



Factors Influencing Post Graduate Students' Choice of Research Topic in Education at Abubakar Tafawa Balewa University, Bauchi-Nigeria

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Abstract

Most frequent external and personal; difference between Ph.D and M.Ed students; on factors that influences the choice of research topic were among the objectives of the study. Survey design was used for the study. The population of the study consisted of 45 (20Ph.D and 25 M.Ed) Post Graduate (PG) students in education from Faculty of Technology Education (FTE), Abubakar Tafawa Balewa University (ATBU) Bauchi. Stratify random sampling was used to select 40(17 Ph.D, 23M.Ed) male and 10(4Ph.D, 6 M.Ed) female PG students in Education. Factors that influence PG students Choice of Research Topic in Education Questionnaire (CRTEQ) was developed, validated and used for data collection. Stability coefficient of 0.88 was established. Hypotheses were tested at $\alpha = 0.05$ level of significance. The data was analyzed using frequency count, percentages and Chi- Square test. Findings from the study revealed that availability of the data method on external factors and the topic falls within my interest and intellectual ability on personal factors were the most frequent factors that influence choice of research topic by PG students in education. There is no significant differences (Chi-Square=.527, $p < 0.05$) between Ph.D and M.Ed students in education on the factors that influence the choice of the research topic. Recommendations from the study includes Post Graduate Research Supervisors (PGRS) to take into consideration of student's preference on choice of research topic, lectures to be organized to PG students in Education by Faculty on the qualities and sources of a good research topic.

Keywords: Determinants; Post Graduate students'; Research topic; Thesis.

1. Introduction

Research work is one of the basic requirements for graduation in universities and other institutions such as Polytechnic and Colleges of Education in Nigeria. Toluhi (cited in James (2008) defined Research as a process of systematic inquiry, investigation and analysis of data in order to increase knowledge, test hypothesis where necessary and to arrive at a conclusion.

The research work (Project, Thesis or Dissertation,) is carried out by students at both Undergraduate and Post graduate levels of Education. Lambert (2013) state that research project is an essential aspect of many undergraduate degree programs. It provides experience of writing in the discipline and given chance to be creative (Alvarez and Dimmock, 2007). To ensure quality of the research work supervisors are appointed to each student by the department, and for supervision to be effective, its require supervisor to be knowledgeable, and skilled in the research field (Abddin *et al.*, 2009). Good supervisory practice help students fulfill their potential and contribute to university research project (Abddin *et al.*, 2009). However, these aims could be achieve if sound topic is chosen by the research student.

James (2008) defined research topic as a brief outline, heading or phrase that describes in concise words the content of a research. The success of any research work lies on the researcher effort, ability and the topic for the research. Indeed these could be achieved if certain criterions such as External and Personal factors for the choice of research topic are observed by the research student under the supervision of the research supervisor.

Literature related to Post graduate students research work focuses on problems associated with Post Graduate research work, pitfalls in choising research topic, questionable data; grammatical errors; and misconception of research concepts, content of the research work, and problem associated with supervision of the research work; (Creswell, 2012; Garrett, 2013; Juliet, 2015; Luse *et al.*, 2012; Yusuf, 2017). These were acknowledged. There need to research further into the factors that influence the choice of research topic as this, hoped to minimize the problems associated with PG students research work as documented by the literature highlighted above, becomes a task for researchers in education.

In view of this, the study aims for determining the factors that influences the choice of research topic among the Post Graduate(PG) Students' in Education Specifically, the study is to determined the

- i. Most frequent external factor that influence the choice of research topic by PG students 'in Education.
- ii. Most frequent personal factor that influence the choice of research topic by PG students 'in Education.
- iii. Differences between Ph.D and M.Ed students' in Education, on factors that influence the choice of research topic.
- iv. Gender differences among PG students' in Education on factors that influence the choice of research topic.

2. Research Questions

The following research questions guided the study

- i. What is the most frequent external factor that influences the choice of research topic by PG students 'in Education?
- ii. What is the most frequent personal factor that influences the choice of research topic by PG students 'in Education?
- iii. What are the differences between Ph.D and M.Ed students' in Education, on factors that influences the choice of research topic?
- iv. What are the differences in gender among PG students' in Education on factors that influence the choice of research topic?.

3. Hypotheses

The following hypotheses were tested at $\alpha = 0.05$ level of significance.

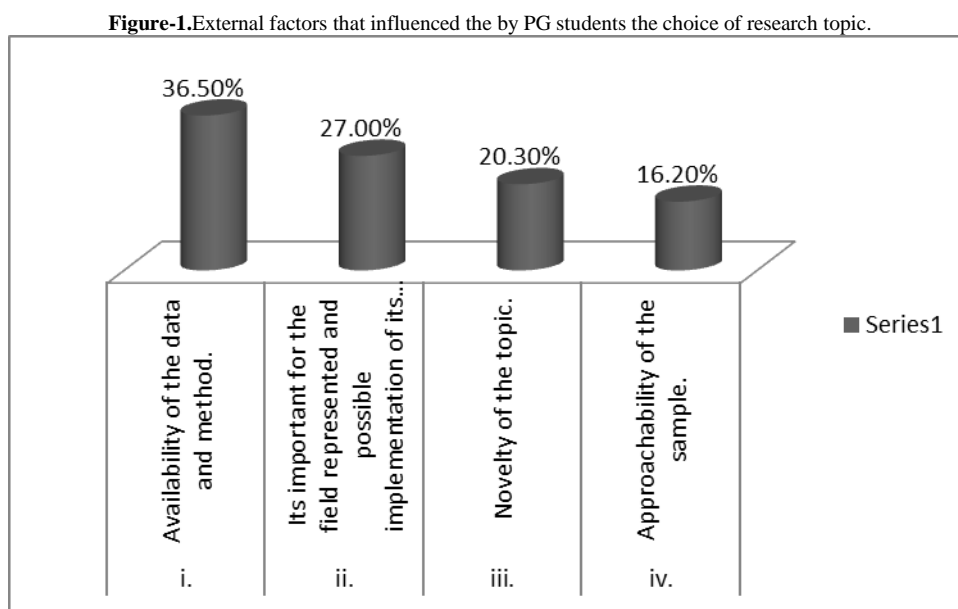
- i. Ho1: There is no significant difference between Ph.D and M.Ed students' in Education on factors that influences the choice of research topic.
- ii. Ho2: There is no significant difference in gender among PG students' in Education on factors that influences the choice of research topic.

4. Methodology

Survey design was used for the study. The population of the study consisted of 45 (20 Ph.D and 25 M.Ed) Post Graduate (PG) students in education from Faculty of Technology Education (FTE), Abubakar Tafawa Balewa University (ATBU) Bauchi. Stratify random sampling was used to select 40(17Ph.D, 23M.Ed) male and 10(4Ph.D, 6 M.Ed) female PG students in education. Factors for the choice of PG Research Topic in Education Questionnaire (FCRTEQ) was developed, validated and used for data collection. The FCRTEQ consisted of 3(A, B and C) sections. Section A, bio data of the respondent, section B, external factors that consisted of 4 items while section C is the personal factors that consisted of 3 items. The respondent is to tick in the factor he/she used in choice of research topic. Face validity of the items was determined by senior lecturers in Measurement and Evaluation and Research Methods. Stability coefficient of 0.88 was determined through pilot testing of the items using 20 (10 Ph.D and 10 M.Ed.) Students' from Faculty of Science ATBU, Bauchi.

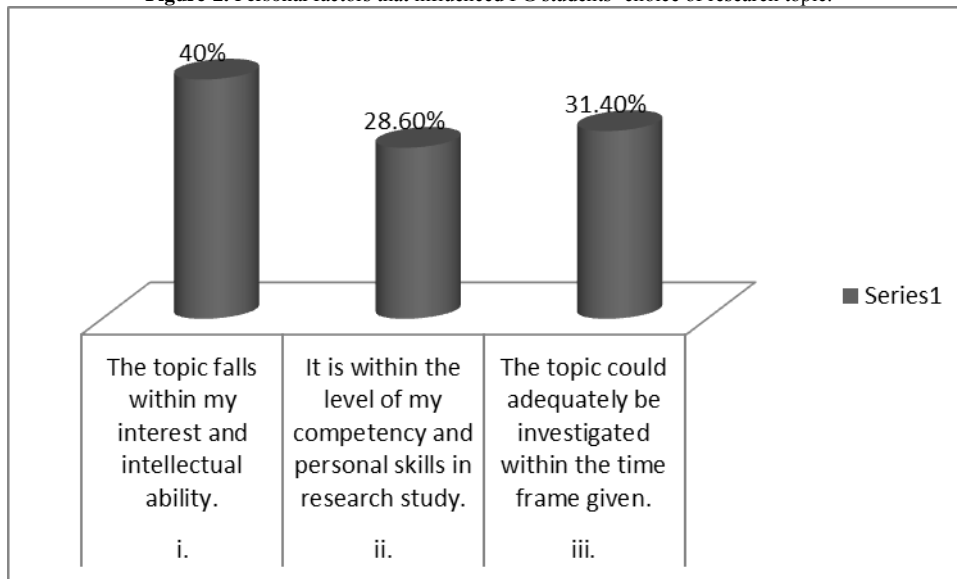
The instrument was administered by the researcher and 2 research assistants. The data was analyzed using frequency count, percentages and Chi- Square test.

5. Results



The *External factors* that influenced that PG students' choice of research topic was shown on [Figure1](#). From the [figure 1](#), Availability of the data and method had the highest percentage (36.5%) while approachability of the sample had the least percentage (16.2%).

Figure-2. Personal factors that influenced PG students’ choice of research topic.



Personal factor which influenced the PG students’ choice of research topic were shown on Figure 2. From the result on Figure 2, the second item statement *it is within the level of my competency and personal skills in research study* had the least percentage of 28.60% as a factor that influenced PG students’ choice of research topic.

Table-1a. Factors that influence PhD students’ on choice of research topic.

Variable	Item	Statement	Frequency	Percentage
External factors	i	Availability of the data and method.	8	14.8
	ii	It’s important for the field represented and possible implementations of its outcomes.	9	16.7
	iii	Novelty of the topic.	8	14.8
	iv.	Approachability of the sample.	4	7.4
		Total	29	53.7
Personal factors	i.	The topic falls within my interest and intellectual ability.	11	20.3
	ii.	It is within the level of my competency and personal skills in research study.	7	13.0
	iii.	The topic could adequately be investigated within the time frame given.	7	13.0
		Total	25	46.3
		Grand Total	54	100

The Ph.D students’ External and Personal factors, that influence the choice of research topic were shown Table 1a. From Table 1a above, the variables External and Personal factors had 29 (53%) and 25 (46.3 %) each as factors that influence PG students choice of research topic.

Table-1b. Factors that influence M.Ed students’ choice of research topic.

Variable	Item	Statement	Frequency	Percentage
External determinant	i	Availability of the data and method.	31	32.0
	ii	It’s important for the field represented and possible implementations of its outcomes.	11	11.3
	iii	Novelty of the topic.	8	8.3
	iv.	Approachability of the sample.	8	8.3
		Total	58	59.9
Personal determinant	i.	The topic falls within my interest and intellectual ability.	11	11.3
	ii.	It is within the level of my competency and personal skills in research study.	13	13.4
	iii.	The topic could adequately be investigated within the time frame given.	15	15.5
		Total	39	40.1
		Grand Total	97	100

The combined Grand total 97 (100) was obtained for the variable External factor 58 (59.9%) and Personal factor 39 (40.1%) that influence the M.Ed students’ choice of research topic (Table 1b).

Table-1c. Computed Chi –Square on the differences between Ph.D and M.Ed students on factors that influence choice of research topic.

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	.527 ^a	1	.468
Continuity Correction ^b	.307	1	..580
Likelihood Ratio	.525	1	.469
L:inear by Linear Association	.523	1	.469
N of valid Cases	151		

- a. 0 cells (0%) have expected count less than 5. The minimum expected count is 22.89
- b. Computed only for 2X2 table.

Results on [Table 1a](#) and [Table 1b](#) were used to obtained the Chi-Square = 0.527, p = 0.468 at $\alpha = 0.05$ level of significance.

Table-2a. Factors that influence male PG students’ on choice of research topic.

Variable	Item	Statement	Frequency	Percentage
External factors	i	Availability of the data and method.	26	22.8
	ii	It’s important for the field represented and possible implementations of its outcomes.	15	13.2
	iii	Novelty of the topic.	12	10.5
	iv.	Approachability of the sample.	11	9.7
		Total	64	56.2
Personal factors	i.	The topic falls within my interest and intellectual ability.	17	14.9
	ii.	It is within the level of my competency and personal skills in research study.	16	14.0
	iii.	The topic could adequately be investigated within the time frame given.	17	14.9
		Total	50	43.8
GrandTotal			114	100

Factors in percentages that influences the choice of the research topic by male PG students on [Table 2a](#) above, revealed grand total of 64 (56.2 %) and 50 (43.8 %) were obtained for both External and Personal factors.

Table-2b. Factors that influence female PG students’ on the choice of research topic.

Variable	Item	Statement	Frequency	Percentage
External factors	i	Availability of the data and method.	8	20.0
	ii	It’s important for the field represented and possible implementations of its outcomes.	14	35.0
	iii	Novelty of the topic.	3	7.5
	iv.	Approachability of the sample.	1	2.5
		Total	26	65
Personal factors	i.	The topic falls within my interest and intellectual ability.	5	12.5
	ii.	It is within the level of my competency and personal skills in research study.	4	10.0
	iii.	The topic could adequately be investigated within the time frame given.	5	12.5
		Total	14	35
Grand Total			40	100

[Table 2b](#) above shows the factors that influenced the choice research topic in percentages by female PG students. Frequency 26 (65 %) and 14 (35 %) were obtained for the External and Personal factors.

Table-2c. Computed Chi –Square on PG students in education gender difference on factors that influence the choice of research topic

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	.957 ^a	1	.328
Continuity Correction ^b	.627	1	.428
Likelihood Ratio	.969	1	.325
L:inear by Linear Association	.951	1	.330
N of valid Cases	154		

- a. 0 cells (0%) have expected count less than 5. The minimum expected count is 16.62
- b. Computed only for 2X2 table.

Result on Table 2c was obtained using results on Table 2a and Table 2b. Chi-Square computed shows no significant (Chi-Square = .957, $p = .328$ at $\alpha = 0.05$ level of significance) differences between male and female PG students on factors that influence the choice of research topic (Table 2c).

6. Findings

- Availability of the data and method (36.5%) is the most frequent external factors that influence the choice of research topic by the PG students in Education.
- 40 % of the PG students in Education were influenced by interest and intellectual ability as the factors for the choice of research topic.
- There is no significant (Chi-Square = 0.527, $p = 0.468$) difference between Ph.D and M.Ed students in Education on factors that influenced the choice of research topic.
- Gender had no influence on the factors which influence the choice of research topic among PG students in Education.

7. Discussion

To achieve objective 1 from the study, result on Figure 1 was used. Availability of the data and method had the highest percentage (36.5%) while Approachability of the sample had the least percentage (16.2 %) as external factors that influenced the choice of research topic by PG students (Figure 1). Finding from this revealed that availability of the data and method is the most frequent external factor that influenced the choice of research topic by the PG students. The finding is in consistence with previous finding of James (2008).

The personal factors that influenced PG students for the choice of research topic (Figure 2) revealed that item i which states that *the topic falls within my interest and intellectual ability* had the highest percentage (40 %). Finding from this, shows that PG students in Education choice topic for the research topic was influenced by the factor that is the topic falls within their interest and intellectual ability, the finding is in support of previous findings of Kanne (2006); Luse et al. (2012).

To determine the differences between Ph.D and M.Ed students' in Education, on factors that influenced the choice of research topic, results from Table 1a and Table 1b were used. From the result on Table 1a, Grand total of 29 (53.7 %) and 25 (46.3 %) were obtained for external and personal factors that influence Ph.D students in Education for the choice of research topic. While Table 1b, revealed Grand total of 58 (59.9%) and 39 (40.1%) for external and personal factors that influence M.Ed students in Education for the choice of research topic. However, these differences in Grand total percentages (53.7 % and 46.3 %; 59.9 % and 40% for Ph.D and M.Ed students in Education) were not statistically significant at $p > 0.05$. Thus, the H_01 was not rejected. Finding from this revealed that there is no significant (Chi-Square = 0.527, $p = 0.468$) difference between Ph.D and M.Ed students in Education on factors that influence choice on the research topic.

To determine the gender differences among PG students in Education on factors that influence the choice of research topic, results from table 2a and 2b were used. Although, Grand total of 64 (56.2 %) and 50 (43.8 %); 26 (65 %) and 14 (35 %) were obtained for external and personal factors that influence the choice of research topic for both Ph.D and M.Ed students in Education respectively. However the H_02 was not rejected at $\alpha = 0.05$ level of significance. This, implies that the Grand total differences on gender among PG students in Education on factors that influence the choice of research topic was not statistically significant (Chi-Square = .957, $p = .328$ at $\alpha = 0.05$). Finding from this, revealed that gender had no influence on the factors that influence the choice of research topic among PG students in Education.

8. Conclusion

The study determined the external and personal factors that influence PG students in Education from Faculty of Technology Education, ATBU, Bauchi, choice of research topic. The study used eight (5 external and 3 personal) items in determining the most frequent from each (external and personal) factor that influence PG students in Education on the choice of research thesis topic. Although, gender differences had no influence on the factor that influence the choice of research topic as observed from the study. However, recommendation was made on similar study with undergraduate students.

Recommendations

- Post Graduate Research Supervisors (PGRS) to take into consideration of student's preference on choice of research topic.
- Lectures to be organized to PG students in Education by Faculty on the qualities and sources of a good research topic.
- Similar study to be carries out with undergraduate students in Education.

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