



A Reflection on Post-Graduate Supervision Practice: Towards a Deeper Understanding of Effective Student Engagement

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Abstract

There can be no debate about the central role of postgraduate studies in the enterprise of the research university. Reflecting on the past and the future of higher education, it is clear that the economic foundations of nations are built on their ability to create new knowledge through research and, in turn, transform the same into innovations and resultant societal impact. In this regard, postgraduate supervision is integral to the foundation of national knowledge creation. The PhD degree is regarded as the capstone entry point for researchers to formally enter the scientific enterprise and the world of academia. However, research shows that many academics undertake the role of postgraduate supervision without any formal training or orientation to the task at hand. This paper reviews the literature in relation to the challenges in higher education with respect to postgraduate supervision. Using a personal reflective lens, the paper highlights the relevance of understanding the locus of disciplinary identity during supervision; the need to embrace plurality in terms of modes of supervision; the importance of knowing the boundaries of power, and how to evade the creation of supervisor dominant relationships; and lastly, that simple pragmatic tools can aid and address what is often perceived by the student to be a terrain of extreme complexity.

Keywords: post-graduate supervision, power relations, pragmatism, quality, self-reflection, supervision styles.

1. Introduction

World-wide quality higher education is an important consideration as it provides the necessary foundation for the knowledge economy in all countries. Research universities have emerged as a basic asset that contributes to the knowledge and socio-economic development of countries (Mammadov & Aypay, 2020). Within higher education, postgraduate studies are an essential and critical part of all research universities. However, even though postgraduate studies serve as an act of academic work and are the foundation of a country's knowledge enterprise effort, there are a number of inherent challenges in the process. An often overlooked issue, and one that is usually taken for granted, is that of the quality of postgraduate research supervision.

The supervisor role is complex (Gohar & Qouta, 2021), and it is the cornerstone of academic life. Research shows that many academics undertake the role of postgraduate supervision without any formal training or orientation to the task at hand. This may have a negative impact on the overall research process as it may prolong the completion of the study. There is evidence that a key success factor of a research project is the relationship between the supervisor and scholar in the course of the coaching stage (Orellana et al., 2016). However, academic supervision of postgraduate studies suffers several problems.

The challenges affecting the quality of supervision may be divided into both supervisory and student-related factors (Holtman & Mukwada, 2014). Apart from the lack of experience in how to supervise students (Assakran, 2016; Holtman & Mukwada, 2014), research shows that heavy academic and teaching duties are one of the many obstacles that impede academic supervision (Assakran, 2016; El-Deeb, 2016). It then calls for more to be done to understand the nuances and intricacies of postgraduate supervision, with a view towards improving practice.

This paper reviews the literature in relation to the challenges in higher education with respect to post-graduate supervision (hereinafter *supervision*). The paper provides a self-reflective account of practice on how the author's persona as a supervisor has been impacted as a result of both experience and supervision practice programmes in the latter part of his academic career. It focuses on the role of the discipline, on modes of supervision approaches, on power relationships, and then on pragmatism as one of the tools of supervision.

The remainder of the paper is organised as follows: Section 2 reviews the literature to highlight key challenges in higher education postgraduate supervision; Section 3 discusses the methodology, viz., self-reflective research; Section 4 provides an overview of the context in which supervision occurs; Section 5 then presents a series of reflections on supervision practice with a view to offering some answers to identified challenges; and lastly, Section 6 provides recommendations in respect of practice.

2. Key challenges in undertaking postgraduate supervision

The literature on postgraduate supervision indicates that postgraduate research students experience challenges that impede them from completing their research on time (Cekiso et al., 2019). Nasiri and Mafakheri (2015) evaluated the challenges faced by supervisors and supervisees in distance postgraduate research programmes at various universities. These researchers found that timing and distance between the supervisor and supervisee were issues

as both parties could not find convenient times to connect. These authors further elaborated that the relationship between the supervisor and supervisee will thus result in a lack of understanding and poor communication. The language barrier between the supervisor and supervisee has also been identified as an additional challenge (Holtman & Mukwada, 2014).

Post-graduate supervision involves a great deal of responsibility for both the researcher and the supervisor. Gohar and Qouta (2021) argue that the role and responsibilities of supervisors are widespread, ranging from basic introductions to research, providing researchers with proper guidance, providing constructive feedback, giving encouragement, maintaining their own personal skills and standards of their work, and many more. This broad set of responsibilities for a single post-graduate supervisor can be difficult to manage and carry out. Many researchers (e.g., Abulsaoud, 2020; Fourie-Malherbe & Albertyn, 2016; Gohar & Qouta, 2021; Holtman & Mukwada, 2014; Muraraneza et al., 2020) found that the intense workload and pressure that supervisors are often faced with is a key challenge that hinders the successful uptake of postgraduate supervision. Similarly, low levels of post-graduate success rates are also attributed to supervisors inexperience (Bitzer, 2011). Gohar and Qouta (2021) further add that supervisors are required to possess scientific competence in planning, moral distinction in their relationship with the researcher, sincerity in their work produced, mastery in communication skills with their colleagues and their students, be excellent role models to the researchers and students, as well as have a devotion to academic supervision that does not waver. All of these qualities are considered key in defining a good supervisor to undertake the demanding task of post-graduate supervision.

Bitzer (2011) noted that inadequate preparation of postgraduate candidates, ineffective infrastructural support for postgraduate studies, insufficient support for students, and inadequate academic procedures and admission requirements are factors influencing postgraduate completion.

A more recent study by Martin and Price (2021) found that with the shift to a more digital platform during the Corona Virus (COVID-19) pandemic, the challenge of conducting remote-learning impacted the relationship between supervisor and supervisee. These authors assert that the cultural contrast between student and supervisor remained a challenge for students. It is contended that cultural differences as well as a power imbalance results in a superiority complex in some supervisors (Martin & Price, 2021).

3. Methodology

This paper employed a self-reflective research methodology. Self-reflection, which may also be referred to as introspection, describes a conscious mental process relying on one's own thoughts, interpretations, and beliefs (Gläser-Zikuda, 2012). Similarly, Franks (2016) indicated that self-reflection is a method that requires researchers to observe how they behave and what they say and write and reflect on these observations as potential interests in innovation and learning.

Self-reflection was conducted on the basis of the researcher's personal experience as a post-graduate supervisor. It provides a reflection on the modes of supervision, power relations, and

supervisory practices. Pool (2018) asserts that self-reflection encourages researchers to defy their own prejudice and acknowledge the extent to which their past experiences impact their interpretation of present events. In order to be reflective, researchers have to become conscious of the existing structures of the mental and must be able to analyse how these underlying cognitive artefacts mould the process of inquiry (Mortari, 2015). The researcher applied this methodology to examine his practice, within the South African context. The underlying objective of this reflective account is to synthesise the learnings into lessons that provide some direction to others in academe towards improved postgraduate supervision practice.

4. National context of research supervision

Research supervision has changed significantly in recent years, and as such, widespread changes have caused governments to scrutinise the purpose of higher education and the attributes and capabilities research graduates have for the workplace (McCallin & Nayar, 2012). As a result, supervision is no longer a function of individual academics and the departments in which they reside. Rather, it has become a matter of national importance. In light of this, this section considers the context of supervision from international and national perspectives.

Throughout his life, the researcher has always maintained an interest in national issues, especially from a developmental perspective. As such, the researcher for some time has been acutely aware of the national context for supervision. In the researcher's previous job as Director of Research Strategic Initiatives, he was often called upon to address and welcome newly registered cohorts of post-graduates students. One of the key messages that was always delivered to the new students was that of the importance of them attaining their degree within the broader national context. In doing so, the researcher has consistently urged students to appreciate the importance of their successfully concluding their studies as a contribution to national development. For example, the National Development Plan of South Africa (National Planning Commission, 2011) laments the 28 PhD graduates per million (as of 2010) per annum. The National Development Plan (NDP) suggests that a more lofty target (see Table 1) is needed since this is critical to achieving an improved net research output, thereby stimulating the national system of innovation and, consequently, economic growth.

Table 1: PhD output amongst selected countries

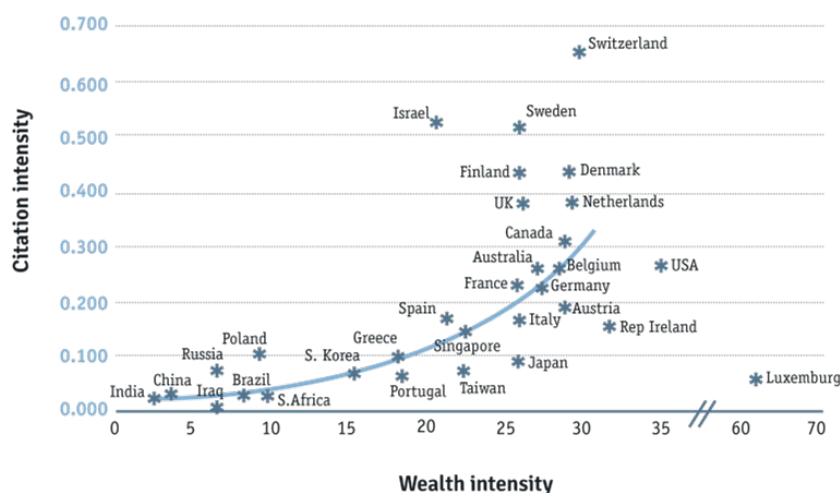
| Country | Current PhD per million of pop |
|-----------------------------|---------------------------------------|
| Portugal | 569 |
| UK | 288 |
| USA | 201 |
| Australia | 264 |
| Korea | 187 |
| Brazil | 48 |
| South Africa | 28 (or 1420 p.a. in 2010) |
| South Africa by 2030 | 100 (or 5000 graduates p.a) |

Source: (National Planning Commission, 2011, p. 288)

Following the publication of the NDP, the government approved the White Paper on Post Secondary Education and Training in November 2013. The White Paper affirms the perspective

of the NDP that one of the roles of the university system is as a dominant producer of new knowledge (DHET, 2013, p. 27). The White Paper endorses the role of universities in “helping to meet national objectives, including tackling the challenges of poverty, unemployment, and inequality” (ibid.). Following on this, the improvement of post-graduate output becomes critical, especially if we account for the correlation between the research output of a country and that of economic growth (Figure 1).

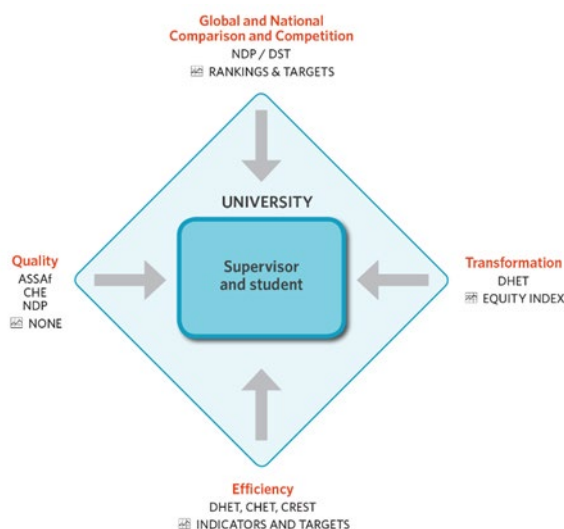
Figure 1: A comparison of scientific and economic wealth



Source: (King, 2004, p.313)

Given the above, the notion that the improvement of the quality of post-graduate supervision leads to a stronger economy and hence, an improved society, is an important perspective for a supervisor to keep in mind. This is made clearer in Figure 2, when one considers the nexus between global and international competition, transformation, quality and efficiency¹.

Figure 2: External pressures on doctorate production in SA



Source: (Cloete, Sheppard & Bunting, 2014)

¹ Each of these dimensions warrant a more comprehensive discussion, in considering the importance of supervision. However it is outside the ambit of this reflective essay.

All of the foregoing augurs well from the perspective of policy frameworks, and the recognition of the importance of doctoral output. The South African National Department of Higher Education and Training (DHET) and the associated higher education bodies are all “making the right noises”, so to speak. Unfortunately, there are a few caveats that make it difficult to realise the erstwhile goals ensconced in the National Development Plan of South Africa. The researcher has observed these first-hand in his higher education experience. The first relates to the relatively poor resourcing of several universities, many of which still bear the scars of differentiated apartheid funding. Thus, the so called “top three” universities in South Africa, which benefited during apartheid, continue to reap the rewards by virtue of a perceived status of being better “quality institutes” than others. They therefore attract the “best” students and possibly more philanthropic and other funding than others. As a consequence, more well-resourced universities have a staff-to-student ratio which allow them to provide adequate attention to the post-graduate cohort. On the other hand, many other universities, whose budgets are mainly reliant on student fees, have to ensure maximum possible student enrolment to maximise, fee income. Faculty and departmental managers, therefore, make it their priority to resource the “lecture timetable” in the first instance. This results in the average academic undertaking post-graduate supervision over and above massive teaching loads, which has a bearing on the quality of supervision. Consequently, the external pressures of “quality” and “efficiency,” reflected in Figure 2, are misnomers. This calls for a rethink of how the academic enterprise is managed and resourced. If we are to believe the evidence regarding the strong correlation between doctoral output and impact on the economy, government and universities will have to re-strategise how best to effectively deploy the time of the academic human resources that must service post-graduate cohort.

5. Reflections on practice

The reflective part of this paper essay is premised on two thematic areas, namely, scholarly identity and supervision practices and processes. Before engaging in these themes, it is necessary to provide some definition of the notion of supervision. According to Lee (2007, p. 683), a supervisor’s conceptions of research are key to understanding how academics will supervise doctoral students. He posits that, consequently, continuing professional development activity (CPD) is therefore essential (ibid: 691).

Following on Lee, this paper presents the author’s conceptions of research in relation to his field, in the next section of the paper. At this point, a broad definition of supervision is warranted. Pearson & Kayrooz (2004, p. 100) suggest that terms such as “apprenticeship”, “mentor,” and “coach” are frequently used when discussing supervision. In their study, they provide evidence that postgraduate research supervisory practice includes the dimensions of expert coaching, facilitating, mentoring, sponsoring, and reflective practice (ibid.).

5.1 The influence of discipline on supervision

The information system field in which the author works, is multi-disciplinary in nature given that its theoretical roots stem from many reference disciplines. The researcher has endeavored to research this issue in the past (e.g., Pather & Remenyi, 2005). One of the early problems

faced by the researcher, given his own disciplinary embedding in the management sciences, was that a considerable amount of IS research is conducted using the positivistic research tradition. This was clearly evidenced by any review of the information systems journals (in the 1980 to 2000 era), especially those that were based in the North. The researcher identified two reasons for this approach. The first is that IS as a discipline or field of study largely grew out of the more technical subject of computer science, with many IS academics using systems theory as a basis for the analysis and understanding of business systems. Secondly, many of the academics who were active in IS research during the 1990s and early 2000s have come to this subject from technical backgrounds, including engineering, physical sciences, and mathematics.

However, at about the time the researcher started out scoping with his own doctoral study in 2002, there had been much progress in the understanding of information systems over the 30 preceding years. Over that period, the practice and study of information systems have changed radically, and these changes have pushed the subject increasingly to the point where the researcher considered it to be fairly eclectic in nature. The problem the author faced as a non-positivist was that the South African IS academic community was largely centered around positivist research. The researcher perceived a “club” of academics who kept both the academic associations and journals in this field, under close watch with a large degree of gatekeeping. The problem was how to break into this “occupied territory”. Over time, fortunately, many other new academics with similar academic persuasions as the author’s come into the profession, to the extent that there is a good balance of philosophical persuasions in our field today.

The relevance of all of the foregoing is whether, as a supervisor, it is possible to be dogmatic about one’s scholarly identity. And if so, how do you accommodate students who may have a natural instinct for a different academic identity? Initially, as a supervisor, the researcher did not believe that it was possible. However, it has been realised that flexibility is key, and that a dogmatic approach to research is actually career limiting. Currently, one can attest that, even though one has a clear personal identity as a scholar, writer, thinker, and knowledge producer, which does have an impact on one’s students, one can be conscious not to let it become instructionist in shaping their students’ identities. Evidence of this is the varying underpinning intellectual persuasions of work produced by the author’s students, e.g., Kaisara and Pather (2011) and April and Pather (2008), which are wholly positivist studies, using quantitative data; Sigwejo & Pather (2016), an interpretivist study based on qualitative evidence; and Uys and Pather (2016), a critical realist study employing mixed methods.

5.2 Modes of supervision in relation to shaping scholarly identity

Lee (2007) offers a typology of post-graduate supervision approaches (Table 2). The average supervisor should become aware of his personal supervision approach so that he can understand the circumstances under which he might need to change his supervision tactic.

Table 2: Modes of Post-graduate Supervision

| Concept of research supervision held by supervisor | Most prominent activity | Knowledge & skills needed | Possible student reaction |
|--|--|--|--|
| Functional | Rational movement through tasks | Directing, Project management | Obedience |
| Enculturation | Gatekeeping | Diagnosis of deficiencies to be remedied. Nurturing | Apprenticeship, role modelling |
| Critical thinking | Evaluation Challenge | Argument (gently Socratic or constructive controversy) | Constant inquiry/fight or flight |
| Feminist | Supporting student in constructing knowledge | Analysis and reflection | Reframing knowledge |
| Emancipation | Mentoring | Facilitation | Personal growth |
| Relationship Development Qualities | Supervising according to experience | Emotional intelligence A range of experiences to draw upon | Emotional intelligence Personal awareness |

Source: (Lee, 2007, p. 691)

The post-graduate journey of the researcher contributed to the development of the supervisory style. The researcher had always been critical of his doctoral supervisor because he felt he could have received more guidance. Therefore, when the researcher started supervising, he promised himself that his students would not suffer that same fate. Consequently, the researcher believes he has developed a mode of supervision that straddles both the “functional” and “enculturation” styles. However, now that the researcher has been able to consider a broader set of models, he understands that his doctoral supervisor was in fact providing an *emancipatory* or *relationship-development* mode of supervision. In retrospect, the researcher thinks this led him to become a more independent and stronger researcher. Notwithstanding, having considered all of these modes, the idiom, *horses for courses* comes to mind. The researcher believes that a supervisor has to keep in mind the different possible approaches, and that different students require different styles of supervision. Furthermore, different styles of supervision may be needed at the various phases of the student’s progress.

To illustrate this point, let’s consider the case of a student who is innately a perfectionist. The unintended consequence of such a trait is that he would struggle to make progress since he would tend to want to see each step of research at a level of perfection before moving on. This is hardly a useful approach for a PhD student, given that the intellectual nature of this level of study does not really follow a step-wise progression until completion. In a situation like this, a supervisor who is following an *emancipation* mode will need to change tact. The researcher has had two such students under his supervision. Furthermore, the researcher was able to address the problem by re-positioning his approach in either an *enculturation* or *functional* mode of supervision to coax his perfectionist students into progress. Thus, the researcher has found that in instances like this, a “*master-apprentice*” type supervisory stance is needed, or else the perfectionist student is in jeopardy of not progressing and possibly even quitting his studies.

5.3 Power relations

Power relations are an important notion in the supervision process. Left unchecked, the average supervisor assumes a dominant role, often times unaware that he might be intimidating the student. This concept has received some attention in the literature, with the notion of trust often suggested as a way to mitigate the unintended consequences of a supervisor assuming a dominant power figure in the relationship. Hemer (2012), for example, argues that there is a need to find a balance between formality and informality in supervision and that the management of power relationships requires the development of personal and institutional trust. Grant et al. (2017) also argue that if many supervision problems are to be avoided, good communication, based on mutual respect and leading to mutual trust, is essential.

The researcher first became aware of the notion of ‘power relations’ while attending a course on PhD supervision. As a consequence, the researcher became enlightened and was able to develop a strong reflective lens on his own supervisory practice in relation to how to use “power”. The first notion of power relations concerns ‘social exclusion’. This relates to both overt and sub-conscious actions of the supervisor, which may result in a sense of exclusion for the student. The researcher considers himself to be a ‘liberated’ South African male, and harbors no racial or gender biases. More so, the researcher has actively participated over many years in various forms of struggles and protests against racial and gender inequities. The researcher is therefore quite certain that such biases do not ever creep into his personal conduct or disposition with others, least of all his students.

However, in reflecting on the notions of power, what the researcher was confronted with was the clinical approach he was taking with his students. In addition, one-on-one interactions with his students have been largely framed by academic discussions in relation to the student’s progress. In retrospect, the researcher has realised that he does not take the time to understand his students’ personal circumstances and difficulties, which have a bearing on their studies. Therefore, the researcher believes that this is a kind of “exclusion” that he has been practising. Consequently, ever since he was exposed to the notion of social exclusion, he has made a conscious effort to take a different approach with his students, so that he could become more empathetic with their individual circumstances.

5.4 Pragmatism in supervisory practices

Over a period of time, the researcher has come to realise the value of utilising tools to provide an element of pragmatism to the PhD student’s research approach. For example, he has often found his student’s inability to get out of the starting blocks at two stages. The first is that students are often stuck in a quagmire during topic scoping often causing them to take a far longer time to get the research proposal developed. The second is during the literature review, usually the second major stage of the PhD journey once the research proposal has been put to bed via the university’s higher degrees processes.

There are two processes that the researcher uses in his own practice to support the student during these two areas of difficulty. The first relates to a “topic discovery exercise” to assist the student in developing logical links between the problem background, the actual problem, the research questions, and the objectives. Thereafter, students work on aligning the research

objectives, with sub-questions. Sub-questions have to include questions that the student will seek to answer in the literature review. The researcher has found that this first step of framing is of great assistance to students in developing the literature review. Also, the researcher has offered this as a tutorial for a wider post-graduate student population in the EU's Enhancing Postgraduate Environments (EPE) support portal (see <https://postgradenvironments.com/>).

Following on the above, the next process in which the researcher asks students to engage is the so-called story line of the literature review. The researcher gets students to produce a storyline to reflect how they want to tell the story of the research problem area. The researcher starts with a simple table in which the student delineates the key headings of the literature review. Based on this, the researcher works with the student to brainstorm the storyline, which is then continuously assessed until a firm first draft of the review is completed.

There are several other tasks and processes that underpin the researcher's supervision, such as setting the ground rules and agreeing on expectations from each other through formal or semi-formal written agreements or memoranda of understandings (MoUs); jointly developing a project plan; familiarising a student at the beginning of the study with the requirements for examining, i.e., the criteria by which examiners are asked to judge the scholarly output; and lastly, being diligent in providing students with a summary of discussions immediately after a supervision meeting. These are just some examples of pragmatism in supervisory practice.

6. Conclusion

This paper has highlighted the importance of ensuring quality postgraduate supervision and its relevance to a country's development. Having examined some of the well-documented challenges from the literature, the paper provided an account of supervision practise. Using a personal reflective lens, the paper has highlighted the relevance of understanding the locus of disciplinary identity during supervision; the need to embrace plurality in terms of modes of supervision; the importance of knowing the boundaries of power and how to evade the creation of supervisor-dominant relationships; and lastly, that simple pragmatic tools can aid and address what is often perceived by the student to be a terrain of extreme complexity.

In addition to the lessons gleaned from the latter, an added reflection is that we do too little to assess the "quality of service" of the post-graduate programmes that our students are subjected to. Thus one of the questions foremost, for future research, is whether a regular "customer oriented" survey of post-graduates will assist universities in identifying problematic areas for intervention. To this end, a service quality evaluation scale to assess post-graduate students satisfaction might be an important area of future research.

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