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The International Journal of Management Education



journal homepage: www.elsevier.com/locate/ijme

Enhancing completion rates of mini-dissertations for a professional master's degree: An integrated approach

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ARTICLE INFO

Keywords: Completion rate Perseverance Attrition Mini-dissertations Postgraduate students Support

ABSTRACT

Due to various forces of change, namely globalisation, funding, the shift to lifelong learning and the need for highly skilled employees, there is pressure on higher education institutions to produce more postgraduate students. Constraints in the higher education sector, among others a lack of sufficient and experienced supervisors and a more diverse student population, have led to concerns related to the completion rates of research projects. The higher education literature identifies various strategies to tackle the challenges associated with the failure to complete postgraduate programmes on time. The article argues that an integrated approach should be used to reduce the completion times of dissertations. It uses a case study as an exemplar of how challenges could be dealt with in an integrated way. The case, an MBA programme, consists of a coursework component and mini-dissertation (compulsory research project). Many students successfully complete the coursework component but struggle to complete the mini-dissertation. It is recommended that specific problem areas be addressed by layering support at various levels of a programme. Consideration should also be given to the most appropriate time to introduce support mechanisms without overburdening already overworked supervisors and students.

1. Introduction

The knowledge economy has led to a huge demand for higher-level skills and an emphasis on lifelong learning. Postgraduate education, especially doctorates, is seen as a way to address the need (McCallin & Nayar, 2012; Parker-Jenkins, 2016). It is evident in the increase in the growth of doctoral output. Statistics from 1998 to 2006 indicated that developed countries with an already high PhD output grew on average by 5%, while developing countries had a growth rate of 7% (Cloete, Mouton, & Sheppard, 2015). Cyranoski, Gilbert, Ledford, Nayar and Yahlia (in Cloete et al., 2015) indicate that between 1998 and 2006, the growth in doctoral output in China was 40%, Mexico 17%, India 8.5%, South Africa 6.4%, the UK 5.2% and the USA 2.5%. Although the number of doctorates in the South African context has increased in the past decade, the National Development Plan has a target of 5000 doctorates by 2030. However, in 2013, only 2051 doctorates had been delivered (Mouton, Boshoff, & James, 2015; National Planning Commission, 2012).

The increase in the number of postgraduate students has led to various challenges in the higher education sector. Internationally, higher education institutions experience insufficient resources to deal with the continuous increase in students. Political pressure and the resulting policy documents are requiring higher education institutions to be more accountable in the production of quality research outputs and to do more with less funding (McCallin & Nayar, 2012). Because student success is tied to funding from governments and external sources, this causes further tension that affects the delivery of postgraduates in higher education institutions (McCallin & Nayar, 2012; Swanepoel, 2010; Van Biljon & De Villiers, 2013).

https://doi.org/10.1016/j.ijme.2018.01.002

Received 7 June 2017; Received in revised form 26 October 2017; Accepted 2 January 2018 1472-8117/ @ 2018 Published by Elsevier Ltd.

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Globalisation has increased the mobility of students and therefore the student population at institutions has become more diverse. Apart from traditional factors like culture, diversity now extends to the students' academic background, their readiness for postgraduate studies and their personal and professional identities (Parker-Jenkins, 2016).

All of these challenges have culminated in an increase in the time it takes students to complete master's and doctoral programmes (Cohen & Greenberg, 2011; Donnelly & Fitzmaurice, 2013; Mouton et al., 2015; Wright, 2003). The massive growth in postgraduate student numbers has challenged higher education institutions in more than one respect and governments have concerns regarding the quality of the graduates that are delivered (McCallin & Nayar, 2012).

Some of the support mechanisms suggested in the literature on postgraduate supervision include alternative supervision models and strategies to meet the rising demand for supervision. However, little research on structured master's and professional programmes has been documented (Cohen, 2012). The article focuses on programme management, supervision and student engagement. It uses a case to illustrate the challenges and how they were dealt with through an integrated approach in a professional master's degree (MBA). In this particular case, implementing the strategies has enabled more students to complete their mini-dissertations (compulsory research projects) within the allocated time. The study has indicated that the challenges associated with completion times should be addressed from the various role players' perspective to achieve the desired change. It provides an overview of the obstacles to completion rates and strategies that the postgraduate supervision literature proposes to enhance timely completion. Lastly, the integrated approach followed in the specific programme is explained.

2. Challenges and strategies associated with completion rates

The higher education literature indicates that students' inability to complete programmes within set timelines is a complex issue. To obtain a more holistic picture, the challenges associated with timely completion will be discussed from the perspective of each role player, namely the student, the supervisor and the administrator (who is responsible for managing the programme). The discussion is followed by an outline of the strategies identified in the higher education literature to address the challenges. The student perspective is analysed first, providing more background about the changing student profile. It is followed by an analysis of the changing supervisory role and lastly the management of the postgraduate programme is scrutinised.

2.1. From a student perspective

Most of the students enrolled in a professional degree are working adults. Roets and Botma (2012) indicate that completion rates usually decline the older the student gets. As working adults, students do not only have their studies to focus on but are expected to juggle various other responsibilities (Alam, Alam, & Rasul, 2013). Mouton (2011) confirms the pressure on students. In this study, 39% of master's students indicated that they experienced challenges associated with personal, social and family life, while almost half (49%) of these students indicated that time constraints – balancing work and studies – contributed to their decision to discontinue their studies.

The struggle to balance conflicting responsibilities and roles puts students at risk. Studying part-time also means that there is less time for social interaction with fellow students, which may limit the support that they could provide each other. It could also mean limited time to attend additional non-course-related activities (Alam et al., 2013). Student support mechanisms should therefore be sensitive to the unique situation of adults.

Due to the lack of exposure to research in most undergraduate courses, students often have an unrealistic idea of what the postgraduate research process entails. They regard it as just another big assignment, like the structured modules that they are used to, therefore underestimating the time and commitment needed to complete a dissertation. The resultant insufficient planning makes them feel overwhelmed (Lambert, 2012; Lee, 2008). To assist with the timely completion of mini-dissertations, Lambert (2012) suggests imposing deadlines for various milestones of the research process. Students are used to deadlines and the pressure of the coursework components and this could assist students to complete their research projects.

A further challenge is the diverse academic background of students, which implies an enormous variance in students' readiness to conduct research and write academically. Zhoa (2001) proposes seminars, workshops and full-time courses to acquire basic research skills or to update research skills. Research training for students refers not only to the specific information included in traditional research methodology courses but also generic workshops on the literature review, research design, data analysis techniques and writing up of the research (McCallin & Nayar, 2012). Supervision should focus on both structure (aspects related to the management of the mini-dissertation) and support, and must be flexible enough to be individualised according to the needs of the student population (McCallin & Nayar, 2012; Zeegers & Barron, 2012). This implies analysing and meeting the needs of individual students (Zhoa, 2001).

The changing student profile demands that traditional supervision methods should be reconsidered. The following section focuses on the challenges that supervisors face.

2.2. From a supervisor perspective

The student's relationship with the supervisor is one of the most important aspects of successfully completing a research project (McCallin & Nayar, 2012). The nature of the supervisory relationship has changed over the years. Supervisors now have to play different roles (McCallin & Nayar, 2012; Parker-Jenkins, 2016), because the traditional supervisory role no longer meets the expectations of students. Students expect supervisors to be advisers, coaches, mentors, guides and quality controllers. These

expectations put additional pressure on supervisors, not only in terms of time, but also in terms of the competencies needed to supervise students.

In practice, no single supervisor can fulfil all these roles to meet student expectations (McCallin & Nayar, 2012). The traditional one-to-one supervision relationship should therefore be reconsidered. While some researchers still try to address shortcomings with a one-to-one model, others have moved away toward a more collaborative approach (Harrison & Grant, 2015). Allocating more than one supervisor to a student could decrease the supervision load, but receiving advice from different supervisors could lead to confusion among students (Harrison & Grant, 2015).

The individual supervisory styles of supervisors exacerbate the confusion among students. Supervisors vary in the amount of information they share. While some supervisors give detailed feedback (hands-on approach), others leave problems to the students, expecting them to figure things out themselves and assuming that they have experience in research (hands-off approach) (McCallin & Nayar, 2012). Students often feel isolated during the research process and when they discuss their research with peers or alumni, they become even more confused due to the variety of opinions (Nordentoft, Thomsen, & Wichmann-Hansen, 2013).

While supervisors' styles are different, just as various lecturers have different teaching styles or preferences, the literature indicates that research supervision is a specialised academic skill and can seldom be fully outsourced to practitioners in the field (McCallin & Nayar, 2012). Swanepoel (2010:136) points out that it has become more and more difficult "to obtain and retain academics of quality". McCallin and Nayar (2012) state that there is a need for faculty development in supervision. Faculty members must be made aware of developments in the field of supervision, especially the support mechanisms that could be utilised and are available in the institution. However, the development of faculty goes beyond training in supervision. It includes creating awareness of political, economic and pedagogical demands and how higher education is responding to them, as well as the implications of these responses for supervisory policies and practices.

Peer support is another significant factor that can assist students to complete their research. The newer supervision models emphasise peer interaction as a support component, mostly through communities of practice. The community of practice focuses on the support that students provide to each other, through the mediation of a facilitator. Such support usually helps to induct students in the academic context, provides social support, alleviates feelings of isolation and transforms knowledge through peer interaction (Donnelly & Fitzmaurice, 2013; Zeegers & Barron, 2012).

Due to the changing expectations and the wide skill set that is required from a modern-day supervisor, all the available resources and infrastructure of an institution must be mobilised to address the needs of individual students. Examples include counselling services, creating social groups in which students can support each other and regular communication on workshops presented by other entities of the institution, like postgraduate schools, language centres and library services. Each department should develop a supervision model and support system within their specific institutional environment that is acceptable to all supervisors to ensure their buy-in (Parker-Jenkins, 2016:12). These mechanisms should be incorporated as a formal, structured part of the programme. The next section focuses on programme management challenges from an administrator's perspective.

2.3. From a programme management perspective

Managing an academic programme is a complex process and involves balancing various factors (McCallin & Nayar, 2012). These factors include taking into account and implementing institutional requirements in the form of policies and processes, ensuring that administrative support is efficient, mobilising support mechanisms for students, ensuring faculty readiness for the changing environment and managing the faculty workload, as well as the design and delivery of the programme (Aversa & McCall, 2013; McCallin & Nayar, 2012).

Given all these demands on administrators, Mouton et al. (2015) warn against creating a compliance culture that just wants to get students through the system. Mouton et al. suggest an analysis of the student profile and ensuring that the resources available in the programme and institution are in place to support postgraduate students.

The design of an academic programme can influence the success rate of students (McCallin & Nayar, 2012). The programme design should keep in mind the requirements of various quality assurance bodies and competitors. Not all challenges can be solved during the supervision process; identifying issues that can be addressed earlier in the programme can contribute to alleviating the pressure on both supervisor and student during the dissertation phase. Support measures that are already available in the programme, like administrative support, could be further extended based on students' feedback (Aversa & McCall, 2013).

Programme managers have to deal with staff shortages together with the increase in student numbers, an ageing workforce (the average age of a South African academic is 59 years) and inexperienced younger supervisors (McCallin & Nayar, 2012; Sonn, 2016). Younger, inexperienced supervisors usually work as co-supervisors and are mentored and coached by senior supervisors. This creates additional pressure on experienced supervisors and limits their capacity for supervising students. Mouton et al. (2015) report that in a study in the South African context, a third of supervisors indicated that they felt they did not give sufficient attention to students. Programme managers must give careful consideration to the current workload of supervisors, to ensure that supervisors have enough time to assist students with their dissertations (Schulze, 2012).

Furthermore, supervisors at some institutions tend to prefer to supervise full dissertations rather than mini-dissertations, because mini-dissertations are not compensated or taken into account for work division or promotion opportunities. Swanepoel (2010) indicates that the amount of work that goes into a mini-dissertation is equal to the input for a full dissertation. Administrators must therefore manage performance indicators together with the capacity and workload division of faculty.

This section discussed the lack of timely completion from the perspective of the student, supervisor and administrators. Strategies suggested in the literature to address some of the challenges were indicated. The next section presents the case study in which an integrated approach was used to solve the challenge of the low completion rates of mini-dissertations.

3. An integrated approach to enhancing completion rates of mini-dissertations

Zeegers and Barron (2012) caution against listing problems and suggesting solutions in a "self-help book fashion". They argue for a multiplicity of pedagogies, which includes content, teaching, student learning and the context of learning. Regarding strategies to improve the completion rates of research, Wisker (2013:208) cautions against "quick fixes or temporary solutions", instead recommending strategies that are "developments in the context of sustainability".

Therefore, a multidimensional approach to deal with challenges at various levels should be considered. To identify sustainable strategies, one should think wider than the student and supervisor, although they would still form the foundation of the strategies (McCallin & Nayar, 2012). The following section provides a practical illustration of the way various strategies can be applied to the issue at different levels.

3.1. Background to the professional master's degree

In a business school environment, students enroll for an MBA, which is classified as a professional master's degree in South Africa. A professional master's consists of a coursework and a research component. A research project is not compulsory in some international MBA programmes. However, in the South African environment, the MBA must include either a research or a technical project in addition to the coursework modules (CHE, 2014). With a PhD programme in mind, MBA students in the particular business school reported on in this article had to complete a research project, known in this context as a mini-dissertation. The admission requirements of the programme included that students must be at least 25 years of age and have at least three years of managerial work experience. Furthermore, the degree was only presented on a part-time basis, implying that all the students were working adults. The average enrolment age of students between 2012 and 2016 was 36 years; three-quarters of the students were male. One out of five students were from neighbouring African countries.

In this particular MBA programme, students completed the coursework component of the programme, but the administrators noticed that they were taking longer to complete the mini-dissertations. A gradual decline in the completion rate of mini-dissertations within the expected time frame was reported. This trend negatively affected the programme's graduation rate. Rockinson-Szapkiw and Spaulding (2014) indicate a global doctoral graduation rate of 50%, while Rochford (in Swanepoel, 2010) claims that only a quarter of students who start a master's dissertation under supervision will complete it. Moreover, these completion rates do not necessarily mean that students have completed the programme in the prescribed time. Most students take longer than the prescribed time frame to complete qualifications. The graduation rate in South Africa is even worse, with Sonn (2016) indicating a graduation rate of 20% for master's graduates and 12% for doctoral graduates. The university of which the business school forms part has a master's completion rate of 26% (IRR, 2016), which is 6% above the national average but still does not meet the benchmark graduation target of 33% as set out in the National Plan for Higher Education of 2001 (HESA, 2014).

Although some of the support systems identified in the literature, such as an academic language expert and a statistician, and access to online databases, were available to students, they were not utilising them. In the coursework component, students received assignments with deadlines, and they usually did not struggle to complete the coursework components on time. However, they struggled to make progress with the mini-dissertation. Most MBA students do not enroll to become researchers, but to increase their knowledge and competencies related to management, or to enhance promotion opportunities for management positions. Few MBA students are enthusiastic about the prospect of completing a mini-dissertation, and for some, this lack of enthusiasm compromises their likelihood of graduating (Morrison, 2013). Lambert (2012), working in a similar context, attributed the main reason for the decline to the fact that students entered the MBA programme from various undergraduate disciplines, with varying levels of exposure to research methods and practical research experience. In addition, students' academic writing skills differ. Lambert (2012) indicates the timing of identifying the topic of the mini-dissertation as another factor that contributes to the failure to complete.

Alam et al. (2013:875) point out that "the success and quality of postgraduate education largely depends on effective and efficient supervision of postgraduate students". In this case study, while the supervision relationship was still valued and regarded as the major determinant of success, additional layers of support were introduced. The introduction of the various support strategies was carefully timed.

3.2. Strategies to enhance completion rates

Fig. 1 provides a summary of the strategies that were introduced. There were two main groups, those implemented before registration for the mini-dissertation, and those implemented during the registration period of the mini-dissertation. The pre-registration strategies focused on programme management, while the registration strategies implemented during registration were aimed at strengthening the supervision model (to support the supervisors) and changing student behaviour (to support students to complete).

3.2.1. Changes at programme level

As indicated in Fig. 1, two strategies were implemented in the MBA programme while students were registered for the coursework

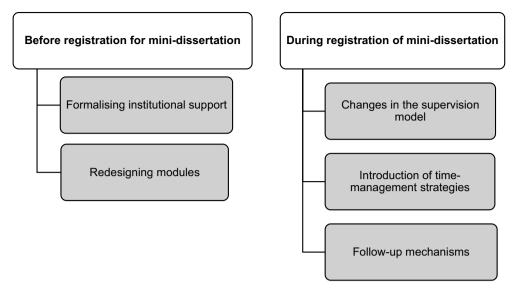


Fig. 1. Summary of strategies that were introduced.

component (before registration for the mini-dissertation), namely formalising institutional support and redesigning some modules.

3.2.1.1. Formalising institutional support. The support systems already available in the institution were optimised and both students and supervisors made aware of them. To emphasise the importance of these support mechanisms to students, short workshops were included in contact sessions in the compulsory course, Business Research Methods. For example, the librarian presented a short one-hour workshop on how to access electronic resources from home, and how to search for credible information. During another contact session, the statistician presented a four-hour workshop on quantitative research, and another on qualitative research. Students' academic writing was assessed as part of the assessment of the proposal and an academic writing expert presented a workshop on key issues. This expert was available to help students throughout their studies. To further highlight the importance of academic language, a proportion of their final mark for the Business Research Methods course was for academic writing. By incorporating institutional support in the coursework modules in a more formal way, the importance of the support was emphasised. When work on the actual dissertation started, students were already familiar with the support mechanisms and could use them optimally.

3.2.1.2. Redesigning modules that could assist in laying the foundation for the mini-dissertation. The students enrolled for the minidissertation during the last year of the MBA programme. To help them to identify a topic well in advance, they had to enroll for Business Research Methods in their first year of study. During the first contact session of this module, they were requested to identify possible topics related to their workplace and academic interests within the framework of the MBA curriculum. They were assisted in identifying suitable topics. During the second contact session, students had to present their chosen topics to the class for assessment and were guided in terms of the feasibility of the topics. The final assessment of the module was the research proposal. Instead of using fictitious cases, students were encouraged to use the Business Research Methods course to compile their research proposal for the mini-dissertation based on an actual business situation. Although students could still change their topics before starting work on the mini-dissertation, they were strongly advised to use the topic identified at the start of the course.

Based on their proposals, students could ask to work with a specific supervisor, or a supervisor would be allocated to a student for their mini-dissertation. The supervisor took this initial proposal and refined it further. In this way, students received continuous support in developing the proposals. The research methodology workshops were also more relevant and applicable because the students had to assimilate the information and identify the best methodology for their specific study.

The above-mentioned interventions took place in the coursework phase, before the students registered for the mini-dissertation. When the students registered for the mini-dissertation, additional strategies were introduced at supervisor and student level.

3.2.2. Changes made at supervisor and student level

Three strategies were implemented that were aimed at supporting students while registered for the mini-dissertation. The first strategy targeted the supervision model, while the other two provided support that simulated elements of the coursework component.

3.2.2.1. Changes in the supervision model. Management preferred a one-to-one supervision model for reasons of accountability and workload division. However, cohort supervision was introduced to provide another layer of support to enhance the work of the supervisor and to avoid repetition of the same information by supervisors. In cohort supervision, students who started at the same time were taught together as they progressed through the academic programme. The advantage of this approach is that it supports both supervisor and student (Van Biljon & De Villiers, 2013). The supervisor is still the subject expert and makes the final decisions

regarding the structure of the mini-dissertation, but the cohort supervision saves time for individual supervisors by providing additional support to the students.

During the cohort supervision sessions, all students received the same generic information on what was expected in the various chapters. Five workshops were presented, outlining to students what was expected at the various stages of the research process. These sessions were used to motivate students and to provide information on the process. They also filled the gaps for students paired with supervisors who had a more hands-off approach. Students felt that the same information was shared with everyone. The workshops were presented by two supervisors who used a team teaching model so that students could get a sense of the variety of approaches to conducting research. A further advantage of the workshops was that it created social support among the students. Not only did they discuss the areas that they struggled with, but they also encouraged each other and did not feel as isolated as when they worked alone with their supervisor.

3.2.2.2. Time management strategies. To enable the students to complete the mini-dissertation on time, it was broken down in smaller milestones. Most of the students followed the traditional research model when writing up their research and the chapters of the mini-dissertation were therefore used to create milestones. Students had to submit certain chapters at certain due dates throughout the year. A number of draft versions of the chapters had to be submitted to supervisors for feedback before the due dates. To further emphasise the importance of the due dates, rules were introduced. If students did not submit on the due dates, they could not continue with the mini-dissertation for that year. In order to ensure that all students were informed of this, a guideline document was compiled and presented to all students when they registered for the mini-dissertation. The timeline could be used by individual supervisors as a starting point to clarify expectations, and it assisted with the development of a research time frame and action plan (Zhoa, 2001).

3.2.2.3. Follow-up mechanisms. To ensure that all students received feedback from their individual supervisors on a certain date, the supervisors also received set dates when marks for the individual chapters (different milestones) had to be provided to the administrative office. Administrative support staff used these marks to monitor student progress and follow up with supervisors if students did not submit. The supervisors could use their discretion to grant an extension to a student who had made progress but for some reason could not submit on time. However, the final submission date for the completed mini-dissertation was non-negotiable as it was a date set by the institution.

The implementation of the strategies as part of an integrated approach was monitored from its inception. The integrated approach was introduced in 2014 and resulted in an increase in timely completion, from an average completion rate of 43.9% for 2011–2013 to 81% for 2014–2016 (in the prescribed time of 1 year). Table 1 indicates the completion rate of mini-dissertations in the MBA programme between 2011 and 2016.

4. Conclusion

Enrolment in postgraduate studies has increased significantly and has led to challenges associated with the completion rate of dissertations. The literature identifies a wide range of strategies to deal with these challenges. Because the factors influencing the completion rates of adult students are multidimensional, the support strategies must also address these factors from different perspectives.

The article uses a case as an exemplar to indicate how challenges associated with the low completion rate of mini-dissertations could be addressed with the integration of various strategies.

The most important aspect of the completion of a dissertation is the student's relationship with their supervisor, which should therefore remain central. The one-to-one supervision relationship can be enriched by several layers of support strategies, ranging from programme to institutional support. Careful consideration should be given to the most appropriate time to introduce the support mechanisms. In the case of a structured programme, some strategies should be introduced even before the dissertation stage.

There is no one-size-fits-all strategy that could eliminate the challenges associated with completion rates. However, the layering and timing of strategies, and optimising what already exists in the various entities of an institution, can assist in creating an integrated support approach to a specific programme.

Further research could specifically correlate biographical factors with completion rates and explore the utilisation of the online

	2011	2012	2013	2014	2015	2016
1 year	53.3	35.5	42.9	77.5	77.6	88
2 years	80.0	74.2	67.2	85.0	79.3	
3 years	93.3	93.6	72.9			
4 years	100	100				
Fail			8.6	12.5	5.2	3
No completion			18.5	2.5	15.5	9
N	30	31	70	40	58	34

Table 1Completion rates of the mini-dissertation in percentages.

environment to create communities of practice. This will enhance peer support without putting more time pressure on supervisors and students.

The case indicates that a custom-made approach to the challenges of the programme could lead to positive results. The issue of completion rates is multifaceted and needs to be handled in a multifaceted yet integrated approach.

Disclosure statement

The research received no funding from public or private sector bodies, and there are no financial or other conflicts of interest associated with it.

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