

RESEARCH PROJECTS AND DISSERTATION WRITING AMONG NIGERIA UNIVERSITY STUDENTS: PERCEIVED DIFFICULTY AREAS AND THE WAY OUT

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Abstract

This study investigated the measure of difficulties Nigeria university students face in implementing, completing and reporting their research projects and dissertations. The study adopted the survey research design. The multistage sampling procedure was used to select 143 students who are at their three and four hundred levels from both the federal and the state owned universities. An instrument, namely students' research difficulty scale ($r = 0.83$) consisting of six sub-sections that elicited students difficulty in carrying out their research, was adopted for data collection. The instrument was given to two experts in Tests and Measurements in the faculty of education, Federal University of Oye-Ekiti, to ascertain its face validity. The data was collected from October, 2019 to January, 2020, and analysed using Descriptive and Inferential statistics (correlation) at $p < 0.05$. The study findings revealed that university students in Nigeria; do encounter many difficulties in effectively and efficiently implementing, completing and reporting their research findings. Thus, for students to overcome these difficulties, Research trainings, workshops, seminars and conferences should be regularly conducted for students; the curriculum planners for tertiary institutions and the university authorities; entwine the teaching and training of students in the methodologies of carrying out and reporting researches early enough (preferably from their hundred levels) so as to adequately equip the students with the needed skills and knowledge of research and its implementation since it remains a major criterion for their graduation from the university.

Keywords: Research, Research works, Nigerian University Students, Difficulties, Research writing.

Introduction

Research is a rigorous process as it entails the very art of skillful writing, organization of thoughts, articulation of problems and finding ways by which such problems can be resolved. It is a methodological way of identifying/solving problems and providing essential information for the enlightenment of the populace in order to enhance self-efficacy and efficiency of the citizenry and foster the economic, social, political and technological growth and development of nations. Paneerselvan (2010) defined research as an organized set of activities to study and develop a model or procedure/technique to find the results of a realistic problem supported by literature and data such that its objectives are optimized and further make recommendations/inferences for implementations. Similarly, Koul (2007) defined research as a systematic attempt to obtain answers to meaningful questions about phenomena or events through the application of scientific procedures. The benefits of conducting research especially in the global sense includes: quantitative education, liberation from ignorance and poverty, improvement in standard of living, provision of solutions to counterparty problems,

overall national development and progress and improvement in educational practices (Ajayi, 2009; Emunemu, 2009; Ayodele-bamisaiye, 2005; Owan, 2005).

This process of research can be achieved by using internet-based databases (Abiddin, 2011; Olmos, Juanjo, Eva and Ana, 2015), constant monitoring of research already conducted (Jalan, Nusantara, Subanjiand Chandra, 2016) and collaborative work (Igun, 2010) are applicable. As noted by (Pravikoff, Tanner and Pierce, 2005), with innovative, interactive strategies to align with requirements for the 21st century, educators need to generate a perception that research is useful, rewarding, fun, and worthwhile; clarifying that research is a skill that requires a foundation of knowledge and its applicability to practice for students and humanity in general.

University students especially in Nigeria do encounter various difficulties in the course of writing research projects and dissertations, which is a major prerequisite for their graduation. The process of research requires a mastermind to follow through. Writing research projects is a skill every student should possess; as it is one of the criterion that educational evaluators can use in assessing student's ability to search, collect information, write, compile, analyze and interpret a topic or a situation. One of the primary purposes of tertiary(university) education is to prepare students especially at the final and graduating stages, to assume professional responsibilities and research skills.

Conducting researches and reporting the findings is one of the criteria for university graduation and certification in most Nigerian universities. The undergraduate students in the course of their study and learning experiences, which are designed specifically to develop inquiry-based learning skills (skills that allow learners the opportunity to ask questions, develop hypothesis and identify methods that would allow them investigate their questions). Researchers have exposed the relationship between teaching and research, and how each of these activities influences the development of students' skills research (Deen and Lucas, 2006; Maher, Timmerman, Hurst, and Gilmore, 2009; Robertson and Blackler, 2006).The university education should amongst others, be tailored towards teaching and development of students in the skill of conducting researches whose results and recommendations could better the lot of the citizenry and the nation at large. According to Lyons, Fisher and Thompson (2005);graduate students have a great deal of research skills because of their participation in graduate teaching fellowship programs but this is not available to undergraduates.

A compulsory course (titled: Research Methods and Statistics) is research oriented and is taught from the third year of the Nigerian university education. This is to ensure that students are exposed to the very knowledge of research along with its fundamentals. Ganobscik and Williams (2009); reported that research writing plays a major role in higher education both in students' understanding of the course content and the consequent assessment of students' knowledge in the course. Also, Bernardo (2010), conducted a study titled "Creative Ways in Teaching Research" and stated that research writing is one macro skill that is complicated to learn and to cultivate. Many studies have been conducted on master's and doctoral students' needs, difficulties, and coping strategies in carry out and reporting researches (Hsu, 2009; Li, 2006, 2007; Lin and Joe,2011); with little or none on undergraduates.

A lecturer who is to be assigned to teach this course has a crucial task to instill in the students the value and place of research as a requirement for their graduation and its significance to their field of specialization and the nation in general. He/she is also expected to assist these students in considering the various aspects of developing a proposal, conducting research, writing the paper, defending it and proffering recommendations. Mentoring students in research can be demanding but rewarding. These students could encounter difficulties stemming from limited background knowledge and skills, limited availability of data, and time constraint. Thus, this study investigated Nigeria university undergraduate students' perceived difficulty areas in Research Projects and Dissertation Writing and possible recommendations towards ameliorating these difficulties.

Statement of the Problem

Many Nigeria university students often view the writing of their research projects burdensome and unachievable, as they seem not to efficiently come up with a productive research culture that can work along with the newest trends in academic disciplines. To what extent can these students adequately write and prepare their project works from chapter one to five, along with the referencing; considering the areas, they find difficult and dreary. The study therefore sought to ascertain the difficulties these undergraduate students encounter in carry out, writing and reporting their researches.

Research Questions

1. What is the extent of difficulties undergraduate students encounter in writing their research project?
2. What is the relationship among students' gender, academic faculties and their difficulties in project writing?

Objectives of the Study

This study aimed to:

1. Identify difficulties encountered by undergraduate students in undertaking research in terms of preparing the proposal, conducting the research and writing the research paper;
2. Propose or recommend ways by which these difficulties can be ameliorated; and
3. Determine the relationship among students' gender, academic faculties and their difficulties in project writing.

Significance of the Study

This study will be beneficial to the following:

1. Provide a guide to undergraduate students in the art and science of research and in producing quality researches;
2. Enlighten university teachers on undergraduate students areas of difficulty, so it could be tackled; and
3. Provide the university curriculum planners the needed data/information in the design of curriculum with more emphasis on research related courses.

Methodology

The study is a non-experimental design of the survey research type. The research type was employed because the researcher had no direct control of the dependent and the independent variables as they had already occurred.

Population, Sampling Technique and sample for the study

The population for the study comprised of all 300 and 400 level undergraduate students’ in federal universities in Nigeria. The multi-stage sampling technique was used in selecting the required number of respondents for the study. Simple random sampling technique was used to select one geo-political zone out of the six in the country. A state was purposively selected from the geo-political zone. A federal and a state university were also purposively selected from the state and finally, simple random sampling was used to select only 300 and 400L students in the some faculties of the universities. In all, 143 undergraduate students constituted the study sample.

Instrumentation

An instrument, the students’ research writing difficulty scale (SRWDS) with Cronbach Alpha reliability coefficient index of 0.83; was developed, pilot tested and validated by the researchers and adopted in collecting data for the study.

The instrument consisted two sections; section A and B. Section A consists of students’ bio-data (Faculty, Department and Gender). Section B consisted of six subsections bordering on questions intended to elicit students difficulty level in chapters one, two, three, four, five and references. There were 34 questions in all. These questions were placed on a four point Likert Scale of Extremely Difficult (1), Somewhat Difficult (2), Fairly Simple (3) and Very Simple (4). Three postgraduate students were trained within two days as research assistants. The researchers and the research assistants administered the instruments to the undergraduate students at the federal university, Oye-Ekiti, Nigeria. Data were collected for six weeks. The data collected were analysed using inferential statistics (correlation) and descriptive statistics (frequencies and percentages).

Results

Research Question 1:What is the extent of difficulties undergraduate students encounter in writing their research project?

Table 1: Students’ difficulty in writing research projects

* VS=Very Simple, FS=Fairly Simple, SD=Somewhat Difficult, ED=Extremely Difficult

S/N	I t e m s	D i f f i c u l t y L e v e l				Remark
		V	S	F	S S D E D	
C H A P T E R O N E						
1	Conceiving an idea and formulating it into a researchable topic	23 (16.1%)	46 (32.2%)	50 (35.0%)	24 (16.8%)	Difficult
2	Relating a research topic to my area of specialization	13 (9.1%)	41 (28.7%)	59 (41.3%)	30 (21.0%)	Difficult
3	Deciding on the research variables to study	17 (11.9%)	50 (35.0%)	56 (39.2%)	19 (13.3%)	Difficult
4	Writing the background to the study	13 (9.1%)	35 (24.5%)	58 (40.6%)	37 (25.9%)	Difficult
5	Establishing the statement of the problem of the study	25 (17.5%)	46 (32.2%)	43 (30.1%)	29 (20.3%)	Difficult
6	Deciding the main aims of the study	15 (10.5%)	33 (23.1%)	44 (30.8%)	51 (35.7%)	Difficult
7	Deciding the specific objectives of the study	13 (9.1%)	30 (21.0%)	52 (36.4%)	48 (33.6%)	Difficult
8	Framing the research questions/hypothesis	29 (20.3%)	42 (29.4%)	52 (36.4%)	20 (14.0%)	Difficult
9	Deciding the delimitation/geographical scope of the study	28 (19.6%)	59 (41.3%)	37 (25.9%)	19 (13.3%)	Simple
C H A P T E R T W O						

1 0	Able to get current body of literature for the study	27 (18.9%)	53 (37.1%)	43 (30.1%)	20 (14.0%)	Simple
1 1	Able to state the conceptual/theoretical framework	15 (10.5%)	53 (37.1%)	57 (40.0%)	18 (12.6%)	Difficult
1 2	Able to review related empirical studies	33 (21.1%)	51 (35.7%)	44 (36.8%)	15 (10.5%)	Difficult
1 3	Able to link previous studies with the current.	18 (12.6%)	35 (24.5%)	69 (48.3%)	21 (14.7%)	Difficult
1 4	Stating the gap in literature	20 (14.0%)	54 (37.8%)	47 (32.9%)	22 (15.4%)	Simple
1 5	Summarizing the literature review	15 (10.5%)	46 (32.2%)	54 (37.8%)	28 (14.6%)	Difficult
	CHAPTER THREE: Methodology					
1 6	Deciding and justifying the appropriate Research Design to employ	36 (25.2%)	19 (13.3%)	33 (23.1%)	55 (38.5%)	Difficult
1 7	Choosing and justifying the choice of the population/sample for the study	13 (9.1%)	53 (37.1%)	5 (39.2%)	21 (14.7%)	Difficult
1 8	Deciding and justifying the sampling technique(s) to adopt for the study	28 (19.6%)	50 (35.0%)	48 (33.6%)	17 (11.9%)	Simple
1 9	Describing and justifying the sample size adopted	23 (16.1%)	33 (23.1%)	61 (42.7%)	26 (18.2%)	Difficult
2 0	Deciding and justifying the choice of instrument(s) to adopt	26 (18.2%)	40 (28.0%)	54 (37.8%)	23 (16.1%)	Difficult
2 1	Able to adopt or adapt a pre-existing instrument	20 (14.0%)	41 (28.7%)	58 (40.6%)	24 (16.8%)	Difficult
2 2	Determining the validity and reliability of the instrument	21 (14.7%)	46 (32.2%)	53 (37.1%)	26 (16.1%)	Difficult
2 3	Able to administer and collect data	19 (13.3%)	32 (22.4%)	58 (40.6%)	34 (23.8%)	Difficult
2 4	Deciding and justifying the choice of statistical tool(s) for data analysis	17 (11.9%)	57 (40.0%)	44 (30.8%)	25 (17.5%)	Simple
2 5	Able to effectively use the chosen method of data analysis	23 (16.1%)	38 (26.6%)	51 (35.7%)	31 (21.1%)	Difficult
2 6	Able to use the SPSS or other analysis software for data analysis	29 (20.3%)	40 (28.0%)	54 (37.8%)	20 (14.0%)	Difficult
	CHAPTER FOUR: Result Presentation and Discussion					
2 7	Able to present results in tables and graphs	18 (12.6%)	37 (25.9%)	44 (30.8%)	44 (30.8%)	Difficult
2 8	Able to interpret results	10 (7.0%)	26 (18.2%)	60 (42.0%)	47 (32.9%)	Difficult
2 9	Able to discuss the findings of the study	13 (9.1%)	38 (26.6%)	48 (33.6%)	44 (30.8%)	Difficult
3 0	Able to Link the discussions to previous studies	14 (9.8%)	35 (24.5%)	50 (35.0%)	44 (30.8%)	Difficult
3 1	Able to summarize major findings from the study	14 (9.8%)	31 (21.7%)	45 (31.5%)	53 (37.1%)	Difficult
	CHAPTER FIVE : Summary, Conclusion and Recommendation					
3 2	Able to summarise and conclude the study	20 (14.0%)	21 (14.7%)	55 (38.5%)	47 (32.9%)	Difficult
3 3	Able to make appropriate recommendation(s) from the study	21 (14.7%)	28 (19.6%)	49 (34.3%)	45 (34.5%)	Difficult
	R E F E R E N C E S					
3 4	Able to consistently reference in line with the APA, MLA etc. format	26 (18.2%)	44 (30.8%)	44 (30.8%)	29 (20.3%)	Difficult

Table 1 depicts the extent of students' difficulty in research project writing (as most of the items response for somewhat difficult and extremely difficulty has a higher percentage value than the fairly simple and Very Simple response).As revealed from the table, more than sixty-five percent of the undergraduate students as sampled in the study; do experience difficulties in conceiving an idea and formulating it into a researchable topic; relating a research topic to my area of specialization; deciding on the research variables to study; writing the background to the study; establishing the statement of the problem of the study; deciding the main aims

of the study; deciding the specific objectives of the study; framing the research questions/hypothesis; deciding the delimitation/geographical scope of the study; able to state the conceptual/theoretical framework; able to review related empirical studies; able to link previous studies with mine; summarizing the literature review; deciding and justifying the appropriate research design to employ; choosing and justifying the choice of the population/sample for the study.

More so, these students do face difficulties in: describing and justifying the sample size adopted; deciding and justifying the choice of instrument(s) to adopt; able to adopt or adapt a pre-existing instrument; determining the validity and reliability of the instrument; able to administer and collect data; able to effectively use the chosen method of data analysis; able to use the SPSS or other analysis software for data analysis; able to present results in tables and graphs; able to interpret results; able to discuss the findings of the study; able to Link the discussions to previous studies; able to summarize major findings from the study; able to summarise and conclude the study; able to make appropriate recommendation(s) from the study and able to consistently reference in line with the APA, MLA etc, format.

However, a large number of the students affirmed that they can with ease: able to get current body of literature for the study; state the gap in literature; deciding and justifying the sampling technique(s) to adopt for the study and deciding and justifying the choice of statistical tool(s) for data analysis.

Research Question 2:What is the relationship among students’ difficulties in their project writing, gender and academic faculties?

Table 2: Relationship among undergraduate students’ gender, academic faculties and difficult areas in writing research projects.

V a r i a b l e s	Academic faculties	Students’ Difficulties	G e n d e r
Pearson Correlation	1	- . 0 1 8	- . 0 1 2
Academic faculties Sig. (2-tailed)		. 8 2 8	. 8 9 0
Pearson Correlation	- . 0 1 8	1	. 1 8 5 *
Students’ Difficulties Sig. (2-tailed)	. 8 2 8		. 0 2 7
Pearson Correlation	- . 0 1 2	. 1 8 5 *	1
G e n d e r Sig. (2-tailed)	. 8 9 0	. 0 2 7	

*** Correlation is significant at the 0.05 level (2-tailed).**

Table 2 shows the relationship among undergraduate students’ difficulties in writing research project, gender and their academic faculties. As evident from the table, there is no significant relationship among undergraduate students’ difficulties in writing research project, gender and their academic faculties; that is, undergraduate students’ difficulties in writing research project is negatively correlated with their gender and academic faculties. Hence, an undergraduate student will be able to write a good research project irrespective of his/her gender and academic faculty.

Discussion

In accordance with the findings of the study, majority of undergraduate students in Nigerian universities do have difficulties in writing their research projects. This reaffirms the findings of Phakiti and Li, 2011, Bernardo (2010) and Yeh (2010), which posited that research writing, is one macro skill that is complicated to learn and cultivate. The finding also corroborated with those of Dadipoor et al (2019) and Ashrafi-Riziet al. (2015), which indicated that students have inadequate knowledge of research methodology and skills in research conduction; Ibrahim Abushouket al. (2016), which restated that students have inadequate understanding of the concepts of research, especially the statistical concepts and lack of skill in scientific writing were the barriers to research; Carla (2016), showed that students were most confident when searching for related studies and when writing a summary of their research and had difficulties when selecting appropriate statistical treatment and discussing research results; Siemens et al. (2010), which affirmed that inadequate knowledge and training in research were the barriers to research in students and Bocar (2012) which opined that lack of skill in analyzing and interpreting the results was one of the obstacles to research in the majority of students.

Additionally, it was observed from the study that there exist no relationship among undergraduate students' difficulties in writing research project, gender and their academic faculties. This is in tune with the findings of VanArensbergen et al. (2012) which shows that among starting researchers, gendered performance differences seem small to non-existent. However, the study finding contrast those of Nakhaie(2002); Prpic(2002); Penas and Willett (2006); Taylor, et al. (2006); Ledin, et al.(2007); Dryler(2011); Abramo, et al. (2009); which posited that performance gaps between male and female researchers had been indicated for long, with men on average publishing more papers, and receiving more citations than female researchers. Similarly, Symonds, et al., (2006) buttressed this by restating that the total impact of female researchers (their productivity) remains lower than their male counterparts.

Conclusion

The finding of the study has exposed undergraduate students' difficulty areas or weak points in research project writing. The results has shown that a large number of undergraduate students in Nigerian universities do have difficulties in writing their research projects, from the very point of conceiving the research topic to the referencing. The study also revealed that there is no relationship among undergraduate students' difficulties in writing research project, gender and their academic faculties.

Recommendations

Based on the findings of this study, the researcher therefore recommends that:

1. Research trainings, workshops, seminars and conferences should be regularly conducted for students (and academic staff inclusive) to inculcate in students the interest, motivation, knowledge and skills of research.
2. Further studies should be conducted to ascertain other possible challenges which may be encountered by students when they undertake research, that have not been captured in this present study.
3. Curriculum planners for tertiary institutions and the university authorities; entwine the teaching and training of students in the methodologies of carrying out and reporting researches early enough (preferably from their hundred levels) so as to

adequately equip these students with the needed skills and knowledge of research and its implementations.

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