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# Demographic factors as correlates of doctoral degree completion in Nigeria library schools

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A review of literature revealed that doctoral students in Nigeria library schools do not complete their studies at the university recommended time frame. This study therefore examined demographic factors as determinants of doctoral degree completion in Nigeria library schools. The objectives were to find out the average time-to-completion of doctoral degree in Nigeria library schools; ascertain the importance of demographic factors such as gender, age, job designation, work status and marital status to time to completion of doctoral studies in Nigeria library schools; find out if mode of study affects time-to-completion of doctoral studies in Nigeria library schools.

The study adopted descriptive research of the survey type. From 26 library schools in Nigeria, 11 were purposively selected. The population comprised 235 doctoral degree holders. Total enumeration of the 235 doctoral degree holders was used. A self-constructed questionnaire was used to collect quantitative data and out of the 235 copies administered, only 183, representing 77.9% were returned and found usable for this study. The only hypothesis in the study was tested using Spearman Rank Order Correlation. This was tested at 0.05 level of significance. Results showed a relationship between demographic factors and time-to-completion, while it takes an average of 5.7 years to complete doctoral degree in Nigeria library schools irrespective of mode of study.

Keywords: Nigeria; LIS Education; Doctoral degree

### Introduction

Demographic characteristics of doctoral students play an important role in time-to-completion of the doctoral programme as most of the students encounter challenges associated with factors personal to them<sup>1</sup>. The importance of demographic factors (gender, age, and marital status) in doctoral degree completion cannot be overemphasized. Sex, age, and marital status are important demographic factors with potential to impact directly on time-to-completion of doctoral studies.

Scholars have divergent opinions on average timeto-completion between male and female postgraduate students. While some researches reveal that males complete their programmes faster than females<sup>2-5</sup>, others believe that there are exceptions, as females predominantly finish earlier than males in some disciplines<sup>6,7</sup> while another report emphasized that there is no significant difference between gender and time-to-completion<sup>8</sup>.

Similarly, age at the beginning of the doctoral degree is another important demographic factor to consider in time to completion of doctoral studies as revealed in literature. It is believed that the younger a doctoral student is at the commencement of the doctoral programme, the more likely to complete the doctoral programme on time<sup>9-11</sup>. The significance of marital status to doctoral completion has also been discussed. While Sheridan and Pyke<sup>12</sup> did not see the significance of marital status to time to completion, others believe that this is an important factor that cannot be ignored<sup>13-16</sup>.

Doctoral degree completion is also affected by the form of enrolment. Students who enrol on a full-time basis tend to complete their programmes faster than those on part-time. Enrolling for doctoral degree on apart-time basis appears to weld a negative effect on the students as it debars them from properly integrating and imbibing the research culture<sup>17-22</sup>. Rodwell and Neumann<sup>23</sup> observed that timely completion is directly proportional to the form of enrolment whether it is on a part-time or full-time basis. Supporting this view, Wingfield<sup>24</sup> asserted that full-time doctoral students who concluded their theses within two to three years were over 80% compared to their counterparts on part-time who could not achieve the feat, staying beyond the stipulated period.

This study examines the demographic factors as correlates of doctoral degree completion in Nigeria library schools.

### **Review of literature**

Earning a PhD degree in record time has become a subject of importance to both male and female doctoral students. In Australia, Martin, Maclachlan and Karmel<sup>9</sup> reported that higher rate of doctoral degree completion was recorded among female doctoral students against their male counterparts. This report has been contradicted by Stiles<sup>25</sup> who revealed that women were 16% less likely to complete their programs than men. Wright and Cochrane<sup>26</sup> opined that the only factor that emerged as a reliable predictor of successful completion within a four-year period and within a ten-year period was whether a student was researching a science-based or arts & humanities based subject. They concluded that gender couldn't be used to determine time-to-completion. Similarly, Nerad and Cerny cited in Ampaw and Jaeger<sup>27</sup> could not establish significant variation in time-to-degree between the male and female gender.

Various arguments have been proposed on the variation in time-to-completion of male and female doctoral students. Ober<sup>28</sup> opined that being a female doctoral student could constitute a barrier to time-to-completion while also noting that the effect of gender could be viewed along various lines of thought. Abedi and Benkin<sup>29</sup> provided one of these lines of thought when they reported that differences in time-to-completion by gender can be explained going by the field of study in which the doctoral student is enrolled. They claimed that greater number of women enrol in fields which are known to have longer time-to-completion than their male counterparts. Similarly, Ploshonka<sup>30</sup> observed that enrolment of women in fields that attract financial support appears to be

minimal, considering the significant role it has been found to play in fast tracking doctoral studies. Also, Tidball cited in Seagram, Gould and Pyke<sup>7</sup> found that male and female faculty tend to be more supportive of students of their own sexes. This will definitely have an impact on time-to-completion of both sexes because both ways, they will enjoy less supervision and mentoring which Seagram, Gould and Pyke<sup>7</sup> consider as key factors to successful and timely completion.

Of equal importance to time-to-completion by gender are issues related to the home front. Women are most likely going to be more involved with the home than men; hence women find it more difficult to balance their roles as students, wives and mothers thereby creating role conflict which has been found to impact on time-to-completion. As observed by Germeroth<sup>31</sup>, role conflict between student, spouse, and parent roles has greater effect on females than their male counterparts which invariably accounts for the extension of time-to-completion of the female student. Leonard cited in Magano<sup>32</sup> also observed that women were more likely to experience fractured doctoral studies due to the pressure of combining work and family.

Age has also been reported in literature as a significant demographic factor that influences timely completion of doctoral programme. The age range at the commencement of doctoral degree greatly impacts on time-to-completion. HEFCE<sup>10</sup> report shows that students that were older at the commencement of their doctoral studies finished later than the younger students. Precisely, it was shown in the report that 81% of doctoral students on full-time study who were under the age of 25 completed their studies within 10 years, while only 70% of those above the age of 30 could complete their studies within the same time frame. It was also revealed by Martin et al.<sup>9</sup> that higher rate of completion was prevalent among young starters in Australia and UK. The reason for this, according to them is the higher responsibilities bestowed on mature students who combine the demands of work and family with academics. This argument may however not be substantive as younger students are also engaged in other roles that confer responsibilities on them.

In a study carried out in the UK and USA, Evans et al<sup>11</sup> also found age to be of importance to successful completion of doctoral studies. They observed that

doctoral students in the UK who were below the age of 25 at the commencement of their study could achieve 81% completion rate against students from age 25 to 30 whose completion rate were recorded at 75% and 70% respectively. In the USA, there was a 43% increase in time-to-completion among students between the ages of 20 and 30, while the increase was about half as large among those aged between 31 and 40. An inverse relationship between age and time-tocompletion of doctoral thesis was recorded by Cook and Swanson as reported in Gittings<sup>13</sup>. Their report established that the older a student as at the time of admission, the decrease in their likelihood of timely completion.

The significance of marital status of doctoral students to the successful completion of their PhD programme has been a subject of discussion. Sheridan and Pyke<sup>12</sup> refuted the notion that marital status affects time-to-completion. They reported that marital status had no significant effect on research activities of doctoral students. This stance was challenged by Olusoji<sup>16</sup> Olubusoye and whose discoveries affirmatively established the significant effect of marital status on time-to-completion. Household issues relating to raising children and home maintenance have been said to preoccupy married doctoral students. Homefront responsibilities take a toll on the time they should ordinarily invest in writing their dissertation.

Ho, Wong and Wong<sup>14</sup> concluded that late completion of doctoral programme among married doctoral students could be traced to pregnancy, childbirth, children and caring for baby. This conclusion was also corroborated by Gittings<sup>13</sup> affirming marital status as one of the major determinants of timely completion. The marital status of male and female doctoral students has been found to affect them in different ways. Van de Schoot et al<sup>15</sup> attributed additional five months' delay experienced by women on doctoral programme to their marital status. Though it has been noted that the change of marital status of men at the time of PhD programme does not impact directly on their time to degree, it has however been found that caring for their children reduces their chance of finishing on time, with almost four months.

A survey investigated differences in time-tocompletion among married and single males and females and found that married men completed their PhD faster than their single colleagues; similarly, married women achieved the same exploit against their single female counterparts Price<sup>33</sup>.

Mode of study is another important component of doctoral degree completion. Evans, Gerdeman, Haines, Hall, Ryland and Sebkova<sup>11</sup> observed that part-time programmes over the years have been encompassed by several challenges which students must surmount in order to attain timely completion. Isaac, Quinlan and Walker<sup>34</sup> also reported that the likelihood of part-time doctoral students completing their doctoral research in record time was slim. Uzonwanne, Uzonwanne and Uzonwanne<sup>35</sup> noted that while mode of study was not found to affect time to completion in the UK, in Nigeria doctoral students who enrolled on part-time basis had higher probability of not paying attention to the programme than those on full-time enrolment. Similarly, Aina<sup>36</sup> found that students who enrol on part-time basis spend an average of 7.71 years on their programme compared to their full-time counterparts who complete their programmes in 5.53 years on the average.

The variation in time-to-completion as a result of mode of study is expected. From the beginning, institutions allocate longer time for completion to students on part-time studies compared to their fulltime counterparts. Students who enrol on a full-time basis also dedicate their time and resources fully to their research work and suffer fewer distractions compared to those who enrol on part-time basis. Parttime students are in most cases, encumbered with a lot of other assignments competing for time with their doctoral studies, which explains why full-time students tend to perform better in terms of completion time than those enrolled on part-time basis. Several issues surround part-time students' inability to complete their studies in record time. They are usually faced with challenges, which negatively affect their time-to-completion.

# **Objectives of the study**

- To find out the average time-to-completion of doctoral degree in Nigeria library school;
- To ascertain the importance of demographic characteristics such as gender, age, job designation, work status and marital status to time to completion of doctoral studies in Nigeria library schools; and

• To find out if mode of study affects time-tocompletion of doctoral studies in Nigeria library schools.

# Hypothesis

The following null hypothesis was formulated and tested at 0.05 level of significance:

 $H_{o1}$ : there is no significant relationship between demographic characteristics (gender, age, job designation, work status & marital status) of doctoral students and time to completion of doctoral degree completion in Nigeria library schools

# Methodology

The social survey design was adopted for the study. A questionnaire tagged Doctoral Degree Completion Questionnaire (DDCQ), was utilized as the primary research instrument. PhD students who graduated between year 2000 and 2015 were chosen for this study on the assumption that the graduates within this period were more likely to provide up-to-date information required for this study. Also, the concentration of doctoral graduates from library schools in Nigeria falls within this period<sup>36</sup>. From the 26 library schools in Nigeria, 11 were purposively selected. 235 copies of the questionnaire were distributed but only 183 were returned and found usable for this study. Descriptive statistics were used to analyze and interpret data collected through the survey questionnaire. The descriptive statistics used include frequency counts and percentages. At the inferential level, Spearman Rank Order Correlation was used to test the only hypothesis in this study.

### Statement of the problem

Completing a PhD degree programme in record time has become an issue of global concern. Attrition from the doctoral programme is growing at an alarming rate. Several authors have reported that it takes an average of 7 years to complete the doctoral studies<sup>6,7,36-40</sup>. This scenario leads to frustration on the part of the students who ordinarily should take a maximum of four years to obtain a doctoral degree. A number of factors have been identified in literature to be responsible for the undue elongation of the doctoral programme<sup>8,14,41,42</sup>. Researches on variation

in the time to completion of doctoral degree based on demographic factors have been explored in various climes<sup>9.25,43</sup>, however, in Nigeria not many studies have considered this variation. This study therefore seeks to investigate the importance of demographic factors to time-to-completion of the doctoral degree in Nigeria Library Schools.

# **Findings and discussions**

### Distribution of the Respondents by institution

The respondents targeted by this study were doctoral degree holders who graduated during the years 2000 to 2015 from 11 doctoral degree awarding library schools in Nigeria. It included 235 doctoral graduates from the 11 library schools. A total enumeration of doctoral degree holders who graduated within the period under study was used. The library schools include Abia State University, Uturu (ABSU), Ahmadu Bello University, Zaria (ABU), Babcock University, Ilishan Remo, Bayero University, Kano (BUK), Delta State University, Abraka (DELSU), Imo State University, Okigwe (IMSU), Nnamdi Azikiwe University, Awka (NAU), University of Ibadan, Ibadan (UI), University of Maiduguri, Maiduguri (UNIMAID), University of Nigeria, Nsukka (UNN), and University of Uyo, Uyo (UNIUYO)

Table 1 presents the distribution of respondents according to library school. A total of two hundred and thirty five (235) copies of the questionnaire were administered to doctoral degree holders who graduated during the 2000 to 2015 from the 11 selected doctoral degree awarding library schools in Nigeria. However, only one hundred and eighty three (183) copies were retrieved with useful responses, giving a response rate of 77.9% (Table 1).

Table 1 revealed that 61 responses with a response rate of 84.7% were generated from University of Ibadan, Ibadan. This is followed by 16 (84.2%) from University of Nigeria, Nsukka; and 14 (82.4%) at Imo State University, Okigwe. The least response rate 5 (50.0%) was from Bayero University, Kano. The overall response rate shows that University of Ibadan had the highest response rate with 33.3%.

### Demographic characteristics of the respondents

Table 2 shows that 109 (59.6%) respondents were between ages 40-44 years while, 5 (2.7%) were

Table 1—Distribution of the respondents according to institution								
Institution	No. of administered questionnaires	No. of returned questionnaires	Response rate (%)	Total respondents (%)				
ABSU	13	10	76.9	5.5				
ABU	14	10	71.4	5.5				
BABCOCK	29	22	75.9	12.0				
BUK	10	5	50.0	2.7				
DELSU	18	13	72.2	7.1				
IMSU	17	14	82.4	7.7				
NAU	5	3	60.0	1.6				
UI	72	61	84.7	33.3				
UNIMAD	3	2	66.7	1.1				
UNN	19	16	84.2	8.7				
UNIUYO	35	27	77.1	14.8				
Total	235	183	77.9	100.0				

between ages 24 years and below when they started their PhD programme. This implies that most of the respondents experienced individuals before starting their PhD programme since they were well above 25 years. Majority of the respondents 105 (57.4%) were males (Table 2). This could mean that there were more male PhD graduates between years 2000 to 2015.

Table 2 further shows that majority of the respondents 150 (82.0%) were married. Results show further that most of the respondents 179 (97.8%) indicated that during their PhD programme, they were officially employed. On the kind of financial support/sponsorship during the PhD programme, majority of the respondents 94 (51.4%) indicated that their institutions were sponsoring them. Similarly, 73 (39.9%) indicated that they personally sponsored their PhD programme while, 4(2.2%) affirmed that they enjoyed grants. On the job designation of the respondents at the commencement of their doctoral degrees, preponderance of them fall within the Librarian I, 40 (21.9%) and the Lecturer II 41 (22.4%) cadres. This is expected, as one cannot attain to a certain level in academics without obtaining a doctoral degree.

Table 3 shows that majority of the respondents [143 (78.1%)] indicated that their institutions recommended 3 years for PhD programme completion while, 40 (21.9%) affirmed that 4 years was recommended in their institutions. However, only 4 (2.2%) completed the programme in less than 3

years while 43 (23.5%) completed the PhD programme between 3-4 years. Majority 68 (37.2%) of the respondents completed the PhD programme between 5-6 years. Results in Table 3 show that only 5 (2.7%) of the whole respondents completed their PhD programme in 10 years and above.

Table 4 shows that 58 respondents (31.7%) had their doctoral studies on full-time basis and only 18 (33.3%) out them completed their studies within 3-4 years. 34 (58.6%) completed between 5-10 years. This suggests that majority of the respondents who enrolled on full-time basis did not complete their stipulated studies within the time frame. Preponderance of the respondents 125 (68.3%) had their programme on part-time basis, but only 73 (58.4%) completed within a period of 3-6 years, while the remaining 52 (41.6%) spent between 7-10 years on the programme. From Table 4, it can be inferred that mode of study does not affect doctoral completion as majority of the respondents completed their studies between 5-6 years irrespective of mode of study. Therefore, it could be inferred that irrespective of the mode of study, the average time to completion of PhD programme in the universities surveyed is 5.7 years.

Hypothesis testing: there is no significant relationship between demographic factors and doctoral degree completion in Nigeria library schools

Table 5 presents information on relationship between demographic factors and time-to-completion using Spearman rank order correlation coefficient.

	2—Demographic characteristics of the	-		
Variables	Characteristics	Frequency (F)	Percentage (%)	
Age at the beginning of the PhD	24yrs and below	5	2.7	
programme	25-29yrs	33	18.0	
	35-39yrs	12	6.6	
	40-44yrs	109	59.6	
	45 and above	24	13.1	
	Total	183	100.0	
Gender	Male	105	57.4	
	Female	78	42.6	
	Total	183	100.0	
Marital status during the PhD programme	Single	24	13.1	
	Married	150	82.0	
	Divorced	6	3.3	
	Separated	3	1.6	
	Total	183	100.0	
Work Status during the PhD programme	Self-employed	4	2.2	
	Officially Employed	179	97.8	
	Total	183	100.0	
Designation at the time of PhD	Librarian II	28	15.3	
programme	Librarian I	40	21.9	
	Senior Librarian	17	9.3	
	Principal Librarian	7	3.8	
	Deputy University Librarian	3	1.6	
	University Librarian	5	2.7	
	Assistant Lecturer	31	17.0	
	Lecturer II	41	22.4	
	Lecturer I	6	3.3	
	Senior Lecturer	5	2.7	
	Total	183	100	
Financial support/sponsorship during the	Personal	73	39.9	
PhD programme	Institutional	94	51.4	
	Employer	12	6.6	
	Grant	4	2.2	
	Total	183	100.0	

Results showed that Gender (r = .089\*; n = 183; p < 0.05); Age (r = .164\*; n = 183; p < 0.05); Kind of financial support/sponsorship (r = .180\*; n = 183; p < 0.05); and Job Designation (r = .217\*; n = 183; p < 0.05); have significant positive relationship with time-to-completion. This assumes that demographic characteristics such as gender, age, good financial support, and job designation could contribute to timely completion of PhD programme. However, Work status (r =  $-.150^*$ ; n = 183; p < 0.05) has

significant negative relationship with time-tocompletion, while marital status (r = -.143; n = 183; p > 0.05) has no significant relationship with time-tocompletion. Hence, the null hypothesis is rejected.

### **Discussion of findings**

Completion of doctoral studies is a major priority for doctoral students from the point of registration. The completion validates doctoral degree; however,

Table 3—	-Recomi	mended number	r of years for P	hD programm	e completion a	and number of	years spent		
Recommended number of	_	Number of years spent on the programme							
years for PhD programme completion		<3 yrs	3-4 yrs	5-6yrs	7-8 yrs	9-10 yrs	Above 10 yrs	Total	
2	F	3	32	45	44	17	2	143	
3yrs	%	2.1	22.4	31.5	30.8	11.9	1.4	78.1	
4	F	1	11	23	2	0	3	40	
4yrs	%	2.5	27.5	57.5	5.0	0.0	7.5	21.9	
	F	4	43	68	46	17	5	183	
Total	%	2.2	23.5	37.2	25.1	9.3	2.7	100.0	

			Number of years spent on the programme						
			<3 yrs	3-4yrs	5-6 yrs	7-8 yrs	9-10 yrs	Above 10 yrs	Total
	Full Time	F	4	18	20	10	4	2	58
		%	3.1	33.3	37.0	18.5	7.4	3.7	31.7
Mode of study									
	Part Time	F	0	25	48	36	13	3	125
		%	0.0	19.4	37.2	27.9	10.1	2.3	68.3
	Total	F	4	43	68	46	17	5	183
Total	Total	%	2.2	23.5	37.2	25.1	9.3	2.7	100.0

time-to-completion could be influenced by several factors that ultimately create disparities in time-tocompletion by candidates who were admitted at the

same period.

The findings on average time to completion of doctoral degree indicated that majority of the respondents 68 (37.2%) completed their doctoral degrees between 5- 6 years. On the average, it takes 5.7 years to complete a doctoral degree in Nigeria library school. This implies that majority of students who enrol for doctoral studies do not complete the programme within the university stipulated minimum time frame. The finding of this study is consistent with the finding of Wamala, Oonyu and Ocaya<sup>44</sup> who discovered that in Makerere University in Uganda, it takes an average of 5 years to complete the doctoral studies. The finding is also in tandem with that of Stock, Siegfried and Finegan<sup>45</sup> who observed that it takes an average of 5 years to complete the PhD degree in economics. The finding of this study is

however at variance with that of Aina<sup>36</sup> who reported that it takes an average of 7 years to complete a doctoral degree in library and information science.

The findings on demographic factors shows that a significant positive relationship exists between demographic factors such as gender, age, job designation, kind of financial support/sponsorship, and time-to-completion of doctoral studies in Nigeria library schools. This implies that demographic factors such as gender, age, good financial support, and job designation could contribute to timely completion of PhD programme. This is in line with the findings of Green and Powell<sup>5</sup> who found a significant relationship between gender and time-to-completion of doctoral studies. The finding on age is however at variance with the study of Watthanapradith et al<sup>1</sup> who found that the age of the doctoral student at the commencement of the doctoral programme holds no significance to successful completion. The findings of this study however revealed that work status has a

Table 5—Relationship between demographic factors and doctoral degree completion									
Spearman's rho		Gender	Marital status	Work status	Job designation	Age	Financial	Time	
Gender	Spearman rank order Correlation	1	.034	173*	145	189*	094	$.089^{*}$	
	Sig. (2-tailed)		.645	.019	.052	.010	.204	.023	
	Ν	183	183	183	183	183	183	183	
Marital status	Spearman rank order Correlation	.034	1	032	.011	024	082	143	
	Sig. (2-tailed)	.645		.670	.889	.745	.272	.054	
	Ν	183	183	183	183	183	183	183	
Work Status	Spearman rank order Correlation	173*	032	1	.821**	042	.174*	150*	
	Sig. (2-tailed)	.019	.670		.000	.576	.019	.042	
	Ν	183	183	183	183	183	183	183	
Job designation	Spearman rank order Correlation	145	.011	.862**	1	.068	083	.217**	
	Sig. (2-tailed)	.052	.889	.000		.366	.271	.003	
	Ν	183	183	183	183	183	183	183	
Age	Spearman rank order Correlation	189*	024	042	.068	1	.007	.164*	
	Sig. (2-tailed)	.010	.745	.576	.366	•	.930	.027	
	Ν	183	183	183	183	183	183	183	
support/sponsor		094	082	.174*	083	.007	1	$.180^{*}$	
hip	Sig. (2-tailed)	.204	.272	.019	.271	.930	•	.022	
	Ν	183	183	183	183	183	183	183	
Time-to- completion of	Spearman rank order Correlation	.089*	143	150*	.217**	.164*	.180*	1	
PhD programme	e Sig. (2-tailed)	.023	.054	.042	.003	.027	.022		
	N	183	183	183	183	183	183	183	
*. Correlation is Source: Field Su	significant at 0.05 level, urvey, 2017								

Table 5-Relationship between demographic factors and doctoral degree completion

significant negative relationship with time-tocompletion while marital status has no significant relationship with time-to-completion. This finding confirms the position of Sheridan and Pyke<sup>12</sup> but contradicts that of Olubusoye and Olusoji<sup>16</sup> and Gittings<sup>13</sup> who found that a significant relationship exists between marital status and time-to-completion.

The findings on mode study shows that mode of study does not affect time-to-completion of doctoral studies in Nigeria library schools. This finding conforms to that of Uzonwanne, Uzonwanne and Uzonwanne<sup>35</sup> who noted that mode of study was not found to affect time-to-completion of doctoral degree in the UK. The finding however contradicts that of Isaac, Quinlan and Walker<sup>34</sup> and Aina<sup>36</sup> who found mode of to affect time-to-completion of doctoral studies.

#### Conclusion

Demographic factors such as gender, age, job designation, and kind of financial support/sponsorship have been found to have a significant positive relationship with time-to-completion. While work status has a significant negative relationship with time to completion of doctoral studies in Nigeria library schools, marital status has no relationship with doctoral degree completion. However, mode of study does not affect time-to completion as the average time to completion between doctoral students who enrolled on part-time and full-time basis was 5.7 years.

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