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Investigating the role of non-academic support systems of students completing a Master's Degree in Open, Distance and e-Learning

Abstract

This paper investigates the role played by the non-academic support systems that students can access during their master's journey within the Open, Distance and e-Learning context. In defining support, this paper draws on the theory of connectivism, which portrays relationships as a network with various connecting nodes. Traditionally, support for master's students takes the form of academic assistance that is channelled primarily through the supervision relationship. The relationship between student and supervisor in Open, Distance and e-Learning represents the main bridge between student and institution. As such, the process of supervision has evolved into a critical component of student success at the level of master's studies. The theory of connectivism challenges this rigid view of unidirectional learning in a supervision relationship or programme. The connectivist approach acknowledges that learning and knowledge rest within a diversity of opinion. Drawing from a cohort of postgraduate students at a South African distance-education institution, this paper measures the learning network of each student. In total, 37 students and graduates responded to an online survey aimed at investigating the networks that students have created during their master's studies. The instrument consisted of 34 items that covered aspects such as the cognitive, affective and systemic support provided by supervisors as well as external sources of support. While the supervision relationship remains the core process during postgraduate studies, meeting the needs of postgraduate students extends well beyond the capabilities of most individual supervisors. Results in this study demonstrated that students have a range of needs for the successful completion of their qualifications. Respondents reportedly had the necessary social and financial capital to support these needs outside the supervision relationships; however, not all students do. This study, therefore, provided a student-support framework that may identify the support needs and support sources to improve postgraduate student support.

Keywords: *Connectivism, Master's, networked learning, non-academic support systems, student success, student throughput*

1. Introduction

Postgraduate supervision is seen as a practice involving complex academic and interpersonal skills in which supervisors are required to play multiple roles such as advisor, quality controller, guide and support structure (De Beer & Mason, 2009; Bitzer, 2010). While good supervision is acknowledged as the key to success in postgraduate research training, the teaching and learning process underpinning this process is not generally understood (Bitzer, 2010). Furthermore, academic staff are under increasing pressure to manage higher student workloads while increasing numbers of students are arriving at universities underprepared for higher degree studies (Bitzer, 2010). Within the traditional conceptualisation of supervision, the process is managed by a single supervisor who is additionally responsible for the administrative management of the supervision process (De Beer & Mason, 2009). In a postgraduate Open Distance and e-Learning (ODEL) context, supervisors are the students' main, and sometimes only, human link to the institution (Van Biljon & De Villiers, 2013). Given the growing number of students entering South African higher education, the traditional model of supervision is unlikely to meet the complex set of needs of master's students fully and due to insufficient support, the likelihood of dropout or prolonged time to completion increases. The stance taken in this paper posits that successful completion of a master's qualification requires a network of support to facilitate learning.

This study focuses on the non-academic support structures used by students in the Master of Arts in Psychology (MA) and the Master of Arts (Psychology) with specialisation in Research Consultation (MARC) programme at an ODeL institution. While both qualifications are research-based degrees, the MARC programme is a coursework-based training programme that leads to registration with the Health Professions Council of South Africa (HPCSA). Both programmes employ a correspondence model of teaching for the dissertation component; however, the MARC programme makes use of a blended approach during the first year.

2. Background

Since 1994, a number of policy-level interventions have been established to redress the historical inequalities embedded within the South African higher education system (Scott, Yeld & Hendry, 2007; South Africa Department of Higher Education & Training, 2013). These policies all share the view that postgraduate education, particularly doctoral education, provides the basis for the production of both high level skills and research (Scott *et al.*, 2007). A cohort analysis conducted by Scott *et al.* (2007) highlighted a number of key findings, namely that postgraduate enrolment has increased since 1995 and that the chief focus of postgraduate programmes should be to reduce the postgraduate pile up in which students neither graduate nor dropout (Scott *et al.*, 2007). The pile up effect refers to the situation in which students remain enrolled for longer than expected or desired. In addition, when the number of recurring students becomes excessive, the efficiency of the postgraduate system is substantially reduced (Scott *et al.*, 2007). Their analysis of the postgraduate education system revealed that of all master's students in 2005, almost two out of five (37%) were ongoing enrolments, while only one in five students were graduating during the same timespan (Scott *et al.*, 2007).

The same study revealed that on average, master's students took approximately three years to graduate (Scott *et al.*, 2007). Thus, where students are graduating with their qualifications, they are doing so in times that is equivalent to their American and European counterparts; however, the rate of graduates remains consistently low. This has increased

the burden of supervision on South African academics since more students are entering the system than leaving, placing strain on the supervisory capacity of South African institutions. Between the years 2000 and 2005, the burden of supervision increased from an average of 3.8 students to 5.2 students per supervisor in general and increased from 6.6 students to 8.5 students per academic in the Social Sciences specifically (Scott *et al.*, 2007). The increased burden of supervision does not simply pertain to the increasing numbers of students but also encompasses the complexity of the supervision relationship and the changing role of a supervisor. To understand this process better, it is necessary to examine the nature of postgraduate support systems.

2.1 Supervision of postgraduate research programmes

Both the MARC and MA Psychology programmes follow the correspondence model of student supervision. Both degree programmes use the dissertation mark as the summative indicator of whether or not the student should be awarded the degree (Unisa, 2013). It is, therefore, important to examine the supervision process and the impact that this process can have on student throughput and retention in a master's programme. With regard to supervision, the relationship between student and supervisor in postgraduate Open Distance and e-Learning (ODEL) represents the main bridge between student and institution. As such, the supervision process has evolved into a critical component in student success (Van Biljon & De Villiers, 2013). As Mapesela and Wilkinson (2005) note, the student-supervisor relationship has been redefined and can include aspects such as mentoring. Schulze (2011) identifies an additional six roles that supervisors fill during supervision: provider of functional support with the emphasis on practical advice; assurer of quality; mentor; facilitator of enculturation into the academy; critical-thinking facilitator; and in some cases, provider of emotional support. Students seeking quality research training need to access resources and expertise, have flexibility regarding choice of learning and learning conditions, secure the opportunity for engagement within a community of practice and procure the opportunities that allow access to relevant employment markets (Bitzer, 2010). Supervisors are seen as essential in assisting students to manage the complex set of demands that are placed on them when navigating viable career pathways, which adds to the overall burden of supervision (Bitzer, 2010).

The supervision process is, therefore, dependent on how each partner in the relationship approaches contact. Due to this, a mismatch in approach could have a negative impact. In addition, a lack of personal contact, particularly in the distance-learning context, could have negative influences on a student's confidence and self-efficacy. There is ample evidence that supervisors base their approach on their own, often unexamined, experiences as a research student, which may perpetuate maladaptive or ill-conceived supervisory practices (Bitzer, 2010). For instance, confusion may result from being unable to clarify in person, and repeated requests may give the feeling of failure that could impede a student's ability to be successful (Schulze, 2011). Addressing this barrier would require critical appraisals of the supervisors' interpersonal and communication skills, which would involve being open to critical feedback from peers and students on their performance as coaches, supervisors and mentors (Bitzer, 2010). Effective supervisors are, therefore, required to have not only the necessary disciplinary and technical knowledge to perform research in their discipline but also the will and capability to develop a repertoire of knowledge and understandings of the different aspects of supervisory practice (Bitzer, 2010). This reflective practice is particularly important for supervisors who are in multicultural supervision in which biases and lack of

knowledge about cultures may have negative implications for a relationship that is based on open communication and mutual respect (Schulze, 2011).

In contrast to the traditional student-supervisor relationship, Van Biljon and De Villiers (2013) highlight the multiplicity of stakeholders involved in a supervision relationship for students in the ODeL context. As mentioned earlier, the supervisor is the primary and sometimes only link between student and institution, and the supervision process is, therefore, critical to student success in this context. Supervisors in this context have to mediate or remove a number of barriers, which include the emotional and psychological barriers that students experience relative to their studies, poor English proficiency among students and students without the necessary research skills or methodological knowledge to conduct independent research (Schulze, 2011; Van Biljon & De Villiers, 2013). One of the key features of ODeL is that it aims to bridge the time and distance divide that precludes access to education by making use of a range of pedagogical approaches and technology to reach students (Tait, 2000). This is achieved at the expense of increased transactional distance between student and instructor, which results in minimal contact and in some cases, the isolation of the student from a conducive learning context or community of practice. In a study on the barriers to learning within the distance-education context, Galusha (1998) identifies a number of domains in which students need support to ensure success in ODeL. These include dispositional barriers such as insecurities about learning, fear of failure, a sense of isolation, lack of social interaction and inadequate training (*ibid.*). Infrastructural barriers include lack of access to learning materials (i.e. journal articles), technology and the internet together with its reliability and cost of connectivity. Institutional barriers include procedures and policies that do not accommodate the needs and circumstances of individual students, difficulty in the use of institutional systems and the unavailability of support services. The curriculum barriers refer to the didactic and pedagogical approaches that may exclude students on the basis of ideological assumptions about learning and knowledge that are not relevant to the student profile (Galusha, 1998; Subotzky & Prinsloo, 2011).

Addressing the multiple needs of postgraduate students, particularly within the ODeL environment, is a burden that cannot be undertaken by individual supervisors. One of the strengths of the ODeL environment is the ability to achieve economies of scale to ensure economical provision of services to students (Tait, 2000). The approach in this study, therefore, take the stance that a postgraduate supervision model that is premised on the principles of student support in ODeL would provide greater scope for supporting distance postgraduate research students.

2.2 Student support

Within the ODeL context, student support aims to assist successful learning and in this regard recognises that this entails various types of support services. Assisting students with their confidence or self-esteem would in turn support their perseverance and success (Schulze, 2011). The three crucial aspects of student support that are considered here are the cognitive, affective and systemic structures (Tait, 2003):

- Cognitive support refers to services concerning course material and formal learning support resources. These could take the form of tutorial classes and other academic support initiatives (Tait, 2000, 2003). Within the postgraduate supervision space, this would primarily refer to the supervisor as the source of support in mediating the learning between the student and knowledge repositories within the discipline.

- Affective support refers to the improvement of the study environment, which could assist in improving student commitment and self-esteem (Tait, 2000, 2003). Affective support could also include the student's emotional or social environment and the possible barriers that these could form during their development.
- Systemic support is concerned with the establishment of effective administration and information management services that are transparent and student-friendly. The purpose of systemic support is to assist students in dealing with institutional systems in such a way that persistent use of the systems is supported (Tait, 2000, 2003).

As proposed by Tait (2000), the framework that is used to develop supportive structures for students needs to consider six factors. These include the characteristics of the students, the availability of technology, the demands of the programme, the scale of the course, the management systems employed and the geographical situation and requirements of both the student and the institution (Tait, 2000).

The characteristics of the students include a variety of factors that could influence the learning structure and the methods. The factors could include the student's gender, age, employment status, disposable income, educational background, geographical location, special needs, language, ethnic and cultural characteristics, communication technology access and proficiency (Tait, 2000). Each characteristic could provide information regarding students that are successful and those that are not. This could thus provide useful information on possible risk factors or be an early warning for possible student support.

2.3 Theoretical approach

Connectivism is a theoretical framework that regards learning through the creation of networks. It maintains that students develop a network by making new connections with information sources, thereby expanding their capacity to learn (Duke, Harper & Johnston, 2013). Connectivism thus commences with individuals who gain and retain knowledge through their personal networks. By making use of these networks, individuals contribute their personal knowledge to an organisation. In turn, the organisation imparts the knowledge and experience back into the system of networks. Through the virtue of the individuals' personal connections, they are able to stay updated with the current knowledge within their field (Duke *et al.*, 2013; Downes, 2013).

A degree of openness is required by a network to allow participants to leave or return depending on their needs and to enable ideas or perspectives within the network to flow freely between participants. This provides not only an open-learning opportunity for participants but also allows individuals or groups to separate themselves from the whole. The purpose here is not to force openness or limit and exclude participants but to maximise the structures of learning in such a way that learners can choose. The purpose is not to be excluded from the whole because of barriers inherent within the structure of the course but rather to provide the freedom to make use of the various networks in the particular context needed for learning (Tschofen & Mackness, 2012).

Connectivism emphasises diversity (Downes, 2008) and makes it a priority to teach everyone to build on personal strengths and develop individual learning pathways. As such, networks should be encouraged to include diversity in terms of the participants, ideas, perspectives, experiences, insights and creativity, which could provide valuable influences towards the network as a whole (Tschofen & Mackness, 2012). Connectivism comprises

several principles that help to structure what the theory claims. According to Downes (2008), learning occurs during the course of 'connecting entities'. In order for learning to persist, these network connections have to be maintained and nurtured. However, one needs to be able to perceive the connections between concepts, fields and ideas in order to grow the network and to develop knowledge from it. This emphasises the importance of having a large capacity for new knowledge, which in return will allow access to the knowledge available in the network. Thus, the ability to recognise and make new connections would widen the network through the generation of new knowledge. This means that the making of decisions is in itself a learning process for the entire network and the individuals involved (Downes, 2008).

3. Problem statement

Given the increasing numbers of recurring students within the South African postgraduate system that increases the burden of supervision on academic staff, it becomes necessary to investigate alternative models of postgraduate support that are better able to influence student and institutional networks. It is essential to take a connectivist view of postgraduate student support in order to understand the networks that students use to support themselves through their postgraduate studies.

4. Research questions

1. Which types of support do students draw on during the course of their postgraduate studies?
2. Which sources of support outside the supervision relationship do students use during their postgraduate studies?
3. What are the levels of satisfaction reported by the students in the Unisa MARC and MA in Psychology programmes regarding the student-supervisor relationship?

5. Method

As stated earlier, the purpose of the study is to explore the support students made use of and the experience of this support during the course of their studies. The study design adopted for this purpose was a descriptive design. The data for the study was collected via an online survey. Participants for the survey about non-academic support systems were sampled from the groups of students who registered for either the MA Psychology programme or the MARC programme between 2009 and 2015. This date range provided sufficient time for students who registered in these years to complete or be close to completing their MA degree.

The data collection was conducted through Qualtrics, an online survey platform. The survey was uploaded and an anonymised link was sent via email to the study population with a total of 426 emails sent. In order to gain access to the personal email addresses of students, permission was requested from institutional ethical clearance committees. It is important to acknowledge that some of the participants contacted for this portion of the study were alumni of the programme since the details of students who had successfully completed their degrees were required. The rationale behind including students who had successfully completed the degree is that this particular participant group held valuable information regarding the additional support structures that they put in place to guide them through their master's qualifications.

The research instrument sent to students was developed using the framework proposed by Tait (2000) and covered the systemic, cognitive and emotional domains of student support

across 34 items. The cognitive domain of the instrument covered aspects such as the supervisory and technical support that students were exposed to, while the emotional aspects of the survey investigated the sources of social and emotional support used during their studies. The systemic support aspects of the instrument covered the material and financial support that students required during the course of studies. The Connectivist perspective was used to understand that these domains of support do not only originate with the supervisors, but could emanate from the networks that students have available to them. This includes resources they have built themselves over time, resources available from the institution (i.e. bursaries or software), other academic staff (within the institution or affiliated with another university), test developers or article authors, consultants, family, friends, other students, employers or co-workers. The instrument consisted of a mix of categorical information relating to the types of support received and Likert scale items rating the quality of support on a five-point scale in the various domains. Descriptive analyses were conducted to identify the patterns and trends among the respondents. The frequency counts, median or mode and standard deviation are reported for each of the domains.

6. Results

The results describe the demographic profile of respondents, the time to completion and the types and sources of support outside the supervision relationship. While the response set was relatively small ($N = 37$), the diversity in responses provided insight into the varying needs of students during the course of their master's qualifications. The supervision satisfaction, time to completion, types of support, sources of support and financial support reported by respondents are discussed in the sections below.

6.1 Demographics of respondents

In total, 37 ($N = 37$) students and graduates who were registered for one of the two Masters' programmes between 2009 and 2015 answered the online survey. Respondents who were registered for the MA in Psychology (Full Dissertation) programme ($N = 23$, $M = 41$, $SD = 9.84$) were on average older than the respondents who registered for the MARC programme ($N = 14$, $M = 34$, $SD = 8.52$).

Eight ($N = 8$) male respondents registered for the MA programme and four ($N = 4$) male respondents registered for the MARC programme. Regarding the female respondents ($N = 29$), 19 ($N = 19$) registered for the MA programme and five ($N = 5$) registered for the MARC programme. With regard to ethnicity, the results were as follows: black respondents ($N = 10$; MA: $N = 5$, MARC: $N = 5$), coloured respondents ($N = 3$; MA: $N = 2$, MARC: $N = 1$), Indian respondents ($N = 7$; MA: $N = 5$, MARC: $N = 2$) and white respondents ($N = 17$; MA: $N = 11$, MARC: $N = 6$).

6.2 Time to completion

Twenty-five respondents ($N = 25$) reported that they had completed their studies (MA: $N = 15$; MARC: $N = 10$) and 12 respondents ($N = 12$) were in progress (MA: $N = 8$; MARC: $N = 4$). Except for one MARC student, all the respondents who had not yet completed their qualifications had submitted their proposals, had gained ethical clearance and had completed data collection. Four MA respondents ($N = 4$) and three MARC respondents ($N = 3$) stated that they had completed the conclusion chapters of their studies, and two MA respondents ($N = 2$) stated that they had submitted their dissertations for examination. Respondents who had concluded

their studies reportedly took between two and seven years to complete their qualifications ($N = 25$, $M = 4.08$, $SD = 1.32$). Of these, 15 respondents were MA students ($N = 15$, $M = 4.27$, $SD = 1.49$) and ten respondents were MARC students ($N = 10$, $M = 3.8$, $SD = 1.03$).

6.3 Supervision satisfaction (likelihood of referring supervisor)

Respondents reported supervision satisfaction on a scale of 0 to 10. Thirty-four students indicated that they were more likely ($N = 34$, $M = 7.5$, $SD = 3.145$) to recommend their supervisors to other students. Respondents who had completed the MARC programme tended to rate their supervisors slightly higher in this regard ($N = 12$, $M = 7.83$, $SD = 2.21$) compared with respondents who had completed the MA degree ($N = 22$, $M = 7.32$, $SD = 3.59$).

6.4 Satisfaction with supervision support roles

Respondents answered several questions regarding their satisfaction with aspects of their supervision relationship. Overall, respondents reported to be satisfied with their supervision relationships ($N = 34$, $M = 4.05$, $SD = 1.05$). Respondents who registered for the MA programme were reported to be slightly less satisfied ($N = 22$, $M = 3.99$, $SD = 1.22$) than respondents who registered for the MARC programme ($N = 12$, $M = 4.18$, $SD = 0.66$, No response = 2). The difference in satisfaction between the two groups may be attributed to the nature of the two programmes. The MA students are less likely to have multiple channels of communication with their supervisor compared with the MARC students who have direct, physical access in addition to email communication.

6.5 Type of student support

Students reported the need for support systems outside their supervision relationships. These support systems were accessed from various sources. The total counts for the types of support needed are presented first, after which the descriptive statistics for the sources of support are provided. Due to the discrepancy in sample sizes, the support systems that the students used are reported in terms of percentages to compare the responses from MA and MARC students. In addition, students were requested to state if they made use of the same support system from multiple sources, which would provide an inflated frequency count when comparing with the number of respondents. Percentages were calculated individually by dividing the number of answers by the number of possible answers in order to gain an estimate that could be compared. These estimates were compared with the total number of answers (combining MA and MARC scores) to provide some context for the descriptive analysis. The MA and MARC scores were transformed into percentage counts against their own population (i.e. if the MA score indicated 4% of respondents, this indicated 4% of the MA respondents, not the MA and MARC combined score), whereas the total percentages provided the estimate for the total study sample.

Of the respondents, 15% reported that they made use of academic support systems outside their supervision relationships (MARC: 19%; MA: 13%). In addition, 10% of respondents reported to use additional resources (MARC: 11%; MA: 10%). Emotional support was used more often in comparison (23%). More specifically, emotional support was used by 24% of the MARC students and 23% of the MA students. Excluding the number of students who used their own funds or received bursaries (MARC: 6%; MA: 4%), 5% of respondents reported making use of funding outside their supervision relationships.

In total, 3% of respondents stated that they made use of support systems that could be classified as 'Other' (MARC: 2%; MA: 4%). Students made use of ICT / technical systems through their dissertation journey (5%). The MARC students (7%) seemed to use this resource slightly more than the MA students (3%). Almost half of the total responses indicated that the resources were not applicable to their situation (48%). It was demonstrated that 42% of the MARC students indicated that the resources were not applicable compared with 51% of the MA students.

6.6 Support sources

When considering the sources of the mentioned resources that students accessed outside their supervision relationships, test developers / authors were accessed the least, as demonstrated by 2% of all respondents (MARC: 2%; MA: 3%). Lecturers (both within and outside Unisa) were not frequently consulted (Lecturers consulted outside Unisa = 6%; lecturers consulted within Unisa = 5%). However, MA students appeared to make use of lecturers outside Unisa more often (8%) than the lecturers within Unisa (3%). Conversely, MARC students accessed lecturers outside Unisa (3%) less often than they accessed lecturers within Unisa (9%). Consultants also were not accessed frequently (5%), with the MARC students (3%) making use of this source less when compared with the MA students (7%). Employers appeared to have acted as sources of support 11% of the time, with the MARC students making use of this source (16%) comparatively more often than the MA students (9%). Colleagues followed a similar pattern in that they were reportedly accessed as sources of support (11%), with 19% of MARC students using this source, which was comparatively more often than the MA students (8%). Fellow students were also demonstrated as a source of support (12%), with MARC students (22%) using this source comparatively more often than MA students (7%). Friends were cited as a source of support (13%). Similar results were observed for the MARC students (15%) and the MA students (12%). Family was demonstrated as the largest source of support for students (22%) for both MARC students (28%) and MA students (20%). An 'Other' option was provided in the survey for students to mention any organisation or stakeholder that may have been omitted in the provided options. A single student accessed another organisation as a source of support, which represented the smallest source in the sample (1%). This translated to 2% of MA students making use of this resource since it was used for three support systems by the same student.

6.7 Financial support

Respondents reported on how they afforded living costs and their research projects. The analysis did not consider what was funded specifically but rather who was paying for some of these expenses. Thus, the scores reported for living costs were calculated as an average of five. The reason for reporting the averages was to be able to compare the MA and MARC scores. The calculation out of a possible five was because each source of funding could have been used for one or more of five possible living expenses. The research expenses were calculated out of a possible seven options.

In terms of living costs, the MA respondents reportedly made use of their own funds ($M = 1.65$) more often than the MARC respondents ($M = 1.5$). The MA respondents made use of funding from relatives ($M = 1.52$) less frequently than the MARC respondents ($M = 1.93$). Both the MA and MARC respondents demonstrated similar results regarding the use of bursary funding for living costs ($M = 0.78$ and $M = 0.64$ respectively). The MA respondents appeared to make use of their employers more often (0.70) than the MARC respondents (0.07).

With regard to research funding, the MA respondents again seemed to make use of their own funding ($M = 2.65$) more often than the MARC students ($M = 2.07$). The MA respondents reportedly made use of funding from relatives more often ($M = 1.30$) than the MARC students ($M = 0.57$). Furthermore, the MA respondents appeared to make use of the bursary less often ($M = 1.35$) than the MARC respondents ($M = 2.00$). Both the MA and MARC respondents made use of their employers comparatively equally with regard to their studies ($M = 0.57$ and $M = 0.64$ respectively). Finally, the MA respondents demonstrated that they made use of Unisa resources ($M = 0.30$) less often than the MARC students ($M = 1.21$).

7. Discussion

While both programmes operate within the ODeL context, the results of the survey show that the MARC students who are physically on the main campus of the institution for certain periods of time make greater use of institutional funding and ICT resources. The implication is that the MA Psychology students, who predominantly communicate through their supervisors, are not sufficiently connected to the broader institution and, therefore, may be unaware of the additional resources available to them. It is important to note that students were generally satisfied with the quality of the supervision received. Despite their satisfaction with supervision, the majority of the participants utilised additional sources of support to assist in the completion of their qualifications. This aligns with the argument made by Van Biljon and De Villiers (2013) about the increasing multiplicity of the supervision relationship. Thus, support needs of students exist even when supervision is taking place to the satisfaction of the student. Consequently, institutions and supervisors should take cognisance to ensure that even students who appear to be satisfied and adequately prepared still require additional support.

Another noticeable difference between the two groups is the use of peers and colleagues in supporting their studies. The MARC students make greater use of peers and colleagues in the workplace than their MA counterparts do. This difference may be attributed to the fact that the MARC students have the opportunity to build a peer network during their coursework year and enter into a professional research context for employment, thus increasing their resource network. One means of addressing the reduced peer network for the MA students could be through utilising cohort-supervision methods using an online learning platform.

In terms of the types of additional support required during postgraduate studies, emotional support appeared to be the most common need among students. Family and friends primarily filled this role for both groups. This finding aligns with the student-support model for distance education proposed by Tait (2000) who states that emotional support is a key factor in improving student retention and success. Furthermore, Galusha (1998) highlights that the emotional impact of distance study can be linked to a sense of isolation and fear/anxiety, which can be linked to failure and insecurity about learning that may manifest as anxiety in regard to receiving feedback from the supervisor. Developing peer-support mechanisms to address the emotional stress associated with feedback and to reduce the feelings of isolation could play a key role in postgraduate success in the MA Psychology programme.

Bitzer and Albertyn (2011) propose a framework for postgraduate supervision planning that encompasses the multiple roles played by supervisors. The framework covers mentoring, sponsoring, coaching and progressing the candidate as key areas for successful supervision. The framework provides a useful guideline for discussing the roles and expectations of both the student and the supervisor during the supervision process. However, the framework works

on the presumption that learning and learning support are isolated in the institutional context. Drawing on the connectivist approach to learning and the findings of the current study, we propose an alternative, complementary framework that would allow both student and supervisor to access the shared networks and thus develop a personal learning environment. The framework draws on the support needs identified within the support framework proposed by Tait (2000) and covers the cognitive, emotional and systematic support needs of students. Within the connectivist frame, the support needs of students would not remain the sole responsibility of their supervisors who are held liable for their supervision success rates. However, it would require supervisors to gain the additional ability of achieving economies of scale, thus connecting their students to relevant sources of information should there be gaps in their own ability or availability at the time. The idea is to augment the supervisors' technical skills, and content or methodological knowledge with experiences from complementary sources, alleviating their ever-growing supervision burdens.

Apart from the technical and disciplinary expertise provided by supervisors, the types of support needs reported by students in this study included emotional, financial and infrastructural needs.

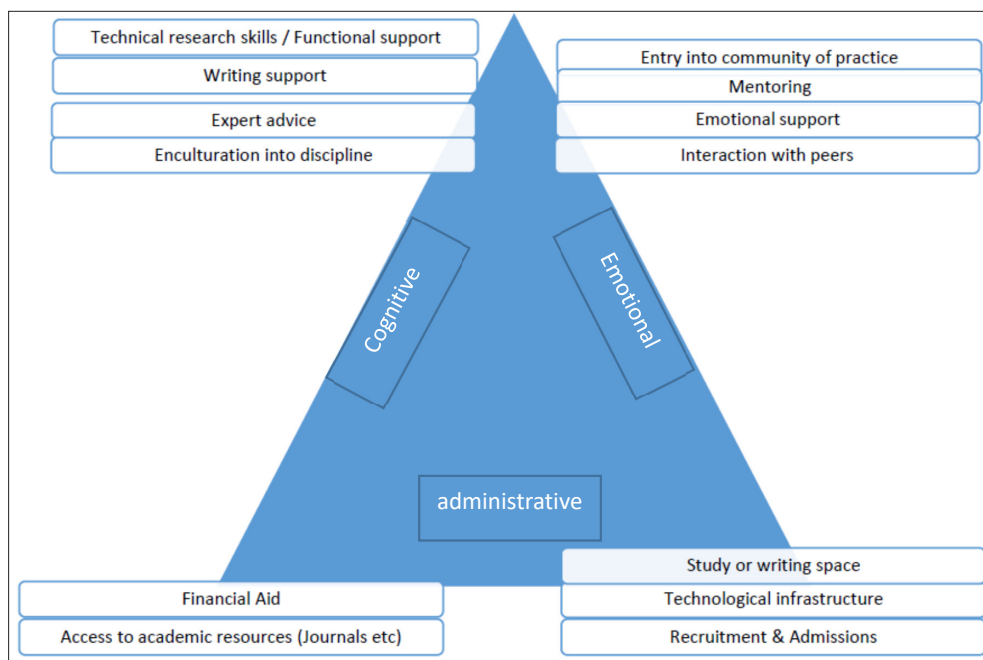


Figure 1: Framework for non-academic support outside supervision relationship

Cognitive support in this context refers to those activities that relate to facilitating the development of the technical-research skills that are required to complete the dissertation successfully. Due to the low levels of academic preparedness at undergraduate level, a number of postgraduate students enter into their qualifications with poor levels of English proficiency and lack the requisite research expertise to complete their qualifications (Van Biljon & De Villiers, 2013). Mapping out the skill-development needs of students early in the supervision process can allow students and supervisors collaboratively to identify institutional resources aimed at

addressing these gaps and hopefully improve the likelihood of completion in the prescribed time. By accessing institutional resources, supervisors can shift the burden of directed training onto systems equipped for technical training and facilitation of developmental skills while assisting students to integrate these new skills into their studies.

Postgraduate studies entail more than simply the development of a 'shopping list' of skills but denote the formation of an identity as a researcher within the discipline who is an independent, critical thinker and competent researcher (Botha, 2010). Enculturation into disciplinary practices extends beyond developing an understanding of the disciplinary academic discourses and includes inculcating an understanding of the disciplinary norms and practices that often remain undocumented and implicit. A community of practice can be viewed as collective learning within a shared domain of human endeavour in which there is commitment to a specific goal characterised by mutual engagement (Manyike, 2017). For postgraduate students, a community of practice provides a space in which students are linked to peers and experts within their disciplinary focus areas and are, therefore, enabled to learn from each other through collaboration (Manyike, 2017). By explicitly facilitating a connection between the student and a community of practice, learning can take place outside the constraints of the supervision relationship and provide students with the opportunity to access a larger network for resources and career pathways.

Emotional support emerged as one of the predominant needs among the respondents within this study, and family and friends primarily fulfilled this role. However, it should not be assumed that all students have access to a support network to fulfil this need. By acknowledging emotional support as part of the critical support required to improve resilience during the complex transformation that students undergo as they progress from knowledge consumer to knowledge producer, supervisors can ensure that access to the necessary support is available. Most higher education institutions have units dedicated to the psychosocial well-being of students at no extra cost to the individual student. At Unisa, there is a countrywide network of counsellors skilled in providing counselling and support to students during their academic journey. Typically referred to as career counselling or academic advising, these units provide key support structures for students who are isolated from the necessary emotional support received from family or friends during their postgraduate journey.

Infrastructural support comprises access to the necessary technological, financial, academic and physical resources required to conduct a postgraduate study. Mapping out the support needs of students at the material level and linking students to the institutional resources to meet these needs will provide a substantial contribution to the improvement of retention and the likelihood of success. The results of the current study showed that a number of respondents from the MA group were self-financing the costs of conducting their research as well as carrying the cost of the ICT infrastructure needed to complete their studies. This is despite the fact that the institution makes substantial provision for these services. This finding implies that the MA students are probably less informed about the network of resources available to them as part of their status as registered students when compared with their MARC counterparts who are afforded the benefit of a period of time on campus at the institution.

In closing, while the supervision relationship remains the core process through which teaching is conveyed for learning to take place during postgraduate studies, meeting the needs of postgraduate students extends well beyond the capabilities of supervisors. In this study, the results demonstrated that students have a range of needs that must be met to

ensure the successful completion of their qualifications. The respondents in this study had the necessary social and financial capital to support these needs outside the supervision relationships; however, it cannot be assumed that all students are aware and capable of meeting these needs. This study, therefore, provided a student-support framework for students in their postgraduate journey that could be used as a tool to identify the support needs and support sources, and improve the chances of retention and timely completion.

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