

# Student Factors as Correlate of Completion Time of Ph.D. Programmes in Public Universities in Southwestern Nigeria

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## ABSTRACT

Completion of Doctor of Philosophy (Ph.D.) programme within five years as stipulated by the National Universities Commission is the desire of students due to the associated minimal cost. However, many Ph.D. students, particularly in public universities in southwestern Nigeria do not complete their programmes in record time. This study, therefore, investigated student factors as predictors of completion time of Ph.D. programmes in public universities southwestern Nigeria.

A sample of 146 respondents in the 2015–2016 cohort whose titles of theses were registered in less than five years were enumerated from University of Ibadan, University of Lagos, Olabisi Onabanjo University and Ekiti State University. A questionnaire titled “Completion Time of Doctoral Programme Questionnaire” (CTDPQ) was used to collect data. A null hypothesis was postulated, while a research question was raised and answered using descriptive and inferential statistical tools of frequency counts, percentage, Means and standard deviation and PPMC Analysis at 0.05 level of significance. The study revealed that there was a positive significance relationship among academic capability ( $r = 0.362, p < 0.05$ ), student interest ( $r = 0.354, p < 0.05$ ), funding status ( $r = 0.336, p < 0.05$ ) and employment status ( $r = 0.354, p < 0.05$ ) with completion time of Ph.D. programme in faculties of education in public universities in Southwestern Nigeria. Based on the findings of the study, it was recommended that students’ academic capability, interest, funding status and employment status should be prioritised to ensure completion time of Ph.D. in public universities.

**Keywords:** Completion time of Ph.D. programme, Academic capability Funding status, Student interest, Employment status

## INTRODUCTION

In most countries, the Doctor of Philosophy (Ph.D.) programme's objective is to teach its students how to think critically, empirically, and creatively in order to better prepare them for their future employment (Olive, Bakkabulindi, and Hilary, 2019). Universally, the time for the completion of a full-time doctoral programme is between three and five years (League of European Research Universities, 2016 and Azent Overseas Education, 2018). In Germany, a four-year doctoral programme is considered too long, and funding might not be available after the first three years of the programme (Manish, 2023). The National Universities Commission (NUC) Benchmark Minimum Academic Standard (BMAS) mandatory completion time for a full-time doctoral programmes in Nigeria ranges from three years to five years (NUC, 2011).

Meanwhile, Olubusoye and Olusoji (2014) observed that the average completion time for a doctoral programme in Nigeria’s foremost university, University of Ibadan (UI) was nine years. It appears the delay in completion time of doctoral programme in many Nigerian universities is a source of worry and concern to stakeholders. Whereas, the average minimum and maximum completion time for full-time doctoral programmes across Faculties of Arts is from three to five years. Social Sciences, three to five years; Sciences, three to four years; Engineering and Technology, three to six years, and Administration and Management, three to five years respectively (NUC, 2011). In this study, timely completion of a doctoral programme is measured by registering a full-time student' title of thesis between three and five years in the Faculty of Education at all the universities that were chosen with the same anticipated time of completion.

The completion time of doctoral programmes as posited by this study could be linked to student related variables. However, the indicators which seem critical to this study which is discussed in relation to the completion time of

doctoral programmes are: academic capability, funding, student's interest, and employment status - student factors (Adeyemi and Adeyemi, 2014; Abiodun-Oyebanji, 2014).

Student factors refer to all the elements that revolve around each student's life in an educational environment which could make or mar academic success, this includes the student's academic capability, funding status, student's interest, and employment status. This researcher thinks that a major factor influencing a university's potential to produce doctorate graduates is the students' own availability. Students' academic capability which could be MPhil, MPhil/Ph.D and Ph.D grades at the entry point could be one of the predictors of the completion time of doctoral programmes. This is because students with high academic capabilities appear to often scale through academic-related challenges coupled with their inherent determination, assurance of purpose, and focus (Grove, Dutkowsky and Grodner, 2010).

Students' interest in enrolling on a doctoral programme could be another predictor of the completion time of a doctoral programme. Students' interests include; employment, promotion, or self-esteem purposes. Jeffrey (2013) discovered that while some doctoral students' main interest is to teach in a university, others may be interested in personal growth and career advancement. The researcher contended that the following variables are often thought to have a direct impact on a PhD program's timely completion: (i) personal characteristics; (ii) research environment; (iii) research project; and (iv) incoming abilities. Lucinda and Amanda (2012) argued that doctorate students' individual factors—such as their reasons for continuing, methods for finishing their dissertations, and reasons for obtaining the degree—were responsible for their timely completion time of doctoral courses.

Also, students' funding status appears to be one of the key variables in doctoral programme in Nigerian universities. Since a student's funding status could be through self, family, or scholarship, it is imperative to examine its influence on the completion of a doctoral programme. The results of several studies have shown that factors such as steady and sufficient financial sources, a helpful advisor, involvement in worthwhile research projects, the incidence of illness, and marital and family issues have a significant influence on the degree's advancement (Owler, 2010 and Soumana and Uddin, 2017). On the contrary, Vossensteyn, Stensaker, Kottmann, Hovdhaugen, Jongbloed, Wollscheid, Kaiser and Cremonini (2015) argued that funding is not a miracle cure for higher education in Europe but increased institutional responsibility is seen as a requirement for study success. Students' financial status in connection to the dependent variable must be examined in order to reconcile the conflicting funding situations. This is premised on the fact that not all doctoral students are on scholarship or family financed.

The employment status of doctoral students is also one of the indicators of the variable of students' factor. For many doctorate students, employment is the only acceptable explanation for their employment and a significant source of money. Anne and Saul (2009) argued that many students work to supplement financial aid, avoid borrowing, gain experiences, and as a way of life. Generally, employment status varies at two levels: employed and unemployed. It has been noted that more doctorate students at universities are working than ever before while enrolled full-time. It is a commonly held view that working too much may likely retard the success of even the most capable and brightest student. Meanwhile, Collin (2016) remarked that working while studying often correlates with a higher grade point average (GPA) because a job assists students to be more effective, organised and gain important skills. Consequently, the impact of doctorate students' work status was examined in relation to the dependent variable.

Several studies have attributed students' academic capability to the successful completion time of doctoral programme. Regler, Bowlin, Sweat, Watts and Throne (2017) carried out a critical review of the reasons for doctoral attrition and persistence to completion time of doctoral programmes. They selected 79 studies from academic databases of ProQuest, Ebsco Host, and Google Scholar. After synthesising their data, the researchers identified four characteristics that are essential for early completion of PhD degrees. The factors are the candidate's prior academic preparation, programme preparation, motivation, and psychological preparedness. They concluded that candidates with low prior academic capability and unfulfilled expectations were more possibly to withdraw from the doctoral programme. The doctorate students who were involved in the research were not given the chance to voice their opinions since it was based on secondary data. However, in this current study, doctoral students' views were considered as one of the stakeholders.

Through an audit of examiner reports, Tonks and Williams (2018) conducted research on the unmet training requirements of postgraduate research students in the biomedical sciences. Over the course of a year, they

examined every report from the examiners for each of the fifty Ph.D. theses that were assessed. Examining both quantitative and qualitative data, the researchers determined the frequent unmet training requirements of Cardiff University's School of Medicine PhD students in Cardiff, United Kingdom. The research used the theoretical framework provided by Holbrook and Bourke (2004). extensive research on thesis exams using data from results, candidate information, and examiner reports. In order to identify areas for further expansion and future focus, the authors concentrated on the analysis of quantitative data relating to examination outcomes and quantifiable elements from the result, such as content analysis, communication quality, critical analysis and questioning of data, and study context.

At the master's level, the multiple regression analysis findings showed an overall adjusted  $R^2 = .120$ ;  $F = 5.644$ ,  $p = .000$ . The multiple regression analysis findings at the doctorate level showed an overall adjusted  $R^2 = .205$ ;  $F = 23.940$ ,  $p = .000$ . Eleven characteristics were shown to be strongly correlated with foreign graduate students' academic success as indicated by their GPA at the PhD level. Results that were noteworthy for students pursuing master's and doctorate degrees, but in different paths, were maybe the most intriguing. While gender was important at all levels, female master's students were expected to have a better GPA (.151). However, the converse was true for Ph.D candidates, with men receiving a higher GPA (.106) after correcting for other covariates.

In addition, the amount of time spent studying alone and for lengths of time were similarly relevant, albeit in the opposite way. For master's students, longer study sessions were associated with better GPAs, while shorter study sessions were associated with lower GPAs. Studying on its own was associated with a better score (.166) for doctorate students but a poorer grade (.143) for master's students. The study's conclusions showed that there were significant differences in the variables linked to the academic success of master's and doctorate students. The distinct educational standards and prerequisites for master's and doctorate candidates might be the root of these discrepancies. This was an online research data collection method which was optional. The return rate of the online questionnaire was technically not reported. Again, due to the nature of the adopted methodology and the combination of undergraduate, master, and Ph.D, related factors together in the same study, it is difficult to ascertain the generalisation of the research findings. This is one of the gaps this current study filled by concentrating on doctoral programme timely completion.

The factors that doctorate candidates ascribed to delays in finishing their theses were examined by Agu and Oluwatayo (2013). The survey design used in the research was descriptive. In a federal institution in southeast Nigeria, 212 delayed PhD candidates were chosen through snowball sampling. The study issues were addressed using descriptive statistics of Mean, and the hypotheses were tested using the t-test. According to the research, variables associated with students are more likely to be responsible for PhD degree completion delays.

It was also shown that the supervision schedule, the enthusiasm and inclination of the student towards research, the student's aptitude for conducting research, and the availability of resources for research are important factors that contribute to the delay in finishing the thesis. The working connection between the supervisor and supervisee was also shown to not significantly postpone the completion of the thesis. Only the doctorate students who were delayed were taken into consideration in this case study. The results aided in understanding the impact of attributive variables on thesis completion delays, but they did not provide data on the rate of delay or attributive factors related to doctorate programmes. It is imperative to emphasise that a single institution is insufficient to adequately represent the whole of Southeast Nigeria. Therefore, these deficiencies were addressed in the present investigation.

Kayode (2014) examined the resources landscape determinants and university graduation quality in southwest Nigeria. Purposive and stratified selection approaches were employed to pick 333 respondents from nine institutions (three from each of the federal, state, and private sectors) as part of the study's survey research design. The respondents comprised nine academic planning officers, nine bursars, 45 heads of departments, 90 lecturers, and 180 students. Data were collected using four questionnaires, and multiple regression analysis and Pearson Product Moment correlation were employed to assess the results. It was found that financial resources ( $r = .741$ ) and physical resources ( $r = .110$ ) had a positive significant relationship with the quality of graduates while teaching staff and material resources did not. It was also reported that landscape variables jointly contributed 46 per cent to the variance. It was observed that the study dependent variable was limited to university undergraduate programme which is an integral part of university programmes. Succinctly put, it did not cover

doctoral programmes and the prediction, therefore, cannot be applied to doctoral programme timely completion. This is a major gap this current study has filled.

In 2014, West, Usher, Foster, and Stewart evaluated how academic staff members perceived the elements that drove Australian indigenous nursing students' course completion. It was decided to use a mixed methods study strategy that included quantitative and qualitative techniques. Fifteen (15) academic staff members from five Queensland universities that assist indigenous nursing students in their final year of undergraduate nursing programmes were chosen using the purposeful sampling approach. Thirteen female and two male academics, ages ranging from thirty-two to early sixty, participated in the study. In university settings, academic experience levels vary from one to twenty (20) years. Academic advisers, first-year coordinators, directors of schools, and positions supporting indigenous students were among the academic positions. The content analysis yielded five themes: (a) qualities of the individual student; (b) institutional structures, systems, and processes; (c) relationships, connections, and partnerships; (d) knowledge, awareness, and understanding of the family and community; and (e) knowledge, awareness, and understanding of academics.

### Statement of the Problem

The seeming inability of many doctoral students to graduate in the expected time of five years and the low percentage of timely completion appears to be a major challenge to education stakeholders. Researchers have found that student factors all have an impact on students' completion of academic programmes individually; however, there hasn't been any research done in Southwestern Nigeria on how these factors work together to influence doctorate programme completion. This study fills that knowledge gap. Hence, this study examined student factors as correlate of completion time of doctoral programmes in the faculties of education in public universities in Southwestern Nigeria.

### Purpose of the Study

The major purpose of this study was to investigate the extent to which student factors influenced the completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria. Specifically, the study:

- i. estimated the average completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria,
- ii. investigated the pattern of relationship between student factors and the completion time of doctoral programmes in public universities in Southwestern Nigeria.

### Research Question and Hypothesis:

What is the average completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria?

**H<sub>01</sub>:** There is no significant relationship between student factors and the completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria.

## METHODOLOGY

For this study, a mixed-methods explanatory survey approach was used.

The descriptive survey exploratory research approach was adopted and used to carry out ex- post facto. The design is considered appropriate because the researcher does not have direct control over the independent variable of interest due to the fact that this variable has already occurred. Hence, it is used to obtain data from the sample of the population and to establish the influence of student factors on the completion time of doctoral programmes in the faculties of education in public universities in Southwestern Nigeria.

A sample of 146 respondents in the 2015–2016 cohort whose titles of theses were registered in less than five years were enumerated from University of Ibadan, University of Lagos, Olabisi Onabanjo University and Ekiti State University. A questionnaire titled “Completion Time of Doctoral Programme Questionnaire” (CTDPQ) was used to collect data. A null hypothesis was postulated, while a research question was raised and answered using descriptive and inferential statistical tools of frequency counts, percentage, Means and standard deviation and



Pearson product moment correlation Analysis at 0.05 level of significance.

## RESULTS AND DISCUSSION

### Research Question 1:

What is the average completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria?

Table 1: Showing the Descriptive Statistics of the Sample Size, Mean, and Standard Deviation of the Student Factors of Completion Time of Doctoral Programme in Public Universities in Southwestern Nigeria

	N	Minimum	Maximum	Mean	Std. Deviation
Academic capability	145	6.00	16.00	10.7172	2.94558
Student's interest	145	5.00	17.00	10.0897	2.60853
Funding status	145	5.00	19.00	13.1034	3.87786
Students' employment status	145	5.00	18.00	13.3379	2.90646
Student factor	145	26.00	65.00	47.2483	9.07341
<b>Number of years to completion</b>	<b>145</b>	<b>4.00</b>	<b>5.00</b>	<b>4.8690</b>	<b>0.37740</b>
Valid N (listwise)	145				

Table 1.1 shows that 623 students are enrolled in Ph.D degrees across all participating institutions. Table 2.1 indicates that 145 Ph.D candidates were able to complete their studies in less than five years. Thus, 145/623(100), or 23.27 per cent, of doctorate students were able to finish registering the titles of their theses within the allotted five years.

**H<sub>10</sub>:** There is no significant relationship among students' variables and completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria.

Table 2: Zero Order Correlations among Variables of Student and Completion Time of Doctoral Programmes

Variables	X1	X2	X3	X4	X5
X1	1				
X2	.939	1			
X3	.501	.435	1		
X4	.939	.567	.435	1	
X5	.362	.354	.336	.354	1

Significant at  $p < 0.05$

Key: X1= Academic Capability, X2= Student Interest, X3= Funding Status X4= Employment Status X5= Completion Time of Doctoral Programmes

Table 2 shows the variables' zero-order correlation. It was observed that there was significant relationship among variables of student and completion time of doctoral programmes. There was significant relationship among academic capability ( $r = 0.362, p < 0.05$ ), student interest ( $r = 0.354, p < 0.05$ ), funding status ( $r = 0.336, p < 0.05$ ) and employment status ( $r = 0.354, p < 0.05$ ) with completion time of Ph.D. programme in faculties of education in public universities in Southwestern Nigeria. The null hypothesis, which states that there is no significant relationship among variables of student and completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria, is therefore rejected. Therefore, it suggests that all the variables are significantly correlated with completion time of doctorate degree in Southwest universities, an indication that they are potent predictors of completion time of doctorate programme in Southwestern Nigerian universities.

### Discussion of findings

This section provides a discussion of the data gathered and analysed results in relation to relevant prior research in the field of doctorate degree completion predictors, with regard to the study's goals and research issues.

## Average Completion Time of Doctoral Programme

The research assessed the average completion time of doctoral programmes in public universities in Southwestern Nigeria. According to the results, PhD studies in education at public institutions in Southwest Nigeria take four to five years to complete completely. The results also showed that doctoral studies at public institutions in Southwest Nigeria take an average of 4.8 years to complete on schedule. This is consistent with the findings of Spronken-Smith, Cameron, and Quigg (2017), who found that full-timers took an average of 3.4 years to submit their work and 4.1 years to complete it and get their degree. Additionally, Shepherd's (2007) study from the Higher Education Funding Council for England confirmed that Ph.D. completion times vary widely throughout universities. Doctorates are often intended to take four years in England. Three-quarters of doctorate candidates at certain institutions, however, are still not considered "doctors" after seven years. This finding may have been a result of the doctoral students' full-time mode of study, in which their Ph.D studentship will lapse if they are unable to register the title of their theses after ten semesters or five years

## Pattern of Relationship between Student Factors and Completion Time of Doctoral Programme

The pattern of relationship between student factors and completion time of doctoral programmes in faculties of education in public universities in Southwestern Nigeria was investigated. Findings of completion time of doctoral programmes revealed a significant positive relationship with students' factors. This showed that the completion of a Ph.D programme was significantly positively correlated with student characteristics. It also implies that an increase in either academic capability, student interest, funding status or employment status factors will lead to a significant increase in the completion time of doctoral programmes. The finding agrees with Olive, Fred, Bakkabulindi and Hilary (2019) who submitted that a positive significant relationship existed among student-related variables and timely completion of doctoral programmes; testing Leech's Model on successful doctoral student completion.

## CONCLUSION

Based on the findings of the study, this study concludes that all four variables— academic capability, student interest, funding status and employment status were potentially predictive of how long doctoral programmes would take to complete. The implication of this conclusion is that there was a substantial positive relationship between the completion time of doctoral programmes and student factors in public universities in Southwestern Nigeria.

## RECOMMENDATIONS

The following recommendations are made based on the results and the findings of this study.

- i. Doctoral students should ensure their source of funding before embarking on doctoral programmes because depending on family members and scholarships for funding the programme may hinder the timely completion.
- ii. The employment situation of students must be taken into consideration when selecting students for Ph.D. courses. For example, candidates for doctorates who are gainfully employed have the ability to finish their degrees on time in the education faculties of public institutions in Southwestern Nigeria.
- iii. Postgraduate colleges should give priority to students whose interest for Ph.D are for employment and promotional purposes during admission process.

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