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Research Skill Determinants and Completion Rate among Postgraduate Students in School of Education Kenyatta University, Kenya

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Abstract

Master's regular program has a specified time of three years and Doctor of Philosophy has a specified time of four years at Kenyatta University. However, it has been observed that postgraduate students overstay in universities. This study sought to examine the extent to which research skills determine completion time among regular postgraduate students in the School of Education, Kenyatta University (KU). This study was anchored on Field theory. This study used a survey research design and was conducted in the school of education, KU. The sample size for this study was eleven SBPS members, ninety-two PhD students, and 209 master's students. A questionnaire for students, an interview for SBPS, and a focused group discussion with students were used to collect data for this study. Mean, standard deviation, linear, and multiple regressions were used in analyzing data, whereas tables and narratives were used in data presentation. This study found that research skills determine the completion time for postgraduate. Major research skills determining completion time are topic identification; statement of the problem; criticizing, identifying research gaps and connecting reviewed literature with the current study; choosing research design; making appropriate research tools; and establishing appropriate data analysis methods. When research skills for PhD and masters are compared, research skills for master's students have a greater determination of completion time as compared to those of PhDs. Study recommendations are research unit be introduced at the undergraduate level, and for graduate students, a practical and learner-centered approach be used in teaching research unit. Finally, graduate students may take in existing faculty research projects.

Keywords: **Research Skills Determinants, Completion Rate, Higher Education, Kenyatta University, Kenya.**

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Introduction and Background of the Study

According to Baum, Ma, and Payea (2010), education is essential in enabling people to get better jobs which leads to more wages and, consequently, better lifestyles which is the wish of every human being. OECD (2012) also points out that education is the best investment one can engage in without a higher risk of loss. More so, highly educated people with master's and doctoral studies form a pool of academicians who can use research skills to address societal issues and engage in innovation activities in their country. However, unlike other levels of education, the internal efficiency of postgraduate programs has not received much attention from researchers.

At a personal level, postgraduate studies help an individual to improve his/her job prospects, increased wages, deeper respect in the community, and intellectual rewards. Timely completion of postgraduate studies prevents attrition among students. Scholars such as Barnes and Randall (2012), Breckner (2012), and Jiranek (2010) have established that attrition is an issue of major concern internationally. Abiddin and Ismail (2011); Sharif, Ramli, Nurhazani, and Abidin (2015) postgraduate studies noted that completion trends have been of great concern to university administrators all over the world. Canadian Association for Graduate Studies (CAGS, 2006) noted that most students take longer to complete their thesis due to unmanageable thesis topics and the unsustainable funding of students. The literature reviewed by Eyangu, Bagire, and Kibrai (2014) showed that the research thesis or project is the main cause of varying completion times of postgraduate studies.

Studies done on postgraduate studies completion trends indicate that few students complete in time, and the majority take longer time than the stipulated (Abiddin & Ismail, 2011; Eyangu *et al.,*2014; Olsen, Spain & Wright, 2008; Wamala & Oonyu, 2012). This trend is also witnessed at KU in the School of Education. Shariff *et al.* (2015) noted that research skills have the greatest influence on postgraduate completion when compared to personal factors among Malaysian postgraduate students. Available literature has highlighted skills in defining research problems, literature reviewing, research methodology, and data collection as necessary for successful and timely postgraduate research completion (Eyangu *et al*., 2014; Ezebilo, 2012; Shariff *et al*., 2015).

An analysis of the KU institutional repository revealed that few full-time students complete within the stipulated time, whereas the majority take longer than the stipulated time. Table 1 and Table 2 show the academic years students took to complete their studies and their respective departments: Early Childhood Studies (ECS); Educational Communication and Technology (ECT); Educational Foundations (EFN); Education Management policy and curriculum Studies (EMP); Educational Psychology (EPS); and Library and Information Science LIS) and Special Needs Education (SNE). This data is for students who joined on or after 2006/2007 academic years.

Table 1: Time Taken by Regular Master's Students to complete their Masters Programs

Department	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs & above
ECS	1	1	1	-	1	1
EFN	2	2	2	-	1	1
ECT	2	4	7	3	5	2
EPS	3	2	7	4	6	3
LIS	1	2	-	2	1	-
EMP	5	17	18	12	5	11
SNE	1	4	6	6	4	3
Total	15	32	41	27	23	21

Source: Institutional repository, KU library (August, 2017)

In table 1, few masters students, 47 (29%), were able to complete their studies within the specified academic years (3 years), whereas the majority 112 (71%), extended their candidature

Table 2: Time taken by Regular PhD Students to Complete their Doctorate Degrees

Department	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs & above
ECS	2	5	3	1	-	1
EFN	-	2	2	2	1	2
ECT	1	1	2	3	-	2
EPS	-	3	2	1	3	1
LIS	-	2	3	6	-	1
EMP	1	-	3	4	5	2
SNE	1	3	2	5	2	2
Total	5	16	17	22	11	11

Source: Institutional repository, KU library (August, 2017)

In table 2 21 (25.6%) PhD students completed their studies within the minimum specified academic years of four years, whereas the majority, 69 (74.4%), extended their candidature.

Statement of the Problem

Every level of an educational program needs to be completed within the specified time. In KU, the master's regular program has a specified time of 3 years, and the doctor of philosophy has a specified time of 4 years. However, in the School of Education, KU, few regular postgraduate students take the specified time /while the majority take longer than the specified time.

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Studies on postgraduate completion globally have revealed research skills as major determinants of the completion of postgraduate studies. However, the extent to which specific variables of research skills determine the completion time of postgraduate studies is hardly studied hence the focus of the current study.

Objective of the Study

This study sought to establish the extent to which research skills determine the completion time of regular post graduate studies in the School of Education, KU.

Theoretical Framework

This study was guided by Field theory in social sciences, whose main proponent is Kurt Lewin (1951). Field theory was re-appraised by Burnes (2004), who affirmed that the theory is still relevant to the modern practice of change in management. Field theory emphasizes that behavior exhibited by an individual results from the interaction between the individual and the social environment in which the behavior is being exhibited. In this study, the behavior was equated to the completion time of students, while interaction between the individual and the social environment was equated to research skills and training a learner is exposed to.

Literature Review

Research Skills

Studies have established research skills in defining research problems, literature reviewing, research methodology, and data collection as vital for successful and timely postgraduate research completion (Eyangu *et al.,*2014, Ezebilo, 2012,Shariff *et al.*,2015).

Problem Definition

Research is defined by formulating its research title, formulating a statement of the problem, research objectives, and the scope of the research (Ssegawa & Rwelamila, 2009). The term topic refers to subjects or issues under investigation (Oso & Onen, 2009). Topic identification has been highlighted by earlier studies as a challenge to researchers and hence many students waste time in this step. Eyangu *et al*. (2014) established that completion rates were low and that research skills were the main attribute to delayed completion rate. Schoot *et al*. (2013) identified constant changes to the research topic as a cause of delayed completion. Bocer (2009) found that to a very great extent identification of a researchable issue and construction of research title challenges student researchers. Moreover, a study by Taskeen, Shehzadi, Khan, and Saleem (2014) established that postgraduate students in Pakistan universities spent a great deal of time in choosing futile and unworthy topics because they were unaware of how to select a topic.

Kombo and Tromp (2006) outlined the following challenges that research students encounter when selecting a topic for their dissertation: too wide, too complex, poorly timed, and topics the researchers are not interested in. Also, sometimes postgraduate students choose consisted titles that do not tally with the research objectives, statement of the problem, or the methodology applied. Developing a statement of the problem has been identified as a challenge for postgraduate researchers. Ellias and Levy (2009) argued that researchers are not aware of what should constitute a statement of the problem. Kombo and Tromp (2006) have also highlighted challenges faced by researchers in their bid to articulate the statement of the problem, and these are lack of clarity, lack of unity between the research problem, objectives, and literature review, lack of urgency for the study and also

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some problem statements lack objectivity and hence only reinforce the researchers' emotional views over the topic under study.

Literature Reviewing

Students have difficulties in reviewing literatures for their dissertations. This can be proved by the fact that some students find themselves repeating what has already been studied. Also, they write irrelevant details in their literature reviews, and others are not able to criticize the already existing literature (Orodho, 2009). Kombo and Tromp (2006) highlighted challenges that researchers encounter while writing the research review, and these are: failure to connect the reviewed studies with the current study, poor presentation whereby researchers write any information in regard to the topic instead of selecting what is significant to their study. Some students also review old works. A study conducted by Eyangu *et al*. (2014) found that literature review was a challenge to Makerere University Business School postgraduate students.

Research Methodology

Research methodology presents research design, variables, study locale, target population, sampling techniques, sample size, research instruments, pilot study, data collection techniques and its analysis and finally logistical and ethical consideration. (Kombo & Tromp, 2009); (Eyangu *et al*., 2014).

Data Collection

Researchers, while in the field, encounter data collection challenges that may lead to: collection of irrelevant data, omission of pertinent data, erroneous or misinterpreted data being collected, collection of conflicting data, or too little information being collected. A study by Schoot *et al* (2013) at Netherlands University established

that data collection is a major setback in postgraduate student research. Hoskins and White (2013) identified three main causes of data collection challenges and these are: the researchers themselves, the participants, and the research tools. The researcher becomes a barrier to data collection if they fail to create a good rapport with participants, if they lack experience in data collection techniques and if they fail to convince the participants to participate, especially in sensitive topics such as homosexuality.

Komba (2016) conducted a study on the challenges of writing theses and dissertations among postgraduate students in Tanzanian higher learning institutions. This study revealed that 78% of the respondents were not able to clearly identify research gaps that their studies indented to fill. Also, 67% of the respondents could not clearly state the statement of the problem of their studies, and neither could they state the rationale of their studies. Moreover, 73% of the respondents lacked the consistency of the topic, statement of the problem, purpose, and specific objectives of the study. In 86% of the sampled dissertations, grammatical errors were so rampant, which ranged from misspellings, ungrammatical sentences to incoherent presentation of contents. Literature review was also a major challenge to learners. From the sampled dissertations, 69% were unable to critique literature reviewed, identify gaps which their study can fill or identify areas of controversy instead, they gave a summary of other scholars' work. In addition, 54% had citation challenges. In defining research methodology, 67% of the respondents were not able to provide a convincing justification for the choice of methodology, while 37% had poorly presented their data collection tools and procedures. In data presentation, analysis, and discussion, only 37% adequately addressed and consequently did well in the summary and conclusion chapter.

Research Design and Methodology

Survey design was approved for the study since the scholar intended to describe, explain and explore determinants of completion time among postgraduate students in the School of Education, KU. Also, this design enabled the investigator to identify relationship between the independent variable(s) and dependent variables of the study.

Target Population

The School of Education has 7 departments, namely EMP, EFN, ECT, SNE, ECS, EPS, and LIS. The target population for this study was 1,042 and was drawn from all seven departments. Thirty-four of the population are members of the School Board of Postgraduate Studies (SBPS). Three hundred and nine PhD students and 669 masters' students totaling 1042 respondents.

Sample Size

Kombo and Tromp (2006) recommend a sample size of 10-30% of the target population as appropriate for a relatively small and clearly defined population. Therefore 30% of the total students in each department and 30% of SBPS members were selected.

Presentation of Findings, Interpretation, and Discussion

The study's objective sought to establish the extent to which research skills determine the completion time of regular post graduate studies in the School of Education, KU. Scales of negative statements were reversed when scoring them. An item with a mean between 1.0 - 2.0 was considered to have a great influence on non-completion, an item with a mean of 2.1 – 3.0 was considered to have little influence on non-completion whereas an item whose mean was between 3.1- 4 was considered to have insignificant influence on non-completion. The findings are presented in table 3 below:

Table 3: PhD Research Skills, Mean and Standard Deviation

Items	SA		A		D		SD		mean	Std. deviation
	F	%	F	%	F	%	F	%		
Identifying research problem was easy	1	1.1	-	-	15	16.3	76	82.6	1.20	.474
Statement of the problem was challenging	72	78.3	16	17.4	3	3.3	1	1.1	1.27	.576
It's difficult to develop research objectives	3	3.3	85	92.4	2	2.2	2	2.2	2.97	.377
It's easy to develop a narrow topic	4	4.3	76	82.6	12	13	-	-	2.09	.410
Developing a timely topic is difficult	6	6.5	73	79.3	13	13.1	-	-	2.08	.450
Developing a clear topic is easy	2	2.2	11	12	79	85.9	-	-	2.84	.427
My statement of the problem was clear	2	2.2	2	2.2	87	94.6	1	1.1	2.95	.343
I did not face the challenge of including irrelevant details in the literature review	9	9.9	9	9.8	71	77.2	3	3.3	2.74	.677
I was able to criticize the already existing literature	2	2.2	3	3.3	80	87.0	7	7.6	3.00	.445
My literature review had consistency with the research objectives	4	4.3	4	4.3	73	79.3	11	12	2.99	.584
It is easy to identify current scholarly work for the review	5	5.4	8	8.7	66	71.7	13	14.1	2.95	.669
Identification of the research gap in my literature was easy	-	-	18	19.6	19	20.6	55	59.8	3.40	.799
Connecting reviewed literature with the current study is easy	20	21.7	55	59.8	1	1.1	16	17.4	2.14	.956
I was able to identify relevant information regarding my topic	27	29.3	42	45.7	15	16.3	8	8.7	2.04	.901
Choosing research design is an easy task	8	8.7	16	17.4	13	14.1	55	59.8	3.25	1.034
Identifying research variables is easy task	54	58.7	18	19.6	15	16.3	5	5.4	3.32	.937
Target population is easy to define	11	12	13	14.1	55	59.8	13	14.1	2.76	.843
Determining sample size is easy	18	19.6	52	56.5	20	21.7	2	2.2	2.07	.708

Items	SA		A		D		SD		mean	Std. deviation
	F	%	F	%	F	%	F	%		
Choosing sampling procedures is difficult	19	20.7	63	68.5	10	10.9	-	-	1.90	.556
Selecting research tools is challenging	25	27.2	54	58.7	13	14.1	-	-	1.87	.633
Determining instrument reliability is a challenge	28	30.4	54	58.7	10	10.9	-	-	1.80	.616
It was difficult to determine validity of my study	29	31.5	43	46.7	17	18.5	3	3.3	1.93	.796
Data collection techniques was difficult to outline	28	30.4	59	64.1	4	4.3	1	1.1	1.76	.581
It is difficult to establish appropriate data analysis methods	29	31.5	60	65.2	2	2.2	1	1.1	1.73	.557
Logistical and ethical considerations are easy to outline	38	41.3	51	55.4	1	1.1	2	2.2	3.64	.622
I collected adequate information from the field	9	42.9	7	33.3	4	19.0	1	4.8	3.14	.910
Data collected was not conflicting	6	28.6	10	47.6	4	19.0	1	4.8	3.00	.837
I was able to convince respondents to participate	6	28.6	13	61.9	2	9.5	-	-	3.19	.602
Prior experience in fieldwork contributed to the quality of data I collected	5	23.8	11	52.4	2	9.5	3	14.3	2.86	.964
Research tools were comprehensive enough to collect adequate data	10	47.6	6	28.6	2	9.5	3	14.3	3.10	1.091
Clarity of instructions in data collection tools was adequate	8	38.1	8	38.1	3	14.3	2	9.5	3.05	.973
Data analysis was not difficult	-	-	3	30.0	3	30.0	4	40.0	1.90	.876
I am facing minimal challenges in writing my research report	-	-	1	25.0	2	50.0	1	25.0	2.00	.816

Source: Research Data (2018)

The majority 91(98.9%), agreed that identifying the research problem is not easy. This item has a mean of 1.2, which is far below the decision level. Thus, the item shows that, to a great extent, it can determine the completion of studies. Statement of the problem was a challenge to 88(95.7%) of the students. This item further has a mean of 1.27. This item, therefore, shows that, to a great extent, it can delay the completion of studies. Further, 88(95.7%) of the students agreed that it was/is difficult for them to develop research objectives. This item has a mean of 2.97 and therefore, to some extent, it can delay the completion of studies. Nearly all the 80 students (87.0%) agreed that they find it difficult to develop narrow, timely, and researchable topics. This item has a mean of 2.09; therefore, to some little extent, it can delay the completion of studies. Developing a timely topic is relatively difficult for 79(87.5%). This item has a mean of 2.08 therefore, to some extent; it can delay the completion of studies.

This study found that 86(93.5%) of the PhD students disagreed that they were able to make a clear statement of the problem which is consisted with research problem, objectives, and literature review; however, this item has a mean of 3.01and therefore to a very low extent it can delay completion of studies. Further, 74(80.43%) of the PhD students were able to include only relevant details in literature review making this item have a low extent of delaying their completion of studies as denoted by its mean of 2.74. Although 87(94%) of the students disagreed that they were able to criticize the already existing literature, this item has low extent of delaying their candidature. The study observed that 84(90%) of the students disagreed that connecting reviewed literature with the current study easy and that 79(90%) of them were able to identify relevant information for their study. The mean of these two items is 2.99 and 3.40 they are not major cause of delayed completion time. Identification of research gap in my literature was/is relatively difficult for 74(80%) of the students. However, this item has mean of 3.40; therefore, it is not reliable for delayed candidature among PhD students. In addition, connecting reviewed literature with current study was relatively easy to 75 (80%) of the students; however, to some extent, this item can delay candidature since it has a mean of 2.14.

Defining research design and identifying research variables are easy tasks for 68(70%) and 72(80%) of the students respectively. These items have a mean of 3.25 and 3.32 respectively and therefore they do not delay students' candidature. Although defining the target population is easy to 68(70%) of the respondents from its mean 2.76, it can to some delay candidature. Determining sample size is relatively easy to 22(20%) of the respondents and to some extent, this item can delay candidature since it has a mean of 2.07.

Choosing sampling procedures was difficult for 82(90%) of the student. Selecting research tools was challenging to 79(90%) of the students, determining reliability was a challenge to 82(90%) of the respondents, and it's difficult for 72(80%) of the respondents to determine validity of their study. Data collection techniques were difficult to outline to 87(90%) of the respondents and it was/is difficult for 89 (98%) of respondents to establish appropriate data analysis methods. These items have means of 1.90; 1.87; 1.93; 1.76; 1.73 respectively and therefore to little extent they delay candidature. Logistical and ethical considerations are easy to outline to 89 (99%) students, and this item does not delay candidature.

Out of the 92 PhD respondents, only twenty-one students were either collecting or had completed their data collection when this study was taken. Sixteen (76.2%) of these PhD students agreed that they were able to collect adequate information/data from the field. Sixteen (76.2%) of the students collected clear data. Nineteen

(90.5%) of these students were able to convince respondents to participate in their data collection. Sixteen (76.5%) students agreed that research tools had clear instructions and were comprehensive enough to collect adequate data. These items have means of above 3.01 and therefore, they insignificantly influence non completion among PhD students in the SoE KU. Sixteen (76.2%) students agreed that prior experience in field work contributed to the quality data they collected. This item has a mean of 2.86; hence to a little extent it can influence non completion.

In addition, ten out of the 92 PhD respondents had done data analysis. Seven out of ten students (70%) had difficulties in data analysis. This item has a mean of 1.90 hence to little extent it can influence non completion. Only 2 respondents were writing their report and one of them strongly agreed that he/she was facing difficulties in writing the report. This item has a mean of 2.00 therefore, to an insignificant influence, it can cause non completion.

Table 4: Masters Research Skills, Mean and Standard Deviation

Items	SA		A		D		SD		mean	Std. deviation
	F	%	F	%	F	%	F	%		
Identifying research problem is easy	1	0.5	-	-	20	9.6	188	90	1.11	.357
Statement of the problem is challenging	185	88.5	23	11	1	0.5	-	-	1.12	.340
It was easy to develop research objectives	5	2.4	4	1.9	45	21.4	155	74.2	1.67	.635
Developing narrow topic is easy	5	2.4	28	13.4	156	74.6	20	9.6	2.09	.565
Developing timely topic is challenging	16	7.7	177	84.7	15	7.2	1	0.5	2.00	.410
I faced challenge of developing clear topic	6	2.9	13	6.2	175	83.3	15	7.2	2.05	.498
My statement of the problem was clear	4	1.9	25	12	71	34	109	52.2	1.96	.767
My literature review had irrelevant details	46	22	35	16.7	112	53.6	16	7.7	2.10	.829
Criticizing the already existing literature was easy	17	8.1	11	5.3	13	6.2	168	80.4	1.89	.916
My literature review had consistency with research objectives	7	3.3	31	14.8	88	42.1	83	39.7	1.68	.806
My literature review was based on old work	37	17.7	114	54.5	41	19.6	17	8.1	2.18	.818
Identification of research gap in my literature is easy	26	12.4	8	3.8	8	3.8	167	79.9	1.51	1.038
Connecting reviewed literature with current study is challenging	170	81.3	2	1	12	5.7	25	12	1.48	1.043
Identify relevant literature is easy	20	9.6	13	6.2	96	45.9	80	38.3	1.13	.903
Choosing research design is an easy task	7	3.3	18	8.6	43	20.6	141	67.5	1.52	.791
Identifying research variables is difficult task	33	15.8	93	44.5	53	25.4	30	14.5	2.38	.918
Target population is easy to define	9	4.3	26	2.4	58	27.8	116	55.5	1.34	.858
Determining sample size is easy	35	16.7	24	11.5	37	17.7	113	54.1	1.09	1.150
Choosing sampling procedures is difficult	123	58.9	62	29.7	7	3.3	17	8.1	1.61	.893
Selecting research tools is challenging	88	42.1	101	48.3	13	6.2	7	3.3	1.71	.731
Determining instrument reliability is a challenge	145	69.4	49	23.4	8	3.8	7	3.3	1.41	.723

Item	SA		A		D		SD		Mean	Std. Dev
	F	%	F	%	F	%	F	%		
It was difficult to determine validity of my study	69	33	63	30.1	56	26.8	21	10	2.14	.993
Data collection techniques are difficult to outline	106	50.7	53	25.4	35	16.7	15	7.2	1.80	.963
It is difficult to establish appropriate data analysis methods	150	71.8	45	21.5	5	2.4	9	4.3	1.39	.740
Logistical and ethical considerations are easy to outline	30	14.4	28.2	30	93	44.5	27	13	2.47	.899
I collected adequate information from the field	11	57.9	3	15.8	3	15.8	2	10.5	3.21	1.084
Data collected was clear	11	57.9	5	26.3	3	15.8	-	-	3.42	.769
I was able to convince respondents to participate	11	57.9	5	26.3	2	10.5	1	5.3	3.37	.895
Prior experience in fieldwork contributed quality of data I collected	4	21.1	9	47.4	4	21.1	2	16.5	2.79	.918
Research tools were comprehensive enough to collect adequate data	6	31.6	6	31.6	5	23.6	2	10.5	2.84	1.015
Clarity of instructions in data collection tools was adequate	5	26.3	8	42.1	4	21.1	2	10.5	2.84	.958
Data analysis was not difficult for me	-	-	1	50	-	-	1	50	2.00	1.414
I faced minimal challenges in writing my research report	-	-	-	-	1	100	-	-	2.00	-

Source: Research Data (2018)

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Table 4 showed that the majority 208 (99%) agreed that identifying research problem is not easy. This item has a mean of 1.11, which is far below the decision level. Thus, the item shows that to a high extent it can delay completion of studies. Statement of the problem was a challenge to 208(99%) of the students. This item further has a mean of 1.12. This item therefore shows that to a high extent it can delay completion of studies. Further, 200(99%) of the students agreed that it was difficult for them to develop research objectives. This item has a mean of 1.67 and therefore to a great extent it can delay completion of studies.

Most students 176(80%) agreed that they find it difficult to develop narrow, timely and researchable topic. This item has a mean of 2.09 therefore, to some little extent; it can delay completion of studies. Further, developing timely topic is relatively difficult according to 193(90%) respondents. This item has a mean of 2.05 therefore to small extent; it can delay completion of studies.

This study observed that 180(90%) of the master's students disagreed that they were able to make clear statement of the problem; and that 186(90%) of these students were unable to make statement of the problem which is consisted with research problem, objectives and literature review; these items have a mean of 1.96 and 2.28 respectively and therefore to small extent they can delay completion of studies. Further, only 128(60%) of the master's students were able to include only relevant details in literature review making this item mean be 2.10 and hence to small extent it can delay completion of studies. Although 181(90%) of the students disagreed that they were able to criticize the already existing literature, this item mean is 1.89 therefore to small extent it can delay their candidature. Most of the students 171(80%) were unable to do literature review which is consistent with

research objectives and hence to a high extent (1.68) it can delay completion time. More than half of the students 151(70%) had the challenge of basing their literature on old studies and to small extent (2.18) their candidature was delayed. Identification of research gap in literature was difficult to 175(80%) of students; 172(80%) of the students disagreed that connecting reviewed literature with the current study is easy and that 176(80%) of them are not able to identify relevant information regarding their topic. The mean of these three items is 1.51; 1.48; and 1.13, respectively so to a great extent they cause delayed completion time.

Defining research design is a difficult task to 184(90%) of students. This item has a mean of 1.52 so to great extent, it can delay completion. Identifying research variable is not easy task to 126(60%) of the students; therefore to a very low extent (2.38) this item can delay completion of studies. Defining target population is not easy to 174(80%) of the respondents; also determining sample size is not easy to 150(70%) of the respondents and to great extent, these items can delay candidature since they have a mean of 1.34 and 1.09 respectively.

Choosing sampling procedures was difficult to 185(90%) of the student. Selecting research tools is challenging to 189(90%) of the students, determining reliability is a challenge to 194(90%) of the responds, and it's difficult for 72(80%) of the respondents to determining validity of my study. Data collection techniques were difficult to outline to 159(80%) of the respondents and it was difficult for 195 (90%) of respondents to establish appropriate data analysis methods. These items have means of 1.61; 1.71; 1.41; 1.76; 1.80; and 1.39 respectively and therefore to great extent they delay candidature. More than half of the learners 120 (57.5%) found it difficult to outline logistical and ethical considerations and this item to little extent (2.47) delay candidature.

Nineteen out of 209 masters' respondents were either collecting or had completed their data collection when this study was taken. Fourteen (73.7%) respondents collected adequate information from the field, 16 (84.2%) respondents collected clear data and were able to convince respondents to participate in their study. These items have means of 3.21, 3.42, and 3.37 respectively therefore, they insignificantly influence non-completion. Thirteen (68.5%) of the respondents agreed that prior experience in fieldwork contributed quality of data they collected, twelve (63.2%) agreed that research tools were comprehensive enough to collect adequate data. Clarity of instructions in data collection tools was adequate to 13 (68.4%) respondents. These items have means of 2.79, 2.84, and 2.84 respectively therefore, they have little influence on non-completion. Two out of the 209 respondents had done data analysis. One of them (50%) had difficult in analyzing data. One out of 209 respondents was writing research report and was facing minimal challenges in writing research report. These two items have means of 2.00 therefore have little influence on non-completion.

School board of postgraduate studies interviews revealed that major research challenges facing post graduate students are inability to identify a researchable topic where most of them choose wide topics. Students therefore take long time in identifying topic and ensuring consistency of topics and statements of problem, objectives and methodology. Inability to criticize the already existing literature, identification of research gaps from reviewed literature and ability to connect reviewed literature with current study are the major encompassing literature reviewing. The most challenging part in research methodology is identification of research design and developing research tools. In data analysis, many students face difficulties in choosing appropriate data analysis methods. Many reports are usually shallow, poorly interrogated, data poorly linked with research objectives and theory, and poor presentation of figures and tables which are packed with a lot of data. However, for master students, almost every research step is an uphill to them and hence their delay in completion of studies.

Focus group discussions revealed that students waste much time identifying a researchable topic. For master's students, research work is experienced with so many challenges in almost every research activity.

H_{01}: Student research skills (IV1 - Independent variable 1) have no significant influence on delayed completion time of postgraduate studies was tested.

To test this hypothesis a linear regression analysis was tested at 5% significance level. The data is presented in a linear regression model in table 4.15 for PhD students and table 4.16 for masters' students.

Table 6: Linear Regression Model for PhD Research Skills and Completion Time

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.746	.285		.621	.010
I.V1	.003	.004	.78	.743	.040

Table 7: Linear Regression Model for Masters Research Skills and Completion Time

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.956	.100		.528	.000
I.V1	.001	.001	.84	.344	.021

As shown in Table 5 and Table 6, there was a significant and positive relationship between respondent's research skills and completion time of their studies (β =0.78; β =0.84). The null hypothesis was therefore rejected. The findings in table 4.13 and table 4.14 imply that students' research skill is an important determinant for completion time of postgraduate studies. This finding concurs with earlier studies by (Eyangu *et al.*, 2014, Ezebilo, 2012 Shariff*et al*.,2015) which established that research skills in defining research problem, literature reviewing, research methodology and data collection, are vital for successful and timely postgraduate research completion.

Summary and Conclusion

Empirical evidence for the existence of a significant relationship of research skills and non-completion time was found. Further analysis revealed; identification of research problem, statement of the problem, choosing sampling procedures, selecting research tools, determining reliability of research instruments, outlining data collection techniques, establishing appropriate data analysis methods, literature reviewing, defining target population and choosing appropriate research designs had great influence on completion rate for graduate students.

Based on the research findings the study concluded that postgraduate students should organize themselves in research teams. The research teams should enable them acquire more ideas, inspiration and also develop and nurtures ability to critically evaluate their work and those of their colleagues Active students at the same department should be meeting to exchange notes and the department should find a mechanism of assembling such students.

This study suggests that to alleviate poor research skills among KU School of education postgraduate students, research skills should be taught at undergraduate level, so as to introduce them to the research process just as they are introduced to other educational units. This will help them in understanding research process, to know how to solve problem scientifically, develop skill in analyzing and interpretation of results. These skills are necessary in further educational endeavors, job opportunities which

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require research skills and most importantly as a long life benefit of education. Also, reorganizing of research unit course such that introduction to research – which can be more theoretical and teacher-centered in approach-is taught to undergraduates at school level and a more complex content - characterized by practical and learner-centered approach is introduced to masters and PhD students at the respective departments so as to prepare them for the rigorous research dissertation. Also, postgraduate students should take in existing faculty research projects.

This may enable them acquire experience before embarking on their own research.

Teaching research skills at departmental level may be instrumental in helping students identify researchable problems early enough and thereby start working on them under the guidance of the course instructor as they wait allocation of supervisors. Since the current study was done to students in progress, the authors recommend a cohort study to examine the problem under investigation.

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