Examination Phase Of The Master's Thesis: A Plausible Cause Of Delayed Completion Of Graduate Studies At Makerere University, Uganda

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ABSTRACT

This paper investigates the influence of the examination stage of student theses on the completion time of graduate studies at Makerere University, Uganda. The assessment is based on the administrative data of 504 Master's degree students in the 2000 to 2008 enrollment cohorts at the School of Education, Makerere University. The total elapsed time from submission of a thesis for evaluation to a viva voce was adopted as a measure of the examination period. Additionally, the period from viva voce to submission of the final thesis was investigated. The analysis included frequency distribution, summary statistics, and a Pearson Chi-square test. A median examination period of 11 months (range, 1–55), in the results, is a lengthy one when compared to the two-year stipulated duration of Master's studies at the University. Subsequently, the fact that about six in every ten students (59.9%) submits a final thesis beyond a months' period after a viva points to further delays in the review process of students' reports. No significant variations in the submission period were observed by student characteristics. In sum, the findings underscore the need to strengthen administrative support systems, particularly aspects related to the review process of student's reports, to ensure students' timely completion of graduate programs.

Keywords: Delayed Completion of Graduate Studies; Makerere University

INTRODUCTION

While an assessment of completion time, using the total elapsed time, is important in pointing us to the overall time students spend in graduate programs, it does not pinpoint the specific stages of candidature in which delays (if any) occur. The resulting lack of knowledge about individual stages of candidature may hinder efforts at designing comprehensive interventions to address obstacles that may appear during the various stages of candidature, which primarily require administrative support. At the same time, the vast majority of research on completion time of graduate studies has focused on factors related to the graduate student; few studies have investigated aspects of the academic institution. Thus, much of the literature addresses student-related factors that hinder timely completion of graduate studies. For example, factors that contribute to timely completion or completion of graduate studies are consensually regarded to include the following factors, among others: age at commencement (Wamala et al., 2011; Wright & Cochrane, 2000), gender (Wright & Cochrane, 2000; Council of Graduate School, 2008; Siegel, 2005; Vladimir, 2010), full-time versus part-time study (Ismail & Abiddin, 2009), national citizenship (Wamala et al., 2011; Wright & Cochrane, 2000), and financial assistance or lack of it (e.g., Tinto, 1993; Charles, 2002; Wamala et al., 2012). All these factors point to graduate students themselves as the main factor in their progress and success in graduate programs—a concept that may not be entirely correct.

Various stages of candidature, which are not directly tagged to the individual student, may also create hindrances to student success in graduate programs. Of particular interest is the examination phase of student

dissertations or theses. This is a necessary stage of graduate studies because it helps to verify that academic standards are appropriate for the award and that they are comparable across higher education institutions. Despite its importance, however, the length of the examination period varies by institution, and under-resourced universities in the developing world fare worse than their counterparts in the developed world. Further, delays have been known to arise from bureaucratic governance strategies. For example, whereas information and communication technology has, in many cases, enabled students to instantly send their dissertations and theses to examiners (both internal and external), it is not uncommon in many African universities to have such documents sent by courier and similarly returned to the institution with the examiners' report.

For example, Wamala and Oonyu's (2012) study of Makerere University, where the stipulated time for completion of Master's studies is two years, reveals that the median time of completion was 3.8 years (range, 1.8 to 5.9) to finish their degree. Certainly, a considerable part of the 3.8 years is a result of delays at the various stages of candidature, including the thesis examination phase. The delayed completion of studies at Makerere and other universities does not mean that there are no clear guidelines and principles governing the various stages of candidature. At Makerere for example, the University Graduate Training and Research Manual stipulates a maximum examination period of three months for examiners' reports to be submitted (*Makerere University*, 2008). However, Mugimu, Nakabugo, and Katunguka's (2009) study of factors affecting research output and completion rates of graduate students at Makerere University suggests the discontentment of students regarding the review process of theses and dissertations. Though it points to a lengthy thesis examination process at the university, Mugimu et al.'s study does not provide precise estimates and dynamics of the entire cycle of the examination process; thus, administrative data on the subject are needed to establish the true state of affairs.

In light of the fact that there have been few investigations of student success in graduate programs at African academic institutions (Wamala et al., 2011), one would not expect to see assessments of factors related to completion and completion time of graduate studies. Therefore, this study sought to investigate the influence of the examination process of student final papers (i.e., theses and dissertations) on the completion time of graduate studies at Makerere University, Uganda. Given that Makerere is a highly ranked institution of higher learning in sub-Saharan Africa and Africa in general (CSIC, 2011), the findings of this study will certainly appeal to the situation of many universities in developing countries.

DATA AND METHOD

The investigations were based on the administrative data of 504 Master's degree students in the 2000 to 2008 enrollment cohorts at the School of Education, Makerere University, who had completed the degree program by the time of the study—September 2011. Students in the School of Education, Makerere, were chosen because delayed completion of graduate studies at the university was previously observed to occur in the arts discipline (e.g., Wamala et al., 2011; Wamala & Oonyu, 2012). The administrative data of this group of students are intended to provide an overview of the extent of the problem at hand. The examination duration was estimated from the time of submission of theses to the point of viva voce. Information was not available regarding when the examiners' reports reached the academic departments or graduate school. Apart from the external examination of the theses, students are required to submit revised copies of their theses based on recommendations given in the viva voce. Thus, the period from viva voce to submission of the final thesis was investigated as well. The submission period of a final thesis was assessed using a categorical outcome: whether students submitted the final thesis (1) in a few days to less than a month after the viva voce; (2) between one and three months later; or (3) after three months. The analysis was performed in two stages. First, the duration of the external examination process and submission status of the final thesis were analyzed considering summary statistics and frequency distribution respectively. Second, differentials in the submission status of the final thesis by student characteristics were investigated using the Pearson Chi-square test. A multinomial logistic regression of the likelihood of submission was suggested for multivariate analysis in case further investigation of the variables was required.

RESULTS

The Master's degree students in this study performed full-time research and coursework at the university and are characterized as follows. They were predominantly Ugandan by nationality (97.7%) and received no

financial assistance towards tuition, research, and/or living expenses (74.2%); the median age at the commencement of Master's studies was 34 years (range, 22 to 59). Slightly more than four in every ten students (41.3%) were female. The highest proportion (56.7%) of women was in the 2000 to 2002 enrollment cohort, followed by 32.7% in the 2003 to 2005 cohort, and an even smaller percentage in the 2006 to 2008 cohort.

Thesis Examination Period

Because the thesis examination period does not span the entire real line $(0, \infty)$, it is not reasonable to assume the normality of the variable. Thus, the variable was subjected to the Shapiro-Wilk test for non-normality (Shapiro & Wilk, 1965). The test results provide evidence for certain types of "non-normality" in the data ($n = 504$; $p < 0.01$), supporting previous literature suggesting the skewed nature of factors related to graduate completion time (Wamala et al., 2011; Wamala & Oonyu, 2012). Table 1 presents a descriptive summary of the external examination period for Master's theses at Makerere University.

Table 1: Descriptive Summary of the Thesis Examination Period

N	Min	Max	Median	Std. Error	95% CI [Median]	
					Lower	Upper
504	1 (0.1)	55 (4.6)	11 (0.9)	0.30	10 (0.8)	12 (1.0)

Note: External examination period is expressed in months (years).

The results shown in Table 1 reveal a median examination period of 11 months (range, 1 to 55). The high upper limit figure (55 months) in the results could be due to resubmission cases of students' reports after an unsuccessful viva voce examination, cases of severe illness or financial challenges associated with tuition. Nevertheless, the estimated period of thesis examination is significantly longer than the three months duration stipulated in the University Graduate Training and Research Handbook (*Makerere University*, 2008). It should be noted that the study did not consider it appropriate to investigate differentials in the thesis examination period by student characteristics because the process is entirely controlled by the Graduate School and academic departments. In other words, students have no control over the thesis examination phase. After a successful viva voce examination, the candidate is advised to carry out minor corrections to the satisfaction of the supervisor, who in most cases is part of the viva voce panel. Otherwise, the student must rewrite and submit a fresh copy of the thesis for evaluation by both internal and external examiners. The following section presents summary statistics of the submission period of the final or corrected copy of a thesis following a viva voce.

Final Submission of the Thesis

The submission period was estimated from the viva voce to the submission of the final thesis after corrections were made on the basis of recommendations given during the defense. In the analysis, a categorical status variable having three outcomes was generated: whether a student submitted the final thesis (1) in a few days to less than a month after the viva voce; (2) between one and three months later; or (3) after three months. Table 2 presents the frequency distribution of student status with regard to submission of the final thesis.

Table 2: Distribution of the Submission Period of the Final Thesis

Submission Status ^a	Frequency	Percentage
Less than 1	202	40.1
1 – 3	272	53.9
4 and Above	30	6.0
Total	504	100

^aSubmission period of the final thesis is reported in months.

A vast majority of students (94.0%) submitted corrected copies of their theses within the three-month period stipulated in the University Graduate Training and Research Handbook. For students who submitted their

final thesis within one month (N = 202), the median period, estimated from the time of viva defense, was 22 days (range, 20 to 29).

Differentials in Submission Status of the Final Thesis

The bivariate assessment of student characteristics by submission status of final thesis was presented using cross-tabular analysis, and associations were established using a Pearson chi-square test and the probability value. This approach intended to identify potential predictors of the thesis submission period; thereafter, variables for inclusion at the multivariate stage of the analysis were suggested. Table 3 presents the distribution of student characteristics by thesis submission status.

Table 3: Distribution of Student Characteristics by Submission Status of the Final Thesis

Student Characteristics	N	Submission Status ^a (%)		
		Less than 1	1-3	4+
Age				
Under 29	163	39.3	55.8	4.9
30-39	207	37.2	56.5	6.3
40 and Above	125	46.4	48.0	5.6
$\chi^2 = 3.12, p = 0.529$				
Sex				
Male	283	42.8	51.2	6.0
Female	218	37.2	56.8	6.0
$\chi^2 = 1.68, p = 0.772$				
Year of Enrollment				
2000 - 2002	217	45.16	46.08	8.76
2003 - 2005	218	34.40	61.47	4.13
2006 - 2008	69	42.03	55.07	2.90
Fisher's exact Sig. = 0.012				
Citizenship				
Ugandan	491	40.1	53.8	6.1
Non-Ugandan	13	38.5	61.5	0.0
Fisher's exact Sig. = 1.000				
Financial Assistance				
No Assistance	371	40.2	54.4	5.4
Assistance Held	125	40.0	53.6	6.4
$\chi^2 = 0.18, p = 0.913$				

Note: The variation in total enrollment (N) is due to missing data items in the graduate student records and/or files.

^aSubmission status is reported in months.

According to Table 3, only one variable, the year of enrollment, was significantly associated with the submission status of the final thesis ($p < 0.05$). The other variables were not significantly associated with the submission period. These results suggest that no further analysis of the likelihood estimates of submission in a multinomial logistic regression is needed. In other words, further analysis of the likelihood of submission for any of the variables will not yield a significant association with any of the student characteristics. Further investigation of these variables in a multivariate analysis would not yield significant results, nor would the variables yield any significant contribution to the final model and/or analysis. Nevertheless, the results shown in Table 3 indicate a significant reduction in the proportion of students submitting a final thesis beyond the stipulated three-month period (i.e., 8.8%, 4.1%, and 2.9% in the cohorts representing 2000–2002, 2003–2005, and 2006–2008, respectively).

DISCUSSION

In this study, the median thesis examination period of 11 months (95% CI 10–12) points to a delayed processing of students reports, an aspect that subsequently contributes towards the delayed completion of Master's studies at the university (Wamala & Oonyu, 2012). In light of the fact that about six in every ten students (59.9%) took longer than a month to submit their final thesis, one might conclude that the entire examination process lasts about a year for a considerable number of students at the university. The results suggest that a student requires another academic year to complete the cycle of the review process. Thus, taking into account the one-year period of coursework and subsequent stages of writing the thesis (developing proposals, collecting and analyzing data, and compiling a report), the two-year period of Master's studies stipulated in the University Graduate Training and Research Handbook is impossible for many students to attain. The findings of this study support the suggestion that a lengthy thesis examination period contributes to the delayed completion of Master's studies at Makerere. Moreover, Master's program completion dynamics mirror those of doctoral programs at Makerere (Wamala & Oonyu, 2012). Therefore, the delayed completion of doctoral studies at the university (Wamala et al., 2011) could certainly be a result of the length of the dissertation examination stage. This study supports the assertion that lengthy examination processing of student theses and dissertations (Mugimu et al., 2009) contributes in delaying the completion of graduate studies at Makerere.

Given that the thesis examination stage is out of student control, this work adds to the literature that affirms administrative hindrances to student success in graduate programs (e.g., Mugimu et al., 2009; Bland, Center, Finstad, Risbey, & Staples, 2006). Recent studies on completion and non-completion of graduate studies at the university have focused on the student (Wamala et al., 2011; Wamala & Oonyu, 2012). Yet, it would not be entirely correct to attribute timely success among graduate students to student characteristics, as prior studies seem to suggest. For example, the individual attributes of age and sex (e.g., Council of Graduate School, 2008; Wright & Cochrane, 2000; Siegel, 2005; Vladimir, 2010), full-time versus part-time study (Ismail & Abiddin, 2009), national citizenship (Wamala et al., 2011; Wright & Cochrane, 2000), and prior qualification have been suggested as factors that contribute to the timely success of students in graduate programs. These factors primarily focus on the student to explain success in graduate studies.

Further, differentials in the thesis examination period were not investigated by student characteristics because the process is out of students' control; the process is entirely controlled by the Graduate School and the students' academic department. In fact, financial penalties for extended candidature (i.e., candidature beyond the stipulated two-year period) are charged prior to the submission of a thesis for examination (*Makerere University*, 2008). However, an investigation of differentials in the submission status of a final thesis, after a viva voce, on the basis of student characteristics yielded no significant association with any of the variables, with the exception of the year of enrollment. The results suggest that this phase of graduate studies at Makerere may also be out of student control; thus, administrative-related support is needed to promote timely approval of student work and achieve early submission of the final thesis.

In conclusion, the lengthy thesis examination process is not unique to the School of Education; the findings of this study provide a picture of the situation in other academic departments at Makerere University. Given that Makerere is ranked among the leading institutions of higher learning in sub-Saharan Africa and Africa at large (CSIC, 2011), these findings provide a good basis for understanding the examination process of student papers in many African universities and others elsewhere.

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