

RESEARCH ARTICLE

Mentorship in undergraduate studies – Building block for postgraduate success

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ABSTRACT

Postgraduate output is important in any country's knowledge development and their knowledge economy. The development of postgraduate output especially at master's and PhD levels in South Africa is at risk due to its slow pace. An argument that can be made is that undergraduate experiences lend to postgraduate access and success. This article explores the experiences that students had during undergraduate study that assisted them to access postgraduate studies. A qualitative methodology was used to collect the data. Data were collected from a sample comprising of postgraduate students from different faculties except health sciences, at a research-intensive university and a comprehensive university in Gauteng, South Africa. Results indicated that there are many experiences, and socialisation processes the undergraduate students had that shaped their professional identity and facilitated access into postgraduate studies and success. This article hones in on mentorship. There were also different forms of mentorship that postgraduates had experienced during their undergraduate study. The results help in supporting the notion that mentorship during undergrad is one of the building blocks to postgraduate success in the South African context.

KEYWORDS

Mentorship, undergraduate, postgraduate, socialisation, experiences, universities, success

Introduction

South African undergraduate education consists of an average time span of about four to five years. However, this is not free of obstacles: the attrition and dropout rates are high (Department of Higher Education and Training [DHET], 2023). When students choose to enrol in a programme, they spend a further two to six years doing a postgraduate degree. Very few students go on to pursue postgraduate studies in South Africa (ASSAf, 2010; Cloete et al., 2015; Essop, 2020). Many spend time working and trying to make a living and do not enrol in further education courses or postgraduate degrees. This is cause for concern as there are a fair number of graduates which should ideally translate to higher numbers of students registering for postgraduate studies.

A number of newspaper articles have been written and studies have been conducted to examine this shortage of postgraduate output in South Africa. What is not prevalent in the literature is how undergraduate experiences support and contribute to building professional identity and postgraduate success, especially at the doctoral

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level. The study reported on in this article examines a few student experiences and the forms of mentorship to which they were exposed in undergrad that had an influence on professional identity and may have assisted with progression and access to postgraduate studies and creation of postgraduate knowledge output. The main research question guiding this study was: What were the experiences in undergraduate that shaped your professional identity and helped you to progress to postgraduate studies?

Problem statement

Despite annual growth increases, which is viewed positively, the undergraduate graduate cohort still surpasses postgraduates extensively. These graduate numbers are not translating to similar or at least close enough proportions in postgraduate enrolments and graduations. There is a total average of 80.4% of undergraduates and only 17.6% of postgraduates in post school education and training (HEMIS, 2017). According to the literature and statistics published by DHET (2023) during the 2021 academic year, more than two-thirds of students (38% or n=88,874 students) enrolled for bachelor's degrees (360 credits); these were followed by diploma enrolments (360 credits), which made up 21% of the total enrolment (or n=48,756 students, and higher certificate enrolments (17.3% of the total enrolment or n=40,324 students) (DHET, 2023). Combined, these account for 76.40% of students who have enrolled in higher education programmes. Postgraduate degree enrolments made up roughly 11.2% of the total number of students in the sector, or n=25,373.

The disparities in postgraduate numbers in comparison to undergraduate numbers is high. The number of undergraduates the country produces are simply not converting to the desired postgraduate numbers. The doctoral statistics are very small in comparison to the number of undergraduates that hold degrees or diplomas (Mouton et al., 2019; Mouton et al., 2022). These statistics demonstrate that there is a problem with postgraduate development, progression, access and success in South Africa. Integral to understanding postgraduate success and professional identity development are the experiences during undergraduateship to which students were exposed. In this article, the role of mentorship will be foregrounded. The next section delves into the literature on mentorship.

Literature review

The role of mentorship

Higher education has seen a rise in the use of mentoring as a strategy to (a) graduate and retain students; and (b) produce and maintain highly successful professors (Castle et al., 2021; Diggs et al., 2023; Padayachee et al., 2024). The section will begin with definitions used in this article, followed by the positive impacts and negative aspects of mentorship, all supported by studies on mentorship. Several definitions of mentorship can be found in the existing literature.

Where two or more individuals have a positive and beneficial relationship, this is usually considered mentorship as stated by Fuentes et al. (2014). The mentee and the

mentor are both responsible for ensuring that the mentorship relationship is successful (Fuentes et al., 2014; Rinfret et al., 2023). The mentorship relationship creates conditions that allow for the transfer and sharing of beneficial information and resources for the mentee and mentor (Fuentes et al., 2014). Mentorship is a developmental process in which individuals with greater experience and skillsets act as role models for those with less experience or skillsets, offering guidance, support, encouragement, and friendship. Diggs et al. (2023) state that mentors assist mentees in navigating higher social networks and provide insight into the unwritten rules of academia.

Mentorship also involves the development of activities that also contribute to the growth and development of the mentee that are usually initiated and driven by the mentor (Azevedo et al., 2023; Brizuela et al., 2023; Keiter Humbert et al., 2011). A mentorship relationship is advantageous for both the mentor and mentee but is not always easy to maintain (Azevedo et al., 2023; Keiter Humbert et al., 2011). Mentors are especially concerned with the professional and personal growth of their mentees, helping them integrate into the academic discipline, culture, and career (Diggs et al., 2023). In agreement with this, Alshayhan et al. (2023); Hummel and Hersey (2023); and Rinfret et al. (2023) state that with enduring consequences on their careers, mentorship provides graduate students with crucial emotional support during the most trying times of their academic careers

Informal contact with students by staff and lecturers at universities can also be considered a form of mentorship outside the lecture room. Informal mentorship occurs without institutionalised organized effort (Todoran, 2023). These informal interactions between staff and students also make staff what Pascerella (1980) called “informal agents of socialization” (cited in Fuentes et al., 2014, p. 288). Although this is not a deliberate attempt to mentor the students, their interactions and their influence on students can be classified as mentorship (Todoran, 2023; Wofford, 2024). It has also been found that sometimes informal mentoring relationships have better positive consequences for students than those that are formally arranged (Fuentes et al., 2014). Mentorship goes beyond just advising students about their career paths, it is personal and pastoral in nature, providing a guide for students to experience campus life and also to pursue and develop their careers (Hummel & Hersey, 2023; Wofford, 2024; Lindén et al., 2013). Mentorship is also going beyond the bare minimum of what a lecturer or supervisor traditionally does in the execution of their duties and responsibilities towards students.

Mentorship is also a developmental relationship, where academic staff and postgraduate students assist with the development of undergraduate and postgraduate students (Azevedo et al., 2023; Lunsford et al., 2013). Staff give the students career coaching and that lends to a developmental relationship or mentorship. According to Godfrey and Benson (2023), Todoran (2023) and Wekullo et al. (2024), postgraduate students also form camaraderie with undergraduate students and support them during their studies, this lends to informal mentorship.

Undergraduate students can also observe the behaviour of university staff and postgraduate students. This observation could be a form of mentorship. University

staff and students could also just model the common features and mannerisms of their profession for undergraduate students (Castle et al., 2021). Mentorship will not always be formal nor does it have to be. Findings from a study conducted by Adams and Hemingway (2014) indicate that the mentors themselves managed to support the students' identities by modelling behaviour that is associated with that knowledge domain and also how things work in that discipline. Access to academic, intellectual and social experiences during studies is essential to student success (Bates III et al., 2024; Xulu-Gama et al., 2018). This is very important since professional identity develops in social interactions and mentorship is one such social interaction.

In addition to career benefits like enhancing teaching, developing leadership qualities, applying for competitive grants, raising research productivity and service opportunities, and empowering faculty, mentoring also addresses psychosocial needs like adjusting to academic culture and fostering positive relationships with coworkers and other students (Azevedo et al., 2023; Bradley & Mead, 2022). Mentorship enhances professional and personal development (Rinfret et al., 2023) and fuels student success.

There are many studies on how mentees and mentors approach the mentoring relationship. Mentorship depends on the mentor's characteristics and personality. These characteristics can range from gender, cultural background, and all the way to the position of the mentor in their career and domain (Adams & Hemingway, 2014; Diggs et al., 2023; Ngongalah et al., 2021)). Mentorship also depends on how involved and interested the mentor and mentee are in the mentoring relationship, if both are uninterested and not making an effort, then the mentorship relationship will also suffer. If both are committed then it might succeed (Corbett, 2016).

Mentorship must be supportive. The mentor's role is to guide students through what is expected of a graduate in their domain or discipline (Wekullo et al., 2024). This could also be dependent on the professional identity with which the student identifies. Whether this is an academic identity or corporate practitioner identity or even both. Ultimately, there are no perfect mentors or mentees but "it is essential that graduate students receive prudent, accurate advising, and consistent, supportive mentoring" (Corbett, 2016, p.). A strong mentoring relationship gives the mentees access to knowledge and skills and this also helps to empower them against challenges and further pursue their goals (Corbett, 2016; Diggs et al., 2023). As reported by Lindén et al. (2013), a supportive mentor will invest time and make an effort for their mentee's development and be encouraging in their academic and personal endeavours.

Mentors that work in a university as academics or are postgraduates might have gone through what the student that they are mentoring is experiencing. This enables them to empathise with the student (Dudley et al., 2022; Padayachee et al., 2024; Van Vliet et al., 2013). Some studies have found that mentoring also has benefits for the mentor, not just the mentee. Being a reciprocal relationship, mentorship can benefit both the mentor and mentee (Kumar & Blake-Beard, 2012). In order to assist the mentee, the mentor can also put their prior experiences and knowledge into practice (Khamis & Chapman, 2017). In addition, Kumar and Blake-Beard (2012) and Pavlovic

and Jenö (2024) agree that the mentor can receive recognition for their efforts, and this helps with building their reputation in academia.

A study by Strebel and Shefer was conducted in South Africa on doctoral candidates that were already registered for a doctoral course in South Africa. At postdoctoral and student levels, mentorship was identified as an important support mechanism for success and completion (Strebel & Shefer, 2016). It was found that the students that had been part of the mentorship programme were grateful and appreciated the support that they were given which assisted them in completing their doctoral studies (Strebel & Shefer, 2016). The mentorship relationship that doctoral students and postdoctoral research fellows have with lecturers and supervisors promotes and supports professional advancement as was found in another South African study on mentorship (Thackwell et al., 2018). The researchers found that structured and well-planned mentorship programmes were the best approach.

South African and international academics and supervisors are overloaded with work and there is pressure for academics to attend to administration, supervision, lecturing and research demands (Strebel & Shefer, 2016). Because of this existing burden, supervisors frequently find themselves unable to satisfy the demands of the responsibilities that come with mentoring and supervision (Wadesango & Machingambi, 2011). As argued by Thackwell et al. (2018), this often leads to poor outcomes for mentorship. Mentorship requires effort from academics and an awareness of the obstacles often faced by students and postgraduates (Thackwell et al., 2018). A solution to this could be engaging senior or retired academics in this regard, who may not have the added pressures of lecturing, publishing and dealing with administrative duties (Pavlovic & Jenö, 2024; Strebel & Shefer, 2016).

While mentorship is generally positive, there have also been studies on its negative aspects. These types of study are few and far between. Negative mentoring relationships tend to damage the mentee (Eby & McManus, 2004; Eby et al., 2004) and mentor (Eby & McManus, 2004; Horton, 2023; Lunsford et al., 2013). No one benefits from such a destructive type of relationship. If negative interactions such as these took place, could it even still be considered mentorship?

Both the mentor and the mentee may suffer grave consequences from unfavourable mentoring situations. Unhealthy competition and obsession emerge when a mentee makes an unhealthy attempt to emulate their mentor as found in studies by Bechard and Gragg (2020), and Lunsford et al. (2013). These negative experiences with mentorship could also lead to truancy from university lectures and abnormal stress levels (Horton, 2023; Kumar & Blake-Beard, 2012). Additional research on what defines bad mentoring reveals that unfulfilled needs persist for both the mentor and the mentee. (Lunsford et al., 2013). Both the mentee and mentor end up emotionally and mentally burned out as a result of their continued dysfunctional relationship (Bechard & Gragg, 2020; Eby et al., 2000). Lastly, there can also be financial implications, especially in terms of taking the time to meet with each other, which if it requires travel, has costs attached to it.

According to the literature, the positive attributes of mentorship outweigh the negatives. Mentoring is an important relationship that students need to develop during

their undergraduate studies. Specifically, with a mentor they have chosen and seek out and also feel comfortable with and trust. Such a mentor does not only have to be a member of academic staff, but it can also be with older students, postgraduates or other support staff (McCorkle et al., 2024). The benefits of mentoring are said to accrue over the years especially when it is cultivated from undergraduate level (Elsen et al., 2009; Wayment & Dickson, 2008). It has also been found in another study on mentorship, that more students are likely to become critical thinkers, secure funding easier and report an interest in becoming professors in their field one day as a direct result of the mentorship that they receive (Lunsford et al., 2013). The mentorship relationship has also been compared to an apprenticeship (Lave & Wenger, 1991). As it is also a process in which not only skills are gained, but attitudes and values for a particular domain as well (Lave & Wenger, 1991; Van Vliet et al., 2013). Students that succeed in their studies tend to be students with a sense of belonging (Hayman et al., 2022; Tinto, 2017). This sense of belonging can be facilitated through mentorship and could be where professional identity intersects with student success. The studies mentioned thus far have shown that mentorship can also be challenging. The final section of this literature review briefly delves into the concept of professional identity.

Conceptualisation of professional identity in higher education

The concept of professional identity is broad. It is defined as the understanding that a profession's values, attitudes, beliefs, and duties foster dedication to a career (Dickerson & Trodd, 2022; Tomlinson & Jackson, 2021). Supporting this is another definition by Tan et al. (2017) where they state that individuals build a sense of professional competence and legitimacy in their field, which can continue to evolve throughout their careers in relation to the self. Fitzgerald et al. (2024) posit that professional identity is shaped by social and cultural factors, including one's behaviour in specific cultures.

Communities of practice, such as professional societies, can enhance acculturation into a profession by fostering shared aims, beliefs, values, and behaviours (Lave & Wenger, 1991). Professional identity is part of a narrative arc that explores a person's projected future self and how it relates to their professional identity at work (Tomlinson & Jackson, 2021). In addition, Foo and Green (2023) and Kristoffersen (2021) state that professional identity is thought to develop over time as the individual obtains insight into professional methods and experiences.

There are a couple of factors that affect the formation of professional identity. These can be gender and gender stereotypes (Tomlinson & Jackson, 2021; Volpe et al., 2019), motivation to complete their studies (Cruess et al., 2019; Tomlinson & Jackson, 2021). Undergraduate professional identity formation relies on both explicit knowledge given by teachers and supervisors and tacit knowledge conveyed through social interactions (Tomlinson & Jackson, 2021). Student satisfaction with their programme appears to be a major element in professional identity. Research indicates that student satisfaction at universities correlates with teaching quality and accessible resources (Green et al., 2022; Tomlinson & Jackson, 2021). Lastly Ewe and Ng (2022) state that the student's resilience and grit also play a role in their professional identity formation.

The above literature review demonstrates that there is a paucity in the South African literature on mentorship and experiences in undergrad and their role in professional identity (Tomlinson & Jackson, 2021) formation and advancement to postgraduate studies. What has not yet been clarified is how this relationship, between mentor and mentee, assists the student in developing a professional identity, advancing to and achieving success as postgraduates in the South African context.

Theoretical framework

Reference will be made to Bronfenbrenner's ecological systems theory in order to frame an understanding of how mentorship plays a role in professional identity development and postgraduate success. This theoretical framing is useful in this study because the theory positions the individual in different social settings and interactions. As stated by Fearnley (2020), social interactions play an important role in professional identity formation and academic success. Mentorship cannot take place without social interactions. Identity cannot develop without social interactions either. A brief introduction into the ecological systems theory is presented in the following paragraphs. Bronfenbrenner was a proponent of the idea that an individual's environment and experiences influence their growth, which in turn leads to further development (Woodland et al., 2024). The scholarly work of Bronfenbrenner uses an ecological, systems-based methodology to study social phenomena and human development (DiSanti & Erickson, 2021). According to Woodland et al. (2024), Bronfenbrenner's approach also requires the passage of time. Time is relevant to the current study as it involves undergraduate level experiences, which is usually four years to five years, and then master's and PhD.

At the centre of the system is the student or individual. The student or individual in this study are the participants who were interviewed. Due to their existence, interactions, and capacity to alter their surroundings, individuals constitute an essential part of all ecosystems (DiSanti & Erickson, 2021). Then surrounding the individual is what is called the microsystem which consists of the individual and their immediate environment, for example family and friends (Bronfenbrenner, 1977; Woodland et al., 2024). A robust description of the microsystem was provided later and Bronfenbrenner defined the microsystem as the activities, personalities and beliefs that the developing individual came into contact with (Bronfenbrenner, 2005). A simpler description is the face-to-face social interactions of the individual (Tobbell & O'Donnell, 2013).

The mesosystem consists of the connections between the people in the individual's immediate environment and the wider community such as school and religion (Bronfenbrenner, 2005; Woodland et al., 2024). The next layer is the exosystem and this is the connection between the mesosystem and another system, for example politics, social media, wherein the developing individual does not have direct interaction but is impacted by the processes that take place in these settings (Bronfenbrenner, 2005; Woodland et al., 2024). This system indirectly impacts the behaviour and development of the individual (McLinden, 2017). Then comes the macrosystem, which is a combination of microsystem, mesosystem and exosystem and is influenced by the social interactions

that are contained within, such as ideologies and cultural attitudes or beliefs (McLinden, 2017; Woodland et al., 2024). The final level or system is the chronosystem which refers to time and is made up of all the experiences that the individual has in their life (McLinden, 2017). The participants in the study have existed and interacted with all these different systems throughout their four- or five-year undergraduate degrees.

Generally, these experiences take place in spaces where identity is nurtured and wherein interactions with others develops similarly to Bronfenbrenner's ecological systems (Tobbell & O'Donnell, 2013). The ecological systems take into account the individual's entire development and experiences throughout their life (McLinden, 2017) and this can be connected to how identity and professional identity change over the course of an individual's life. Every individual has unique situational and dispositional characteristics that impact how they engage with the systems in their environment (DiSanti & Erickson, 2021). In addition to this, Fearnley (2020) asserts that each person develops through a multitude of experiences, including their relationships within their immediate and wider social environments.

Bronfenbrenner's ecological systems theory supports the progression of students from undergraduate through to postgraduate and examines the experiences that got them there. It also examines how these experiences shaped their professional identities that also assisted them to access postgraduate studies. The Bronfenbrenner theory also takes time into account and so does professional identity formation. This is important as undergraduate degrees in South Africa take about four or five years and this is a considerable amount of time for these experiences and social interactions to take place.

Within these interactions, Bronfenbrenner's theory also encourages that attention be paid to the unique characteristics of each individual and how they experience things differently compared to the next individual (McLinden, 2017). Individuals inside each system are always changing, and their growth depends critically on how various systems interact (Fearnley, 2020). The link between the individual's characteristics and the environment they are interacting in is very important (Darling, 2007). It can be said that it is these interrelationships that shape the individual's professional identity and also determine progression to postgraduate access and success.

From this theory outline the main research questions are:

- Describe mentoring experiences that contributed to your professional identity?
- What mentorship experiences from undergraduate assisted you to get to postgraduate?
- How did you develop these mentorship relationships?

Methodology

A qualitative design was used, and semi-structured interviews were conducted. The interview protocol is exploratory and allows for the examination of the different ways that mentorship played a role in the development of professional identity and postgraduate achievement. All interviews were submitted to NVIVO. The outputs from NVIVO were nodes or themes that are relevant to the study. Ethical clearance was sought and obtained for the study.

Postgraduate students from two universities in South Africa, one research-intensive and the other comprehensive, were involved in the study. Sampling for the study was purposive because students that had completed their undergraduate studies at the same institution were selected for the study to ensure consistency and to enable demonstration of the transition from undergraduate to postgraduate in a similar environment. The participants were from different faculties; commerce, humanities, science and engineering. The health sciences were not included as further ethical clearance would have had to be sought as the postgraduate students were mainly hospital-based and not on campus. The researcher was advised that this would be a possible bottleneck and hinder progress and upon consideration had to exclude health sciences. After data collection there were n=27 interviews collected from both institutions.

The researcher selected two institutions in South Africa because the country has different higher education structures. There are research-intensive universities, comprehensive and universities of technology in the country. This was also within the financial limits and timeframe that the researcher had been given. The interviews used a semi-structured approach wherein the researcher was able to ask probing questions where necessary rather than following a strict interview schedule. The methodology used allowed for the exploration of postgraduate student's past experiences of mentorship in undergrad with regards to how this played a role in their professional identity formation and enabled progression to postgraduate level. The questions were used to explore the forms of mentorship that students encountered during their undergraduate studies.

Findings

A major theme or primary forms of mentorship was at the faculty level (outside the lecture room). Then secondary forms of mentorship were identified including engagement with the community, friends and family. Additionally, mentorship sub-themes were formed during data analysis. The sub-themes are (i) mentorship within the faculty/department/university, (ii) mentorship from the community, and (iii) well-known public figures as role models. Famous people were mentioned as role models by some respondents. Role modelling is also considered a characteristic of mentorship (Thevenin et al., 2016). This is not considered mentorship in the current study as they did not have a relationship with these famous people, however, such accounts are relevant to mentorship and thus were included in the study.

Different forms of mentorship

All respondents reported positive mentorship experiences. There were no reports of negative forms of mentorship that they encountered but this is not to conclude that they do not exist. The respondents mentioned that their mentors had shared valuable knowledge, skills and discipline-specific values and attitudes through their interactions with them. Below is a breakdown of the sub-themes that came out of the study.

Mentorship within the university

These experiences took place outside of their formal lecture environments and sometimes off campus too. The respondents reported that they had developed mentoring relationships with their lecturers and some postgraduate students that were tutors. One respondent had the following to report:

One of my lecturers mentored me and some of my classmates from our second year of university. (Respondent 1, Author, 2020)

The very same respondent mentioned that the lecturer had quite a few of her students under her mentorship and would take them out for lunch once a month. It was at these informal and friendly get-togethers that they managed to ask her some private questions about her life. This allowed for some transfer of valuable life lessons to the mentees.

She only mentored young women. We were comfortable enough to ask her personal questions about how she became successful and any challenges that she faced. (Respondent 1, Author, 2020)

Mentorship from family and community

One of the respondents had a family member who was already working at their university. This particular respondent spent a great deal of their free time in the relative's office space on campus, assisting with some of their admin. At some point, the relative encouraged the respondent to go to an academic conference and the respondent had this to say:

The academics I saw were having so much fun during after-hours when conference sessions had ended. Which was completely opposite to how I thought they were like. (Respondent 2, Author, 2020)

Another respondent also reported being mentored by a family member and older friends, who were studying at the same university that they were doing their undergraduate studies in:

My cousin lived with us and was doing his postgraduate studies. He would allow me to tag along to the postgraduate bar on campus with his friends. They were all scientists and this made me want to pursue my postgraduate studies. (Respondent 3, Author, 2020)

A respondent also gave an anecdote about a neighbour who used to visit and who also gave advice from time to time:

Our neighbour had studied something in the science field and she came to speak to me. I now have postgraduate qualifications in a science field too. (Respondent 4, Author, 2020)

A few of the respondents also came from religious backgrounds. They were exposed to different people that worked in different fields in their various places of worship. This

represented an opportunity for them to interact with people they had something in common with (their religion). A respondent had the following to say:

The church that I attend was able to set up programmes for the matric students in our congregation. Usually the programmes were led by people that already had degrees. I knew that I could trust these people and they were very open to giving us advice.
(Respondent 5, Author, 2020)

The respondent mentioned a very important characteristic of mentorship and that is trust. This is also a very important component for a mentor–mentee relationship to flourish. Without trust, a mentorship relationship is impossible or unsustainable. The individuals at their places of worship were also easily accessible because they were found in a place that the respondent frequented.

Famous role models

Although this is not necessarily a mentoring relationship, as they did not have a direct relationship with these famous personalities, these are still role models that they wanted to emulate. Some of the respondents mentioned that they looked up to famous people that worked in their domain. A respondent in international relations had this to say:

The people that had a great influence in my life and professional identity were my high school friends, Kofi Anan and Banki Moon. (Respondent 6, Author, 2020)

A respondent from engineering had the following to say:

Elon Musk is one of the tech giants and I want to be like him one day. (Respondent 7, Author, 2020)

The examples of role models that they gave are people that work in their fields of study. These are famous personalities that are known all over the world. Only accessible through social media and other modes of media. The respondents also felt that they have something in common with their role model although they had never met them.

Discussion

The purpose of the study was to explore the mentoring experiences to which the respondents were exposed during their undergraduate that contributed to the development of their professional identity and also assisted them to be successful in their postgraduate studies. Bronfenbrenner’s ecological systems theory assisted with contextualising the fact that mentorship experiences occur in different ‘ecosystems’ or situations and social interactions and therefore also support the various forms of mentorship that result.

Data analysis was conducted, and it was found that mentorship experiences took place in varied forms. This demonstrates that informal mentorship comes in different forms, some of which are not defined in the existing body of knowledge. Consistent with previous literature (Bronfenbrenner, 1977; Woodland et al., 2024), this study found

that instances of mentorship in the faculty, family and community were mentioned by respondents. The primary form of mentorship was that which took place in faculty spaces and mainly with lecturers and tutors. Further analyses revealed that secondary forms of mentorship took place in the external community, inside the university community and in family structures.

Professional identity formation involves combining personal and professional identities. This requires them to be conscious of their own situated, relative, and relational positions in terms of their postgraduate studies. Professional identity is socially determined and also dependent on the individuals themselves. In relation to mentorship, this means that the social nature of mentorship and the social nature of professional identity formation support each other. That the participants reference their experiences with lecturers, friends, neighbours and people from their religious affiliations also shows that mentorship, and therefore the development of professional identity, is dynamic. It changes over time.

Bronfenbrenner's ecological systems theory also supports the context in which mentorship and professional identity forms in different spaces and over time. Time is a common factor between the theory, mentorship and professional identity and this is consistent with the literature (McLinden, 2017; Woodland et al., 2024). This also examines how students' experiences with higher education, mentorship and the development of professional identity and how this may impact their professional identities and knowledge contributions, drawing on the diverse extant literature. Reflecting on who they interacted with, what role they played and even the environment and the resources that they had at their disposal is another important part of the process.

The experiences that the respondents reported can be viewed as positive. Good mentorship entails a relationship that is supportive, encouraging and collegial. Respondents in the study reported that they had experienced good mentoring relationships. These findings support previous literature and studies (e.g. Diggs et al., 2023; Hayman, 2022; Wekullo, et al., 2024). None of the respondents reported negative mentoring experiences.

Respondents indicated that their role models assisted them in shaping their professional identities and also helped them to thrive during their postgraduate studies. It is important to highlight that, despite the fact that role models are not a type of mentoring as the respondents have never met the renowned individuals they consider as their role models, role modelling is a characteristic of mentorship (Hammond et al., 2024; Van Vliet et al., 2013; Zhang et al., 2023). Hammond et al. (2024) observe that, considering how easily accessible renowned people are in today's world, it appears likely that some historical, religious, and popular media leaders can positively impact youth by modelling their behaviours.

The respondents also had something in common with the people that they considered mentors. One that particularly stood out was a student who was an African female whose mentor was also an African female. In her engagement with her mentor she mentioned that the group of mentees she was part of used to ask their mentor

how she had become successful with reference to her race and gender. The participants responses suggested that mentors with a similar cultural background or gender identity might be best for students that want to progress to postgraduate studies. This is supported by Corbett (2016) as they confirm that if the mentor and mentee can see themselves in each other, it facilitates positive growth of the mentoring relationship. Further research by Azevedo et al. (2023) supports this. They found that women in certain programmes have distinct mentorship needs compared to men.

The work of Corbett (2016) and Azevedo et al. (2023) demonstrates that mentorship is also beneficial for the mentor. The mentor gets the opportunity to discuss their own past experiences that shaped who they are. In turn, the mentees get opportunities to learn from those past experiences. As mentioned earlier, mentoring is beneficial for both the mentee and mentor (Kumar & Blake-Beard, 2012) and is demonstrated in the respondents' accounts.

This article had to rely on literature related to mentorship and professional identity but did not necessarily have a direct link between mentorship and postgraduate success. The paucity in studies related to this issue in South Africa highlights the need for more studies on the role of mentorship in professional identity and postgraduate success in South Africa. It is important to highlight that informal mentoring experiences are reported in this study. Formal mentorship programmes were not reported by the respondents. Universities can also encourage staff and postgraduate students to mentor future postgraduate researchers.

A limitation of the study is that the participants were registered or had completed postgraduate studies only. An area that needs to be examined are the mentorship experiences of postgraduate students that dropped out of their programmes and graduates that hold only an undergraduate degree and never registered for postgraduate studies. What also needs to be explored is the possibility of negative mentoring experiences during university students' undergraduate studies. Due to the known difficulties in obtaining ethical clearance – the majority of master's and PhD medical students are based in hospitals rather than on campus – the study did not include the health sciences faculties. Ethical clearance would have required permission from the Department of Health and from the hospitals' management in addition to the ethical clearance that had to be sought from the two higher education institutions from which data were collected. Future research with greater resources and time should incorporate them. Additionally, the study purposefully excluded full-time and part-time academics. To fully comprehend their distinct mentoring approaches, more research is required. Future research might more closely monitor student access and directly invite faculty. These are cohorts of graduates and academics that can be considered for further studies.

Ethics statement

Ethical clearance was obtained for this study.

Potential conflict of interest

The author declares that there are no competing interests.

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