191/ajue.v17i2.13394
- Kenny, J., & Fluck, A.E. (2023). Life at the academic coalface: validation of a holistic academic workload estimation tool. *Higher Education*, 86(3), 507–526. https://doi.org/10.1007/s10734-022-00912-x
- Kim, H., & Rehg, M. (2018). Faculty performance and morale in higher education: A systems approach. *Systems Research and Behavioral Science*, 35(3), 308-323. https://doi.org/10.1002/sres.2495
- Kimani, E.N. (2014). Challenges in Quality Control for Post-graduate Supervision. *International Journal of Humanities Social Sciences and Education*, 1(9), 63–70.
- Lategan, L. O. K. (2014). "Research education": A concept wider than post-graduate supervision? *Journal for New Generation Sciences*, 12(2), 43-58.
- Li, H., & Horta, H. (2023). Exploring the identity development of PhD graduates transitioning to non-researcher roles. *Higher Education Quarterly*, 78, 421–435. https://doi.org/10.1111/hequ.12452
- Liu, X., Zhang, Z., & Song, Z. (2020). A comparative study of the data-driven day-ahead hourly provincial load forecasting methods: From classical data mining to deep learning. *Renewable and Sustainable Energy Reviews*, 119, 109632. https://doi.org/10.1016/j.rser.2019.109632
- Maki, P.L. (2023). Assessing for learning: Building a sustainable commitment across the institution. London: Routledge.
- Milara, I.S., Pitkänen, K., Laru, J., Iwata, M., Orduña, M.C., & Riekki, J. (2020). STEAM in Oulu: Scaffolding the development of a Community of Practice for local educators around STEAM and digital fabrication. *International Journal of Child-Computer Interaction*, 26(2020), 100197.
- Muhayimana, T., & Hill, S.E. (2023). Learning the Ropes Together: New Faculty Co-Mentoring in a" Mandatory" Community of Practice. *Journal of Higher Education Theory & Practice*, 23(7), 154-167.
- Muraraneza, C., Mtshali, N., & Bvimbwe, T. (2020). Challenges in post-graduate research supervision in nursing education: Integrative review. *Nurse Education Today*, 89, 1-8. https://doi.org/10.1016/j.nedt.2020.104376
- Nkambule, N.S., & Tang, C.W. (2024). Building a case for communities of practice as drivers of innovative teaching in English medium instruction context. *Higher Education*, 87(3), 721-740. https://doi.org/10.1007/s10734-023-01032-w
- O'Connor, P. (2019). Gender imbalance in senior positions in higher education: What is the problem? What can be done? *Policy Reviews in Higher Education*, 3(1), 28–50. https://doi.org/10.1080/23322969.2018.1552084
- Ojha, D., Patel, P. C., & Sridharan, S.V. (2020). Dynamic strategic planning and firm competitive performance: A conceptualisation and an empirical test. *International Journal of Production Economics*, 222, 107509.

- 13 - Kariyana et al., 2024

- O'Regan, A., O'Doherty, J., Green, J., & Hyde, S. (2022). Symbiotic relationships through longitudinal integrated clerkships in general practice. *BMC Medical Education*, 22, 64. https://doi.org/10.1186/s12909-022-03119-x
- Owan, V.J., & Offu, O.E. (2021). Standardised predictive linear models of managerial processes and the sustainability of graduate programmes (SGPs) in universities: A case study. *Contemporary Mathematics and Science Education*, 2(1),ep21006. https://doi.org/10.30935/conmaths/9681
- Parker, D.M., Willis, K., & Holmes, B.D. (2020). Doctoral Student Online Learning: Addressing Challenges of the Virtual Experience. *Journal of Research Initiatives*, 5(2), 1–10.
- Prastyaningtyas, E.W., Ausat, A.A., Muhamad, L.F., Wanof, M.I., & Suherlan, S. (2023). The Role of Information Technology in Improving Human Resources Career Development. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(3), 266-275.
- Roos, L., Löfström, E., & Remmik, M. (2021). Individual and structural challenges in doctoral education: An ethical perspective. *International Journal of Doctoral Studies*, 16, 211-236. https://doi.org/10.28945/4738
- Salehi, M., Fahimi, M. A., Zimon, G., & Homayoun, S. (2022). The effect of knowledge management on intellectual capital, social capital, and firm innovation. *Journal of Facilities Management*, 20(5), 732-748. https://doi.org/10.1108/JFM-06-2021-0064
- Smith, J., Billot, J., Clouder, L., & King, V. (2020). Juggling competing activities: academic staff as doctoral candidates. *Higher Education Research & Development*, 39(3), 591–605. https://doi.org/10.1080/07294360.2019.1685945
- Steinert, Y., O'Sullivan, P.S., & Irby, D. M. (2019). Strengthening teachers' professional identities through faculty development. *Academic Medicine*, 94(7), 963–968. https://doi.org/10.1097/ACM.00000000000002695
- Stone, C. & Springer, M. (2019). Interactivity, connectedness and teacher-presence': Engaging and retaining students online. *Australian Journal of Adult Learning*, 59(2), 146-169.
- Strachan, S., Logan, L., Willison, D., Bain, R., Roberts, J., Mitchell, I., & Yarr, R. (2023). Reflections on developing a collaborative multi-disciplinary approach to embedding education for sustainable development into higher education curricula. *Emerald Open Research*, 1(9), 1–20. https://doi.org/10.1108/EOR-09-2023-0007
- Tlali, T., Chere-Masopha, J., Sebatane, E., & Khalanyane, T. (2022). Challenges Confronting Post-graduate Supervision at the National University of Lesotho: Supervisors' Perspectives. *International Journal of African Higher Education*, 9(2), 22–39. https://doi.org/10.6017/ijahe.v9i2.15367
- University of Cambridge (2010). Senior Lecturer: March 2010. https://www.hr.admin.cam.ac.uk/files/usl.pdf
- Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge University Press.
- Whitchurch, C., Locke, W., & Marini, G. (2019). A delicate balance: optimising individual aspirations and institutional missions in higher education. (CGHE Working Paper 45). Centre for Global Higher Education: London, UK.
- Wilkinson, A.C. (2011). Post-graduate supervision as an advanced teaching and learning practice: Exploring the scholarship link. *South African Journal of Higher Education*, 25(5), 902–920. https://hdl.handle.net/10520/EJC37723
- Xue, S., Hu, X., Chi, X., & Zhang, J. (2021). Building an online community of practice through WeChat for teacher professional learning. *Professional Development in Education*, 47(4), 613-637. https://doi.org/10.1080/19415257.2019.1647273
- Yoder, S. R., Lonstein, A. B., Sharma, A., Garcia-Munoz, J., Moreno, R., Chen, A. Y., Orben, G., Clemons, T., Masters, M., Forrest, L. L., & Ukhuedoba, I. (2022). PEARLS (Perspectives on Equity

- 14 - Kariyana et al., 2024

Advancement: Research and Learning Symposium), a Case Report in Promoting DEI in a Medical School Setting. *Education Sciences*, 12(9), 586. https://doi.org/10.3390/educsci12090586

Žalėnienė, I., & Pereira, P. (2021). Higher education for sustainability: A global perspective. *Geography and Sustainability*, 2(2), 99-106.

Zepeda, S.J. (2019). Professional development: What works. Eye on Education: Routledge.

Zuiches, J. J. (2013). The Impacts of Seed Grants as Incentives for Engagement. *Journal of Higher Education Outreach and Engagement*, 17(4), 57-73.

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