

Corrective Measures for Mitigating Doctoral Attrition in a Kenyan Public University: Voices of Recent Graduates

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Abstract

This article documents the experiences and perceptions of doctoral graduates on doctoral attrition and discusses a university's corrective measures in mitigating doctoral attrition in Kenya. The study was conducted using virtual individual interviews with seven recently graduated doctoral students (five women and two men) from Kenya. Analysis of the data revealed that doctoral students attributed unmet expectations and supervisory relationship to low doctoral completion rate, and believed the university's corrective measures needed to be improved to increase the doctoral graduation rate. This study recommended that the university: a) provide potential and current students with the information necessary to succeed; b) facilitate positive student-faculty relations, and c) promote student cohesiveness in the programs.

Keywords: Attrition, corrective measures, Kenya, policy, supervisory-relationship, recommendations

INTRODUCTION

Completion of a doctoral degree represents an individual's progress and a country's prosperity. At the individual level, enrolling and completing a doctoral degree increases the chances of getting a better job and an opportunity for self-actualization (Brill et al., 2014; Haynes, 2008; Rigler et al., 2017). Thus, holders of doctoral degrees contribute to societal sustainable development, especially in Kenya (Odhiambo, 2018). Despite the growing societal and individual benefits, doctoral program attrition is a global problem (Allum et al., 2014). For example, Lovitts (2001) considered attrition a loss to a society's scientific or social advancement and a risk to the "existence of doctoral programs and the faculty who teach them" (p. 3). Lovitts (2001) further noted that non-completers suffer from psychological stress, massive debt, and limited career choices. Consequently, the failure of Ph.D. students to graduate is a zero return on investment and an immense waste for an individual, the institution, and the national resources (Smallwood, 2004). It is, therefore, a concern that Kenya's doctoral graduation rates remain low compared to other countries like Canada, United States, and South Africa (Sowell et al., 2008; Tamburri, 2013; Matheka et al., 2020a, 2020b; Mukhwana et al., 2017).

Increasingly, doctoral attrition has gained the attention of researchers globally as institutions seek understanding of the factors that cause attrition and ways of developing corrective measures to demonstrate continuous improvement (Devos et al., 2017; Levitch & Shaw, 2014; Matheka et al., 2020a, 2020b; Rockinson-Szapkiw et al., 2014). Several qualitative studies have recommended students' integration and socialization into the university as a corrective measure to address doctoral attrition (Devos et al., 2017; O'Meara et al., 2013). Researchers, like Devos et al.

(2017), Jones (2013), and Rigler et al. (2017), have emphasized the significance of supportive human relationships (faculty-student relationship, program culture or environment, and level of cohort/collegial support) in determining the outcome of doctoral experience. Particularly, doctoral students have attributed isolation, disappointment with advising, and a lack of conducive departmental climate to doctoral degree attrition (Rigler et al., 2017). Tinto (1997) argued that the quality of faculty guidance and interaction contributes to a shift in program culture that can determine how students progress in their degree program. However, many of the approaches for improving completion rates are piecemeal in nature, targeting a single aspect of doctoral education. More so, what these studies have failed to consider while addressing attrition is that different regions differ on circumstances leading to doctoral attrition and retention, affecting policymaking and implementation.

As an area of study, doctoral attrition is highly complex, due to the lack of systematic data collection and to earlier, questioned research findings on causal factors. In Kenya, the continued awareness of doctoral attrition has seen many institutions of higher learning and departments try to implement programs and reverse attrition. Efforts to establish a doctoral completion rate have been difficult, due to universities' failure to monitor and document graduation time (Matheka et al., 2020a). Lack of sufficient information can hinder decisions and policymaking aimed at increasing graduation rates in doctoral programs. For example, Mukhwana et al. (2016) noted that Kenya lacked a national policy on postgraduate training, leading to few guidelines “on budgeting, students’ loans, admissions and priorities on programs and research” (p. 4). However, Kenyan universities have made efforts to improve the process and,

... benchmark best practices from selected countries in Africa, Europe, Asia, and America. Emphasis was placed on applicability in the Kenyan context. The identified practices inform[ed] the development of the Kenya policy with a view to learning from others to ensure that the policy’s desired outcomes are met (Mukhwana et al., 2016, p. 3).

Mukhwana et al. (2017) opined that “The basis of any policy development is to first have a thorough understanding of the current situation, the challenges faced, successes experienced as well as opinions of those who are engaged in the activity” (p. 2); thus, the need to design data-driven policies to address Kenya-based doctoral completion and attrition phenomenon.

In reviewing literature for this study, the following themes emerged: a) funding and its effects on higher education in Kenya; b) state of doctoral education in Kenya; and c) current national and institutional policies (i.e., best practices) to improve doctoral education in Kenya.

Funding and its effects on Higher Education in Kenya

As with other Sub-Saharan African universities, Kenya’s universities struggle with inadequate financing, unmet demands, and weak institutions (Stromquist, 2017). Over the past decade, the operating costs for public universities in Kenya have risen, but government support has declined or flattened (Michubu et al., 2017), making it difficult to meet the demands of the soaring student population. Higher education funding has been ignored at the expense of elementary and secondary education due to the government’s belief that there is no empirical evidence of higher education’s impact on poverty eradication and economic growth (Odhiambo, 2018). Uetela (2017; as cited in Odhiambo, 2018) noted that investment in higher education in Africa has been considered a serious burden to African countries.

Financing Kenya’s university education is a challenge, given the low and diminishing budget allocation and the government’s struggle to maintain public infrastructure, security, and

support for the country's youthful population. Further, there is little or no input from the private sector, and the cost of providing university education and research is skyrocketing (Odhiambo, 2018). Inadequate financial support has continued to undermine the universities' ability to offer quality education and training (Aduda, 2016; Odhiambo, 2018).

In addition to financial issues, university education has experienced other serious challenges, such as the inability to sustain academic staff, which has resulted in poor service delivery, as many lecturers are not properly qualified. The mismatch between the number of qualified faculty and the rapid growth of higher education in Kenya has raised questions of the "ability of Kenya's universities to produce the kind of graduates who can drive the country forward" (Odhiambo, 2018, p. 192). The quality and relevance of university education in Kenya is at risk (Odhiambo, 2011) and if unaddressed, Kenyan public universities will fail to generate education and research and contribute to social, cultural, and economic development in the country.

State of doctoral education in Kenya

Many public universities in Kenya offer Ph.D. programs initiated by departments in different schools and approved by the university senate and management (Barasa & Omulando, 2018). Ideally, most programs depend on the current gaps in the doctoral programs, demand from students and faculty, availability of qualified teaching staff, and a response to the stakeholders' needs (Barasa & Omulando, 2018). The recent increase in Ph.D. programs has seen a growth in student enrollment; however, the continued increase in enrollment has overstretched instructors to their limit (Commission for University Education [CUE], 2018; Matheka et al., 2020a, 2020b). Barasa and Omulando (2018) reported a lack of qualified faculty to effectively sustain Ph.D. education and research in Kenyan universities. To give students value for their money, universities require qualified individuals to provide quality administrative, teaching, research, and outreach duties (Barasa & Omulando, 2018; Sifuna, 2010). Nonetheless, Mukhwana et al. (2016) noted that "universities are not allocating adequate resources to the development of postgraduate programs" (p. 4).

The current inadequacy of qualified faculty has also created a dire need to build Ph.D. capacity in higher education. Thus, many departments are under pressure to ensure that all faculty hold a Ph.D., which can boost internal capacity and help initiate new programs (Barasa & Omulando 2018). The ability of Kenya to address persistent deficiencies in universities' postgraduate training and research and produce over 10,000 doctoral graduates annually is uncertain. The CUE directive calling for all university academic staff to be Ph.D. holders by 2019 (CUE, 2014) was not met. The doctoral completion rate in Kenya's public universities is estimated at 11% (Barasa & Omulando, 2018), producing fewer than 7,000 Ph.D. holders annually (Nganga, 2019). This shortage validates Matheka et al.'s (2020a, 2020b) call for public universities in Kenya to produce more Ph.D. holders.

Kenyan universities experience low enrollment numbers, inadequate preparation and supervision of graduates, and low graduation rates at the Ph.D. level, which leads to fewer graduates to meet national needs (Mukhwana et al., 2016). Furthermore, Barasa and Omulando (2018) reported that doctoral students in Kenya take a longer time to graduate due to personal challenges (for example, work circumstances, funding constraints, part-time teaching, and family commitments). Matheka et al. (2020b) differed with Barasa and Omulando (2018) on why Kenyan doctoral students drop out or take longer to graduate. They used secondary data on students'

background and program characteristics (i.e., age, nationality, gender, financial support, and marital status) from 21 universities offering Ph.D. programs. This research established that while the nature of the program determined students' success, their background had no significant effect on their success.

Further, in a cross-sectional study involving 628 Ph.D. students enrolled between 2010 and 2018, Matheka et al. (2020b) explored the relationship between motivation and self-efficacy and Ph.D. student success. The researchers found no relationship between extrinsic motivation and students' pace, while intrinsic motivation positively predicted the students' pace. Additionally, they argued that self-efficacy did not have a positive and significant relationship with the students' pace and success. However, age affected their pace, with younger students completing their programs faster than older ones. They concluded that "gender, financial support, and mode of the study were not significant predictors of students' pace" (Matheka et al., 2020b, p. 126). To improve the Ph.D. education system in Kenya, researchers recommended that universities monitor and track the students' progress and generate strategies to mitigate factors considered detrimental to their success.

Current national and institutional policies to improve doctoral education in Kenya

The CUE was established through an Act of Parliament (Universities Act No. 42 of 2012) to help universities with their weak regulatory framework. The CUE used a peer-review approach to work with universities and formulate policies (i.e., regulations, standards, and guidelines) to address aspects of Kenya's university education (Mukhwana et al., 2017). While best practices were suggested, issues continue to remain, as follows:

Access and equity: The government provides financial support through the Higher Education Loans Board (HELB) to ensure that students can access university education. Universities have also introduced Open, Distance, and E-Learning (ODEL) programs to provide more study opportunities for prospective students. Improved access has led to the higher enrollment of students, creating competition for limited physical and academic facilities, compromising the quality of skills required in the job market.

Quality and relevance: To ensure the quality and relevance of university education, CUE recommended improving the teaching staff by hiring Ph.D. holders only for faculty positions. However, universities have not overcome quality compliance challenges (Odhiambo, 2018). Although CUE has put in place internal and external quality assurance structures, the "culture for this is still largely missing" (Mukhwana et al., 2017, p. 345). For example, CUE canceled five fraudulent doctoral degrees for Ph.D. students who had studied only for six months before receiving their doctorates in a Kenyan university (Wanzala, 2016). The fraud is an indicator of the compromised quality education and training of university education in Kenya.

Postgraduate training and professional development: Most Ph.D. students are self-funded. Those employed by the university receive funding and scholarships (Barasa & Omulando, 2018). Other sources may include HELB and employer-related funding; however, many of those who enroll do not graduate. In many institutions, doctoral students can enhance their teaching skills through teaching undergraduate courses. Furthermore, they are exposed to research techniques and methodologies through workshops and seminars. However, Mukhwana et al. (2016) noted that these opportunities are available only to tutorial fellows and graduate assistants.

Supervision and communication: Ph.D. students in Kenya have little input in selecting their supervisors (advisors), as it is determined by their departments. Mukhwana et al. (2016) noted that supervisors must sometimes deal with unfamiliar research topics and an increased workload. For example, some supervisors also have administrative duties, making their supervision workload much higher. Doctoral students require information, guidance, and clear strategy from the graduate school and their advisors to complete their degree programs with minimal stress. While universities have policies and regulations guiding postgraduate student training and research, they are often inaccessible to students and staff (Mukhwana et al., 2016).

Monitoring student progress: University graduate schools require supervisors to give regular update reports on their Ph.D. students' progress. Unfortunately, these reports are not always presented, making it difficult for the school to provide support due to scanty data (Mukhwana et al., 2016). Despite the aforementioned challenges, new institutional policies requiring each university to account for the progress of its doctoral students have helped lower the time to graduation (Barasa & Omulando, 2018).

Research gap and current study

The literature reviewed for this study addresses the challenges that Kenyan universities experience as they endeavor to provide quality and accessible doctoral education. Some of the challenges include: inadequate financing, unmet student demands, and weak institutions (Stromquist, 2017); rising operating costs (Michubu et al., 2017); rising enrollment and lack of qualified teaching staff (Mukhwana et al., 2016); and missing quality assurance culture (Odhiambo, 2018). However, only a few studies advocated for strategies to mitigate factors that hinder students' progress and success in Kenyan universities (Matheka et al., 2020a, 2020b). While doctoral degree attrition rates are a topic studied globally, there are few accounts from Kenya on the voices of recently completed doctoral students and how their perceptions can inform policymaking. This study, therefore, aims to draw on a dataset generated from seven recent doctoral graduates to make recommendations that may give insights in designing policies to help mitigate attrition and low graduation rates in Kenyan public universities.

In this study, we draw on a dataset generated from recently graduated doctoral students to offer insights into the students' perceptions and experiences. Next, we discuss them in the light of student integration as a corrective measure to address the low graduation rates in a Kenyan public university. By placing the analytical focus on former doctoral students with earned degrees, we argue that, although the graduation rates are low in Kenya, there are ways to address this issue. Understanding the causes of doctoral students' attrition can benefit the various sectors of society and provide educators with evidence-based recommendations for future improvement. This study aimed to answer the following research questions: a) What are the experiences and perceptions of recently graduated students towards their doctoral education? and b) What would the recently graduated students consider as corrective measures to doctoral attrition in Kenya?

METHODOLOGY

Kenyatta University is a research-based institution in Nairobi County and offers undergraduate and graduate education programs; however, its doctoral education is structured by colleges and departments. The university has an annual enrollment of over 1,000 doctoral and professional students. The Department of Special Education, where this study was conducted, is the pioneer

of special education at the university level in Kenya and started offering courses in 1995. The department offers majors in education for learners with disabilities and courses in eight areas of specialization (emotional and behavioral disorders, speech and language pathology, physical disabilities and other health impairments, emotional and behavioral disorders, mental retardation, gifted and talented, learning disabilities, and hearing impairment). The programs attract many students pursuing competitive doctoral programs in Special Needs Education offered through full-time/regular, open-learning, part-time, and school-based modes. The students engage in dissertation research to demonstrate their ability to conduct independent research on a discipline-related topic. The faculty members are obligated to guide doctoral students through their coursework, examination, and research during their doctoral program. Although the Ph.D. degree in special education program is four years, most doctoral students in this university take between five to ten years to complete their terminal degrees.

Participants: After gaining Institutional Review Board (IRB) approval to conduct the study, we used criterion and snowball sampling to find participants. Participants were chosen intentionally with an effort to find those who could provide significant information regarding attrition, persistence, and university best practices. The former doctoral student participants were required to have completed their doctoral degrees within five years of their enrollment. All seven participants (five women and two men) agreed to participate by signing a consent form.

Data sources and analysis: The interviews took place in Summer 2020, with seven former doctoral students in the College of Education, Department of Special Education at a flagship university in Kenya. To comply with COVID-19 pandemic preventive measures, such as social distancing and self-isolation (Ngumbi, 2020; Mustafa, 2020), we conducted virtual interviews using Zoom. We used a loosely (semi) structured interview protocol to allow participants to diverge from the main topics and to further explore concepts and ideas. Interview questions targeted participants' experiences throughout their programs, including the time of admission through the dissertation experience. The virtual interviews lasted for 45–60 minutes and were audio-taped and later transcribed verbatim.

We analyzed the data using the constant comparative method that allowed data collection and analysis to occur simultaneously (Glaser, 1978). After completing an interview with each participant, we transcribed the interview verbatim, then read the entire transcript several times to make sense of the interview (Creswell, 2018). Due to the volume of the interview data, we used computer software for data analysis-NVivo 12 to analyze the collected data. NVivo computer software has a sophisticated code that retrieves functions and modeling capabilities to help manage large data. Using the computer software, we were able to link and map related data, thus, managing and speeding the data analysis in four steps. First, we uploaded the transcribed interviews into the software and sorted them into nodes (collection of references about a specific theme or person) based on each participant and interview question. Second, we used NVivo (verbatim) coding where we identified keywords and phrases spoken by the participants and related to doctoral experiences and their frequency using word cloud: a visualizing text method. We highlighted these words and phrases using different colors. Third, we categorized the different phrases and words (merging the codes) and linked related categories into initial themes. Finally, we consolidated the emerging topics into overarching themes. To realize trustworthiness, we used member checking (Creswell, 2018) where several participants were sent copies of the interview synopsis to verify the emerging themes.

RESULTS

In reviewing the data collected for this study, the following key themes emerged: a) what students considered causes of attrition or delayed completion; b) what students considered the university's best practices, and c) gaps in the university's best practices.

What students considered causes of attrition or delayed completion

Unmet expectations: Some students dropped out of the education doctoral program because it was wrong for them, or they had unmet expectations. In one case, a participant informed us that a student dropped out of the Ph.D. program for a master's course to secure employment at the university as a lecturer. According to the participant, the student felt that the Ph.D. in education "was not moving in that direction. So, she opted to take a master's in her area of specialization because she felt that that would give her that opening" (Personal communication, June 9, 2020). A mismatch between a student's goals for enrolling in a program can lead to dropping out:

So, I would say [basing my argument on her feelings], that openings for doctoral students could be an issue that is making people drop out or lag. That is, if their interests in taking the program are not met, they will drop out. (Personal communication, June 14, 2020)

Unhealthy supervisory relationship: Participants linked murky supervisory relationships to students dropping out or delayed completion. For example, an unhealthy relationship between a student and her supervisor led her to drop out of the program at the concept level. The student reportedly claimed that "she had requested to have her supervisor changed as the supervisor kept on telling her that the work is lost, the work is lost. So finally, she sort of gave it up" (Personal communication, June 9, 2020). The supervisory relationship with this particular student was marred by lack of trust, especially with her dissertation drafts. According to most participants, students who lag or dropout of their programs mistrust their supervisors for losing or not reading their works. One participant noted, "Why would the supervisor be losing my work all the time? If I do not trust that the supervisor read my work, I am not able to move along. And that would come from the kind of comments, you know, vague statement" (Personal communication, June 14, 2020). The participants considered it ironic that some students end up lagging to an extent that they depend on former colleagues for mentorship to overcome supervisory challenges. One participant noted:

So, they started their Ph.D. together, the mentor has already graduated and joined the university while the supervisor is still losing the work. So, we can talk of supervision being an issue that is making students lag and even drop out (Personal communication, June 9, 2020).

Participants observed that supervisors were overwhelmed by the number of students they supervise, leading them to ignore or forget students who lag. One participant noted:

I realized ... I think the supervisors have very many students to supervise. I was speaking to some peers the other day, and in a group of nine ... We had a Zoom class, and then after class, we were grouped in breakaway rooms. We were nine, and six of us were under the same supervisor, and that is for that day. You do not know who else. And that is for Ph.D. You know! There is also a master's class, and others. (Personal communication, July 14, 2020)

Therefore, because of their heavy load, the participants felt that supervisors experienced a hard time reading and internalizing the work of students under their care. Thus, it is only active students

that capture the attention of the supervisor who progress with their dissertation. For example, “they will only follow-up the work of the student who follows them” (Personal communication, July 14, 2020). This is also illustrated by one of the participants:

You do not keep them on their toes, keep pushing them. They will not ask you where you are or what happened to you? You just get lost and forgotten. When you finally wake up, you meet them and they say ok, remind me what you were doing. You start all over again. (Personal communication, June 9, 2020)

Some participants suggested that students who were on study leave and were full-time managed to complete their degrees sooner since they could meet with their supervisors regularly. Specifically, “... international students tend to clear very fast because they are on campus full time and they meet with their supervisors regularly. You find students from Ghana, from Rwanda, graduating very fast compared to those of us who are part-timers” (Personal communication, June 24, 2020).

Going by the participants observations, supervisory relationships contributed significantly to how the students’ progressed during their doctoral journey. Although the students tend to mistrust their supervisors with their work, it emerged that supervisors are overwhelmed with the number of students and workload that they only pay attention to students who are persistent.

What students considered university best practices

Admission made easier: The participants noted that the university administration has made the admission process easier and informative: “The registration process is quite smooth. Let me start there. Because all you need to do is present your papers and if you are qualified you get admission within a few days. You get brochures that inform you what is expected of you” (Personal communication, June 28, 2020).

Resource center: The university has provided doctoral students with a state-of-the-art library, making it easier for them to access research materials. One participant showed great appreciation of the university’s effort:

We have a specific repository section for dissertations and journals for a postgraduate student, you know. There are three specific areas for postgraduates that undergraduates should not access. So, I feel that the library is well-equipped for the study and the university has tried to link up the students with many of these international libraries online to assist. (Personal communication, July 2, 2020)

A fitting curriculum: Some participants felt the university provides a doctoral program in education with a curriculum that prepares students to become independent researchers as noted by one of the participants, “Currently, in the education department, a Ph.D. student must undertake a one-year coursework program whereby you sit in class, learn with the lecturers, and sit an exam and I feel that helps the student to understand what is expected of them in the future” (Personal communication, June 11, 2020). To meet the growing students’ demands, the university “also attempted to ensure that we have enough faculty to fit in for these different units” (Personal communication, June 29, 2020). One participant felt that the part-time faculty “made a good effort to prepare me for the dissertation” (Personal communication, June 20, 2020). The new curriculum introduced course-work units that students felt necessary to “understand what it is that is expected of me ... in helping the student to open up towards the dissertation writing” (Personal communication, June 18, 2020).

Faculty promotion pegged on the number of graduands supervised: The interview data indicated that the university has a mechanism for tracking students' progress in their doctoral programs. Participants reported that the university has measures in place to ensure that enrolled students graduate on time by "pegging their promotion to the number of students whom they graduate" (Personal communication, June 10, 2020). The participants shared that the university keeps them "on their toes" and constantly reminds them "that your time is running out" and made to explain "why they're not moving or why they should not be struck out of the register. And one must prove that they have been having meetings with their supervisors" (Personal communication, July 18, 2020). They considered the tracking as "evidence that you are moving on, even though you are taking longer than expected" (Personal communication, June 29, 2020). The participants reported that the university also ensured that students could have their supervisors changed if they were not coping well.

Financial support and professional development: The university provides doctoral students with opportunities to improve their teaching skills by offering part-time and full-time tutorial jobs, while others are enrolled as examination supervisors. The participants embraced the employment opportunities, as they were empowered financially and professionally. However, these opportunities were only for those students who had completed their coursework.

Peer mentorship program: The college of education, at departmental levels, had initiated mentorship programs to motivate and advise students who were lagging behind. The effect of the mentorship program was positive since some students had considered rejoining the program, as one participant reported: "so she gave it up until the mentorship program came up, and she was inclined to redo it" (Personal communication, June 14, 2020). The mentorship program involves former doctoral students, who graduated and are working as faculty, and those new to the graduate program, but progressing at the right pace to mentor other students who were lagging or had dropped out, but willing to re-join the program.

Gaps in the university's best practices

While the university made efforts to ensure its doctoral students transitioned with minimum stress, participants found gaps in the best practices of the university.

The *orientation program* was found to be inadequate, since it catered only to full-time students, while part-time students had to depend on peers to find their way around the university. Participants shared that part-time students "do not get as good orientation as the full-time students" (Personal communication, July 14, 2020). One participant said "it took me quite a while to realize [and] to learn my ways around. I must get it from peers. But that orientation program that my peers had gotten was very good" (Personal communication, June 28, 2020). The university orientation is inadequate, as it does not consider part-time students. While the participants considered university orientation good for new students, they said "that part-time students do not get as good orientation as the full-time students. It is assumed that part-time students know their way around or they will make up their time to ask questions" (Personal communication, June 9, 2020).

Another gap was on the available *time and the quality of faculty* who taught coursework. The participants felt inadequately prepared to cover the coursework units and students were left on their own to complete the remaining readings. Part-time students "don't have time to read through, so they find themselves having several gaps" (Personal communication, June 28, 2020). The participants recommended the university to ensure that "If it would be possible, maybe the

lecturer should be in a position to follow-up the individual students and ensure that they get to graduation before they can get others” (Personal communication, June 14, 2020).

Communication is another gap. Participants felt that besides the university providing different resources to help students in their doctoral journey, they lacked proper communication structures and channels, as one participant shared “So, the resources are there. Unless you know how to access these resources, you may not benefit. The resources are available unless you have the time to use them. Other times you may also need guidance in using them, something that is not within the curriculum” (Personal communication, July 10, 2020). Therefore, participants felt the university assumed that the doctoral students would maneuver their way through the university. Furthermore, they reported that students spend or wasted time trying to familiarize themselves with the university in order to benefit from available resources. A similar scenario was cited where doctoral candidates did not know who their supervisors were and had to rely on departmental secretaries who informed them that “you have been allocated supervisors” (Personal communication, June 9, 2020). There is little or vague communication on “Who they are [supervisors] and how to get hold of them. You have no idea what you are dealing with” (Personal communication, June 26, 2020). This supervisory dilemma complicated the doctoral students’ progress and calls for redress. Participants thought that “the structure itself needs to be made a little bit more comprehensive” to enable students “to meet [with their] supervisors” (Personal communication, July 10, 2020).

Participants also identified *a lack of collegiality and collaboration in research* as a serious gap. They felt isolated from their peers and faculty on research development. Loneliness during seminar and conference proposal writing is evident in the interviewees’ data. One participant compared her master’s experience with her doctoral experience:

You would have to make sure that you [are] either presenting or you are in a team that is presenting. You could not present two consecutive presentations when others have not. But with the current situation, as I said, it is so much on your own that you do what you must do, and nobody is following you up. You are an adult (Personal communication, June 9, 2020).

According to the participants, Ph.D. students are considered mature and should explore their academic world on their own. There is laxity and little to no support accorded to them during professional development programs, with supervisors accused of blaming students through rhetorical questions like “How come you are not participating in the study and you are a Ph.D. [student]?” (Personal communication, June 20, 2020).

DISCUSSION

The purpose of this study was to explore the perception of recent doctoral graduates on the university’s best practices used to mitigate low graduation rates and attrition. We established that students considered unmet expectations and unhealthy supervisory relationships as the major causes of attrition and low graduation rates. Further, the students acknowledged the university’s effort to mitigate attrition and enhance progress with minimum stress (e.g., the admission made easier, peer mentorship program, fitting curriculum, financial support, and progress tracking). However, they pointed out gaps in the university’s best practices (e.g., poor communication, inadequate orientation, inadequate faculty, and lack of collaboration and collegiality). The discussion is guided by the two research questions that this study aimed to answer.

Experiences and perceptions of recently graduated students towards their doctoral education

Although, Ph.D. programs are initiated by departments, based on the availability of qualified staff, this study established that the flagship university experienced a shortage of qualified staff that affected the coursework unit training, concept writing, and dissertation supervision quality. The findings align with Barasa and Omulando's (2018) and CUE's (2018) observations that the continued absence of qualified and necessary staff has significantly impacted the quality and relevance of doctoral programs in public universities. The literature informs that the continued demand for Ph.D. training has overstretched the limited faculty in doctoral programs in Kenya (Barasa & Omulando, 2018; Mukwana et al., 2017). This observation corroborates this study's findings that supervisors were overwhelmed by the number of doctoral students they were supervising. The mismatch between the number of qualified faculty and the number of doctoral students is associated with doctoral lagging and dropout, especially the Ph.D. program in special education at the flagship university.

We established that participants attributed unhealthy supervisory relationships to their colleagues' dropping out or lagging behind. According to Tinto (1997), a relationship exists between the quality of faculty guidance and how students progressed in their degree programs. The supervisors play a central role in students' experience and the students expected support to manage their work. Devos et al. (2017) observed that supervisors failed to offer help, either because they had little time to offer the students, had little knowledge about the students' work, or were barely blocking students' progress. This study established that doctoral students doubted their supervisors' abilities to help with dissertation writing and feedback. Thus, they considered their supervisors as offering little to no help or hindered their progress altogether. This was coupled with poor communication from the departments on supervision allocation. The findings also aligned with Odhiambo's (2018) conclusions that associated the lack of financial stability to poor service delivery due to the university's inability to sustain academic staff, which resulted in employing unqualified lecturers.

We also established that students were dropping out of their programs due to unmet expectations. Mukhwana et al. (2016) attributed the university's inability to meet the demand of its doctoral students to its lack of resources for the development of its doctoral program. The university's failure in providing outreach duties to its candidates led them to enroll in programs that did not meet their goals. For example, in this flagship university, a student dropped out of her Ph.D. program and enrolled in a master's program because she felt a master's degree would provide her with the specialization required to secure a faculty job, while a Ph.D. degree did not guarantee the same employment opportunity.

What recently graduated students considered as corrective measures to doctoral attrition in Kenya?

Regarding corrective measures, the university currently understands the factors associated with attrition and has endeavored to develop corrective measures. It emerged that participants accepted the university's best practices to mitigate low graduation rates. Among the key corrective measures was tracking doctoral students' progress by associating faculty promotion with the number of graduates. The findings corroborated Barasa and Mulondo's (2018) observations that CUE's institutional policy of each university accounting for doctoral progress would help reduce time to graduation. The university also initiated a peer mentorship program to help students. The initiative

had a positive impact on encouraging doctoral students to reach out to fellow students for guidance. Through their peer mentorship, doctoral students understood how they overwhelmed their supervisors.

Nonetheless, there are significant gaps in the university's best practices that could contribute to delayed graduation or dropout rates. This study established that poor communication, orientation to the program, collegiality, collaboration in research, and the quality of faculty affected doctoral students' success. Mukhwana et al. (2016) identified similar gaps in institution policies arguing that when students and faculty fail to access university policies and regulations, due to poor communication and collaboration, it makes it difficult for the graduate school to offer support to struggling students.

Limitations of the study

This study had several limitations that might have influenced the findings. For example, we used a small sample of seven participants from the special education department that could have influenced the representation of the larger population under study. Second, we used snowballing sampling to recruit this study's participants that, once again, could lead to biased data sources. Snowball sampling is a non-probability sampling method where not everyone has an equal chance of being selected. Sampling continued until we realized data saturation (Ghaljaie et al., 2017). Finally, the use of virtual interviews due to COVID-19 could have influenced the natural behavior of the participants and denied us the ability to make clear participant observations. However, snowball sampling was based on the availability, doctoral experience, and time to graduation of the participants. The study, thus, used a sample size of seven doctoral graduates. Despite these limitations, our study provides some valuable insights for improving doctoral graduation rates in Kenya's public universities.

Recommendations for improving doctoral completion

This study explored the perceptions of recently graduated doctoral students to shed light on their experiences; the study may also play a significant role in designing new policies to help improve the future of one's doctoral journey. The interviews underscored participants' experiences on their research projects, and how they perceived the university's best practices. We considered their experiences as crucial insights needed to inform recommendations for improving university policies and increasing graduation rates. We advance three recommendations: a) education doctoral programs to provide students with the information they need; b) education programs to facilitate positive student and faculty relationships; and c) education programs to encourage student cohesiveness in the programs.

Education doctoral programs to provide students with the information they need

The university needs to provide information that is helpful to potential and current students. In our study, we found that lack of proper orientation and poor communication hindered students' progress. Similarly, we advocate for providing graduate students with information about various aspects of their study. To mitigate unmet expectations, programs must communicate to potential students the skills and knowledge they are expected to possess for future careers.

Additionally, because a key predictor of program completion is whether the student knows the program's expectations, faculty must communicate this knowledge through orientations and formal handbooks, rather than through word-of-mouth. Students must also be integrated into the

formal processes of the program (e.g., through their participation on committees for potential faculty hire). Student-faculty mentoring relationships can also have a significant impact on a student's successful integration into the university.

Education programs need to facilitate positive student and faculty relationships

A faculty-student relationship is considered key to enhancing the supportive relationship in doctoral programs. In our study, we identified advising and alienating departmental climates as key factors for doctoral attrition. Departments should take a proactive approach to improve doctoral student-faculty relationships through social events, seminars, and research collaboration. As stated earlier, students should also be integrated into the program through participation in committees for faculty hires, student admissions, and curriculum development. Student-faculty mentoring relationships can also have a significant impact on a student's successful integration.

Encourage student cohesiveness in the programs

In this study, participants reported that they benefited from peer support and their department-initiated peer mentorship program. However, students' cohesiveness declined as a result of isolation felt from their peers and faculty on research development. Improved access to higher education has led to the high enrollment of students, creating competition for limited physical and academic facilities, leading to isolation. The flagship university has initiated a peer mentoring program that brings together students to share their experiences. The faculty and department heads should consider designing plans to provide students with opportunities for social interactions, including symposiums, seminars, conferences, and informal gatherings.

CONCLUSION

Kenya has continued to benchmark its national university policies based on those from other countries; however, this has not helped address the low graduation rate in doctoral programs. One way to do so is to design data-driven corrective measures. As Mukhwana et al. (2016) noted, there is a need to understand the current situation in our universities, identify the challenges, and get opinions of those engaged in doctoral research to inform policy. This study presented the experiences and opinions of doctoral students that may inform institutional policies and perhaps mitigate attrition in public universities. The study documented three major themes linked to low doctoral graduation rates: a) what students considered causes of attrition or delayed completion; b) what students considered the university's best practices, and c) gaps in the university's best practices.

One, that students' unmet expectations and unhealthy supervisory relationships contributed significantly to low graduation rates in the flagship university. Two, that doctoral students sought help from their peers to overcome the challenges they faced with their supervisors. The peer mentorship program enhanced student understanding of supervisor workloads and encouraged sharing of their experiences and social integration. The findings of this study inform university administration and faculty on the importance of enhancing student-faculty interaction to build a healthy, working relationship to reduce doctoral-related stress.

Enhancing students' voices is one way of understanding their lived doctoral experiences. This study emphasizes doctoral students' opinions on what the university did best to improve doctoral graduation rates. The participants attributed their success to the university's improved

admission system, quality resource center, financial support, and tracking of doctoral students' progress. However, students were not contented with the university's communication once a student is enrolled. There was evidence that students lacked proper program orientation, and that communication between them and their supervisors and departments were inadequate and affected their progress. Lack of collaboration affected students' professional development and their research skills. The study recommends that: First, the university should provide potential and current students with the information they need to complete their program; second, the university must facilitate positive student-faculty relations; third, the university must promote student cohesiveness; and fourth, the university should consider doctoral supervision as a teaching unit to help supervisors ease their teaching load.

There is a need for further research to explore doctoral attrition from a different scope, using multiple data sources and collection methods, a representative sampling, and a bigger sample size as more knowledge is required to inform national and institutional policies to improve doctoral graduation rates in Kenya.

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