Assessment of Research Studies Carried out by Graduate Students in St. Mary's University

A thesis Presented

To

Institute of Educational Research

Addis Ababa University

In Partial Fulfillment

of the Requirements for the Degree of Master of Arts in Educational Research and Development

By

Hassen Mohammed Dawud

August, 2014

Acknowledgements

I am heartily thankful to my advisor Dr. Mulu Nega whose encouragement, guidance and commitment to give me valuable comments and suggestions from the initial to final level enabling me to conduct my study properly.

My thanks also go to all my instructors in IER for enabling me to acquire the necessary skills and sharing me their experiences. I am grateful to my friend Mr. Neguse Ahmedin for his encouragement and support.

I would like to show my gratitude to my wife, Rahel Endris for her encouragement and giving me moral support. Lastly, I offer my regards and blessing to all of those who supported me in any respect during the completion of the study.

List of Tables

Page

Acronyms and abbreviations

SMU= St. Mary's University

IGNOU= Indra Ghandi National Open University

MARD= Masters of Arts in Rural Development

MSW = Masters of Arts in Social Work

MPA = Masters of Arts in Public Administration

MEC= Masters of Arts in Economics

MBA= Masters of Arts in Business Administration

MoE= Ministry of Education

HE =Higher Education

AAU =Addis Ababa University

Table of Contents

Contents **Page**

Abstract

The purpose of this study was to assess the research studies carried out by postgraduate students. The research reports of the students and interviews with instructors, advisors, dean and coordinator were used as source of both quantitative and qualitative data. A total of 27 students' theses were selected using systematic random sampling from St. Mary University's library index. Interview was used to scrutinize the information obtained in documentary analysis. The informants of the interview were 6 purposively selected MA and PhD qualified teachers. Both quantitative and qualitative techniques were used to analyze the data. The major findings of the study showed that all sample theses except three met the minimum quality standard. Regarding the status of students' research studies, the assessment results implied that students produced a good number of research papers. On the other hand, the results of the quantitative and qualitative analyses of the data identified major challenges and major gaps or weaknesses of graduate students experienced in St. Mary's University while they undertake research. These are: appropriateness of sample size, the research design, methods of subject selection, and subject characteristics. The paper, therefore, highly recommended that it is worthy to emphasis in report writing skills ,data analysis using the statistical package SPSS and giving a special attention of students' attendance in research methodology courses are among others.

Chapter One

Introduction

1.1 Back Ground of the study

Western-style higher education in Ethiopia is a recent phenomenon. According to the existing studies, it is started with the inauguration of the university college of Addis Ababa in 1950 (Wana, 2004; Habuamu, 2003).Since then, the higher education sector in Ethiopia has shown a modest expansion until the 1980's – a period which some scholars characterize as a lost decade for African Higher Education (Mama, 2003, cited in Tesfaye ,2006).

The Ethiopian education system has showed systematic increase in almost all measures of activity in all sub sectors over the last five years. In particular, enrolment has grown at an average annual growth rate of 15.5% for undergraduate and 32.6% for postgraduate (MoE, 2012/13).

The number of higher education institutions in Ethiopia is 32 public universities (31 owned by MoE plus Ethiopian Civil Service University, Defense University College). And two accredited non-government universities.

According to MoE annual statistical abstract (2012/13), the total undergraduate enrolment (government and non-government, regular, evening, summer and distance programs) is 553,484 of which 166,141are females which accounts for 30% of the total enrolment (MoE, 2012/2013). In addition, 474,198(85.6%) of the total undergraduate enrolment is in government institutions. The rest 79,198(14.4%) is in non government of which females account for 33,915(20.4%).

The significant increase in postgraduate enrolment was registered as depicted in MoE annual statistical abstract (2012/2013), in the past five years of which 90.3% are from government institutions. The percentage of female postgraduate students is 19.5% which is lower than by 0.7 percentage points when compared to the 2011/12.Whereas the number of postgraduates in non-government institutions is 3,036 from which females account for 697(22.9%) and male account for 2339(77%).

Youhanes Woldetensae (2010) explained that as part of the general push for increasing the size of enrolment in higher education, many countries have undertaken the initiatives to involve the private sector in higher education. A rapid growth of the private sector in higher education is seen globally and it has established itself as an important part of the tertiary system. In fact, private higher education has also experienced spectacular growth in Africa, and can help diversify the educational program of students and absorb a percentage of the increase in the number of students if this appropriately monitored to provide quality. In 2006, the private sector accounted 22% of higher education students in Africa (UNESCO-ADEA, 2009).

In Ethiopia, 14,480 students are enrolled in 2012/2013 academic year in non-government higher education institutions and female students account for 6007(41.4%) whereas male students account for 8473(58.5%)of the total enrolment (MoE,2012/2013).

As Youhanes (2010) suggested , building strong links with universities in other countries to enhance their global reach with respect to internationalization of higher education, universities should promote collaborations with foreign universities in joint research projects, staff exchange, and sandwich postgraduate

programs. International cooperation among universities and strategic partnerships are necessary to maintain and advance competitive positions.

Research in higher education institutions shall be undertaken not only for reasons of scholarly prestige or for economic consideration but also as part of the overall renewal and development of learning, teaching & public service activities including the dissemination of knowledge Teshome Yizengaw (2004). Teshome added that researchers should also look at how their findings can be included in the curricula and retaining programs. One important strategy could be to strengthen the research wings of universities and embark upon extended graduate studies. Furthermore, it is essential that research should be compulsory and counted as part of the assessment of each academic staff. No system of higher education can fulfill its mission and be visible for society in general unless some of its teaching staff carried out research. Research endeavor is not the only concern of university teachers, but students should also take their part as scholars .So, postgraduate students undertake research in public as well as private higher education institutions in the Ethiopian context .Moreover, there are limited research work on whether the research carried out by postgraduate students in private higher education institution is to the desired standard in terms of relevance and quality.

The reason for undertaking research in this area in the Ethiopian context is that there is no any parameter or yardstick to judge whether or not the research works produced by students is standardized .A review of the books written on Ethiopian Higher Education (Nuru 2005, Abdunasir, 2000) and a Master Thesis of Teklegerima, 2012) indicates that none of them had a focus on quality research studies assessment. The first two authors focused on with quality of report

writing of students 'research study whereas the last author focused on quality and implementation of research studies presented by College instructors. However, none of them focused on quality of students' research study. Hence, this study is an attempt to focus on quality of research studies carried out by graduate students at St. Marry's University. This study has paramount importance to add theoretical as well as practical knowledge to the available literature on how private and government universities develop yardstick or criteria and implement it to determine the level of quality research study in the given environmental context or in the university. This study believed to bridge the research gap in the area of quality research study.

Hence, the researcher is interested in assessing the research undertaking trends , the engagement and productivity of private higher education institutions in postgraduate research that have recently been flourished in the country. St. Marry University is the one to be mentioned in this regard .

1.2 Statement of the Problem

An essential concern of research undertaking is problem solving. To solve any problem that students encounter in their life and career. They should get research exposures during their stay in universities. In various universities, undergraduate and postgraduate students have responsibility to conduct research as partial fulfillment of their degrees. In this regard, universities assign advisors to support them. A previous survey of students' written works and students theses defense in AAU had revealed a range of problems. Wana (2008) identified the following problems that were observed in students Master's theses defense session in AAU.

1. Failure to tell the topic of the research and explain the importance of the problem and its contribution as well.

2 Few fail to explain clearly limitation and delimitation of the study. Similarly, they mix up the meaning of conceptual model and review literature.

3 .Rarely interpret their statistical findings properly and relate them to the research questions.

4. Failure to document the references properly.

5. Plagiarism was also mentioned as problems.

On top of this, a study carried out by Nuru (2005), which has particular relevance to the present study, explored the problems encountered by under graduate students of AAU in report writing. The results suggested that the work of students suffered from a range of errors. While some of the errors committed tend to suggest lack of mastery of basic skills of writing, others paper to be caused by lack of familiarity with conventional research report writing. The paper concluded by identifying some of the implications of the findings. While Nuru's study focused on students competence in writing senior essay of undergraduate students in AAU, the present study focused on the quality of the research studies carried out by graduate students in St. Mary's University.

In this study, therefore, an attempt was made to assess research studies carried out by graduate students at St. Mary's University.

To this end, the study will answer the following basic questions:

1. What is the status of research undertaking by postgraduate students at St. Mary's University?

2. What are the knowledge and skill gaps in conducting relevant and quality research by postgraduate students at St .Mary's University?

3. What are the major factors that influence research undertaking by postgraduate students at St. Mary's University?

1.3 Objectives of the Study

The main objective of the study is to investigate the quality of research studies carried out by postgraduate students at St .Mary's University. Therefore, this study explores the problems experienced by students. More specifically, the study intends to:

1. Analyze the quality of research studies practiced at the university.

2. Explore most common errors committed by student researchers

3. Identify some of the factors that influence postgraduate students' research undertaking.

1.4 Significance Of The Study

This study is expected to identify the problems related to quality of research studies conducted by postgraduate students. Student researchers, instructors and other researches will be benefited from the research findings of this study in general and the university in particular. This study will also be used as a starting

point for other researchers who are interested to assess postgraduate students research study related to quality in private as well as public universities.

1.5 Delimitation of The Study

The study is delimited to exploring the status of research carried out by postgraduate students in terms of relevance and quality in one selected private university. The study is delimited at St. Mary's University to investigate the problems associated with postgraduate students' research reports. Hence, the findings will not be generalized to all research undertaking of the university.

1.6 Limitation of the Study

In access able of postgraduate students for interview and unavailability of research carried out on the area were major challenges in gathering relevant information. These challenges influence validity of research findings in this study.

1.7 Operational definition of key Terms:

Research Relevance: describes the combined level of societal significance of the research (Danish Council for Research Policy, December 2006)

Quality: is defined in terms of the internal validity of the studies, or the extent to which the design conducted and analyses minimize errors and biases (Alberta Heritage Health Foundation, February, 2004).

Chapter Two
Review of Related Literature

In this section, relevant research literature works are reviewed. The section is organized: first, the nature of evaluating research, conventional style and format, are presented. Second, challenges or weaknesses in research studies, indicators of good research, funding, time and advising are presented. Finally, the conceptual framework of the study is discussed.

2.1 The Nature of Evaluating Research

Different principles can be used to guide an attempt to assess the quality of research papers .Regading the principles Cohne et.al(2007, cited in Teklegerima ,2012) argued that evaluation is judged by the criteria of utility, accuracy, propriety and credibility whereas research is judged methodologically and by the contribution that makes to ensure internal and external validity. An important quality of good research is its objectivity (Nuru ,2005).That is to say , it is an objective or unbiased account of phenomenon. Objectivity in research calls for the treatment of the problem and the data in a logical and less personal fashion. A researcher who is striving for objectivity would resist the temptation to seek only the data that confirm his /her hypothesis and draw conclusion to suit his /her personal feeling and performance. Objectivity is required at all levels: data collection, analysis, interpretation and conclusion. Best (2006) also summarized that the evaluation of research project is a valuable exercise. Using the analytical questions suggested the critiquing of another researchers report helps, develop competency of research and reporting skill.

Another crucial point to be mentioned during the assessment of research reports is its relevance. Yohannes (2010) recommended that Ethiopian Higher Education

Institutions needs to demonstrate the relevance of their research activities to be more responsive to developmental needs .Effective research policies and strategies should be developed in universities to ensure that relevant research is undertaken in priority areas. Strong departments in research that could be identified as center of excellence should be promoted to enhance the countries' competitiveness in the global knowledge economy. Derebssa (2004) also suggested in this regard that the university should become responsive to social needs and include in its research problems a sizable component of research applied to national needs including technological research for the solution of problems in such fields as food, industry, energy, irrigation, housing, natural resources and development etc.

Writing a critical analysis of a research report is a valuable experience for the student. Report of educational research may be taken from published collections and periodicals, the journals of Educational Research, or one of the many other publications in education or in the closely related fields of psychology or sociology. Unpublished research reports written by previous students of educational research are another source. These include theses or dissertations found in the university library (Best, 1999). Similarly, Gay (2009) explained that knowing how to conduct research and how to produce a research report are valuable skills, but as a professional, an individual should also know how to consume and evaluate research. Anyone who reads a newspaper, listens to the radio, or watches television is a consumer of research. Many people uncritically accept and act on medical and health findings are presented by someone in a white lab coat or because they are labeled "research". Very few people question the procedures utilized or the generalizability of the findings. Individuals have a responsibility to be informed about the latest findings in their professional area

and to be able to differentiate good from poor research when investigating a topic of study. A researcher critically evaluates each reference and does not consider poorly executed research.

2.2 Conventional Style and Format

What are we doing when we do research? In answering this question .Usher (1996), said that a common answer would be that we are systematically attempting to address and investigate certain predefined issues or problems. Addressing and investigating educational questions, issues and problems is something that is also likely to be found in everyday practice.

In most text books on research methods the main defining characteristic of research is its systematic nature. Of course, once research is characterized as systematic, it also suggests related characteristics such as rigorous and methodical. There is doubt that the correct use of appropriate method is accorded significant place in all types of research. For example, empirical research, the most common research form, is commonly described as involving the collection, analysis and presentation of primary data in rigorous, systematic and methodical way. Supporting this idea, Best (1999) explained that through a critical analysis, the student may gain some insight into the nature of a research problem, the methods by which it may be attacked, the difficulties inherent in the research process, the ways in which data are analyzed and conclusions drawn and the style in which the report is presented.

On top of this, Best summarized that the research is expected to follow the conventional pattern of style and form used in academic circles. Although style manuals differ in some of the smaller details, students are expected to be

consistent in following the pattern of style contained in the manual required by their institution or in the one that they are permitted to select.

He added that the style of writing should be clear, concise, and completely objective. Of course highest standards, correct usage are expected, and carefully proof reading before the final report is written. Tables and figures may help to make the meaning of the data clear. They should be presented in proper mechanical form and should be carefully designed to present an accurate and undistorted picture.

2.3 Challenges or weaknesses in Research study

Here, an attempt was made to discuss different researchers' results that show some errors experienced in research reports.

In order to produce good research report researchers need to govern certain methodical rules. Regarding this, Ruane (2005) mentioned important points. In the interest of curtailing errors, science utilizes standardized procedures that guide our research for accurate information about the world around us. There are rules for developing and assessing the accuracy of the ways we try to document or measure social reality (i.e., criteria for establishing measurement validity). There are "rules" that govern our ability to draw causal connection between events or between characteristics and behavior (i.e., criteria for establishing internal validity). There are rules that govern which people, things, or events we should focus on when studying the world around us (i.e., criteria for sampling). And there are rules that govern whether or not it is appropriate to generalized our research findings beyond our study at hand (i.e., criteria for establishing external validity)

These rules constitute the heart of research methods. And while learning these rules is a challenging work, they promise a benefit not offered by any other way of knowledge. The methodical rules of research minimize the likely hood of errors. It abiding by the discerning methodical rules of research, we gain confidence that our findings are accurate or error free. To the contrary of this fact researchers may commit errors in the research process.

Accordingly, Gay (2009) explained that many research studies have flaws of various kinds. Just because a study is published does not necessarily mean that it is good study or that is reported adequately. The most common flaw is a failure to collect or report valid and reliable information about data gathering procedures and instruments such as test, observations, questionnaires, and interviews. Other common flaw in the study itself, which includes weakness in the research design and inappropriate or biased selection of participants. Flaws in the repot include failure to state limitations in the research and a general lack of description about the study. Watching for these problems is part of being a competent consumer of research reports .The problems also highlight common pitfalls to avoid in one's own research (Gay 2009).

Following the above study, Best (1970, cited in Cohen, 1994) has listed the kinds of problems occurring in the various types of historical research projects submitted by students. These include:

1. Defining the problem too broadly

2. The tendency to use easy –to- find secondary sources of data rather than sufficient primary sources, which are harder to locate but usually more trust worthy.

3. Inadequate historical criticism of data due to failure to establish authenticity of sources and trust worthiness of data. For example, there is often a tendency to accept a statement as necessarily true when several observers agree. If it is possible that one may have influenced the others, or that all were influenced by the same in accurate sources of information.

4. Poor logical analysis resulting from:

    a. Oversimplification- failure to recognize the fact that causes of events are more often multiple and complex than single and simple.

    b. Overgeneralization on the basis of insufficient evidence, and false reasoning by analogy, basing conclusions upon superficial similarities of situations.

    c. Failure to interpret words and expressions in the light of their accepted meaning in an earlier period.

    d. Failure to distinguish between significant facts in a situation and those that are irrelevant or unimportant

5. Expression of personal bias, as revealed by statements listed out of context for purposes of persuasion, assuming too generous or uncritical an attitude towards a person or idea (or being too unfriendly or critical) excessive admiration for the past (sometimes known as the old oaken

bucket delusion), or an equally unrealistic admiration for the new or contemporary, assuming that all change represents progress.

6. Poor reporting in a style that is dull and colorless, too flowery of flippant, too persuasive or of the 'soap-box' type, or lacking in proper usage.

In addition to these, Sutherland (1969, cited in Cohen, 1994), has illustrated two further common errors among historians of education. These are first projecting current battles backwards on than historical background which leads to distortion, and second, description in a vacuum which fails to illustrate the relationship of the educational system to the structure of society.

In line with the above argument, wana (2008) has attempted to discuss practical issues that were observed from various students theses defense in AAU and accordingly, the following problems have been observed.

- Some students failed to tell the audience the topic of the research and explained /described the importance of the problem studied and its contribution to existing body of knowledge.

- A good number of students did not recognize the difference between conceptual literature and related literature (they mix up). Furthermore, in thesis defense few failed to explain clearly certain points such as delimitation and limitation of the study etc.

- One problem which is very common is that students rarely relate their findings with other studies that they discussed in theses literature review. They should attempt to show whether their findings go along with the findings of others or not.

- Students told that they used statistics such as chi-square, ANOVA ,t-test, etc; however, some rarely interpreted their findings properly, and relate them to research questions

- A very common thing that happens in most cases is that references cited in the body of thesis are not properly listed in the bibliography. The failure to document properly indicates lack of seriousness of the graduate students and some blame their secretaries for the oversight.

- Plagiarism: it means using other people's words as if they were their own.

Another investigation conducted by Best (1990) also suggested a number of limitations and sources of error in the analysis and interpretation of data that jeopardize the sources of an investigation. New researchers in particular need to be aware of these potential pitfalls. Some of these problems include:

1. Confusing statements with facts: A common fault is the acceptance of statements as facts. What individuals report may be a sincere expression of what they believe to be the facts in the case, but these statements are not necessarily true. Few people observe skillfully and many forget quickly. It is the researches' responsibility to verify all students as completely as possible before they are accepted as facts.

2. Failure to recognize limitations. The very nature of research impels certain restrictions or limitations about the group or the situation described- its size, its representativeness, and its distinctive composition. Failure to recognize these limitations may lead to the formulation of generalizations that are not warranted by the data collected.

3. Carless or incompetent tabulation: when one is confronted with a mess of data, it is easy to make simple mechanical errors. Placing a tally in the wrong cell or in correctly totaling a set of scores can easily invalidate carefully gathered data. Errors may sometimes be attributed to clerical helpers with limited ability and little interest in the research project.

4. Faulty logic. This rather inclusive category embraces a number of errors in the thought process of the research. Individual assumptions in appropriate analogies, inversion of cause and effect, confusion of a simple relationship with causation failure to recognize that group phenomena may not be used. Indiscriminately to predict individual occurrences or behavior, failure to realize that the whole may be greater than the sum of its parts, belief that frequency of appearance is always a measure of importance, and many other errors are limitations to accurate interpretation.

5. The researcher's unconscious bias. Although objectivity is the ideal of research, few individuals achieve it completely. There is great temptation to omit evidence unfavorable to the hypothesis and to over emphasize favorable data. Effective researchers are aware of their feelings and the likely areas of their bias and constantly endeavor to maintain the objectivity that is essential (P.265-266)

2.4 Factors that Influence the Quality of Research

2.4.1 Validity

Validity is an assumption what is being studied and that can be measured to confirm the truthfulness and accuracy of findings or conclusions drawn from the

data. It indicates that the conclusions that the researcher has drawn are trustworthy (O'Leary, 2004, cited in Teklegerima, 2012). Similarly, Dematteo et.al (2005) cited in Teklegerima (2012) described that validity is related to research methodology, because its primary purpose is to increase the accuracy and usefulness of findings by eliminating or controlling as many confounding variables as possible. The general design strategies which can be used to measure the conclusions drawn from the results of a study are valid (p.16) . There are two types of validity: Internal and external .Each of these are briefly discussed as follow:

2.4.2. Internal Validity

Internal validity seeks to demonstrate that the explanation of particular events or issues or set of data which pieces of research provides can actually be sustained by the data. In some degree, this concerns accuracy, which can be applied to quantitative and qualitative research. The findings must describe accurately the phenomena being researched.

In ethnographic research internal validity can be addressed in several ways, as explained by Lecompete and Preissle (1993) cited in Cohn (2007):

- Using low inference terminology and descriptions.
- Using multiple researcher
- Using participant researcher
- Using peer examination of data(debriefing)
- Using mechanical means to record, store and retrieve data.

In this regard, Hammersley (1992, cited in Cohn, 2007) suggests that internal validity for qualitative data required attention to:

- Plausibility and credibility
- The kinds and amounts of evidences required such that the greater the claim that is being made, the more convincing the evidence has to be for that claim.
- Clarity on the kind of claim made from the research (e.g definitional, descriptive, explanatory, theory generation)

Moreover, Gliner et al. (2009), Cook and Campbell (1979) define internal validity as the approximate validity with which we can infer that a relationship is causal. Internal validity depends on the strength or soundness of the design and influence whether one can conclude that the independent variable or intervention cause the dependent variable to change. Although internal validity is often discussed with respect to randomized and quasi experiment, we think the concept also applied to research with attribute of independent variable (i.e., to non experimental studies.)

According to Ruane (2005), if we are wrong in identifying the "cause" of some social phenomena, any of the policies built around our causal model will likely to be misguided. These kinds of mistakes have the potential of being quite costly. Science will assess or evaluate causal assertions in light of the standard of internal validity. In posing the question of internal validity (causal validity) we are asking if the overall research plan or research design is really capable of detecting causal relationships when they exist. Achieving internal validity

means that we can demonstrate that changes in one entity are due to changes in another.

Ruane added that the good news is that science has a good as gold standard for achieving internal validity; the experiment. The experiment is a very contrived, specific research plan that strives to minimize control in the interest of isolating and thereby making explicit any connection between the independent and dependent variables. Because the researcher has so much control over the conditions of the experiment, the design has the edge when it comes to satisfying the criteria for establishing causality: the time test, the association test, and the test for spuriousness.

Jenner (2004) cited in Teklegerima (2012) argues that essential textual strategies for validation in qualitative research are the disclosure of the procedure and the process of interpretation, the presentation of the relevant data, the reproduction of transcripts and field notes. For DeMatteo et al. (2005) internal validity refers to the conceptual and scientific soundness of a research study. The primary purpose of all forms of research is to produce valid conclusions. Researchers are usually interested in studying the relationship of specific variables (p.16).

2.4.3 External Validity

According to Cohen (2007), external validity refers to the degree to which the results can be generalized to the wider population, cases or situations. The issue of generalization is problematical. The positive researchers generalize ability is a sine qua non, while this is attenuated in naturalistic research. For one school of thought, generalize ability through stripping out contextual variables is fundamental, while, for another, generalizations that say little about the context have little that is useful to say about human behavior (scholfield 1990). For

positive variables randomized, while for ethnographers human behavior is infinitely complex, irreducible, socially situated and unique.

External validity is the last trust issue that falls within the validity domain concerns the breadth of our findings (Ruane, 2005). Even if, we are satisfied with our study's measures and with our overall design, we still must ask if the findings obtained in any one study can be safely generalized to other settings or groups.

Taking one's new knowledge and "spreading it around" can be problematic with experimental research. In this regard, Ruane gave several examples of generalizing findings, we can once again turn to the world of medical research. Pharmaceutical companies, for instance, must initiate the testing of new drugs on animals. For example, some of the newly proposed treatments for spinal cord injuries are based on research with paralyzed dogs retrieved from http://w.w.w.vet.purdue. Edu /cpr. The external validity question looms large: will the promising results found with lab animals be as promising when humans are brought into the picture?

As Flick (2007) cited in Teklegerima (2012) noted, generalization of the results is often closely linked to realize the sample. In line with this ,the author asserted that generalizeability concerns whether findings or conclusions drawn from a sample are directly applicable to a large population. Authenticity deals with truth while recognizing that multiple truths may exist. It is also concerned with describing the deep structure of experience /phenomenon in a manner that is 'true' to the experience. O' Leary (2004) supported that generalizeability also referred to as external validity indicates that the findings of a sample are directly applicable to the settings. Findings from the sample may vary to that of the

population, and it should consider the generalize ability of statistical probability of being representative. In connection to this, Cohen et al (2005) stated that external validity refers to the degree to which the results can be generalized to the wider population or situation.

Another writer, Gliner et al. (2009) expressed that external validity with generalize ability that is the extent to which samples, settings, treatment variables, and measurement variables, can be generalized beyond the study. External validity does not depend on internal validity. For example, it might be suggested that because the study has poor internal validity (a weak design) then external validity must also be poor. However, external validity should be judged separately, before the fact, and not be based on the internal validity.

2.4.4 Reliability

Reliability of data collection instruments, data sources etc. can affect the quality of research reports. In this regard, Gliner (2009) explained that when a person is said to be reliable, we have certain conceptions about that person. For example, the person always shows up for meetings on time. Therefore, he/she is a reliable person. Or, the person always gets the job done; therefore she is a reliable person. When we use tests or other instruments to measure outcomes, we also need to make sure that these instruments provided reliable data. Cronbach (1990) said that reliability refers to consistency of a series of measurements. According to Thompson (2003), reliability is a property of scores and is not immutable across all conceivable uses of a given measure. The importance of reliability for research methods cannot be over stated. If our outcome measure does not provide reliable data, then we cannot accurately assess the results of our study, hence, our study will be worthless.

Robson (Cited in Koshy by Teklegerima, 2012), suggested that reliability is described as stability of measure and consideration of when the measure is repeated. According to NCDDR (2011), consistency for any given topic is the extent to which similar findings are reported using similar and different study design. As Leary (2004) stated, reliability is concerned with internal consistency, i.e whether data collected measured are the same under repeated trails. Whereas dependability accepts that reliability is studies of the social may not be possible, but it attests that methods are systematic, well documented and designed to account for research subjectivities. Mujis (2004) noted that reliability refers to the extent to which test scores are free of measurement errors. The repeated measure or test- retest reliability is concerned whether the instrument we use give us similar results if used with the same respondents after a short period of time. Internal reliability is also concerned with the consistency whether all the items are measuring the same construct.

Bogdan and Biklen (1998) explained that whether two researchers independently studying the same setting or subjects come up with the same findings or not. In this regard, reliability is related to the quantitative researchers. Among certain research approaches the expectation is that there will be consistency in the results of observation made by different researchers over time. Qualitative researchers do not exactly share this expectations (Agar, 1986; Heider, 1988).In qualitative studies researchers are concerned with the accuracy and comprehensiveness of their data. Qualitative researchers tend to view reliability as a fit between what they record as data and what actually occurs in the setting under study, rather than the literal consistency across different observations.

As the preceding discussion indicates, two researchers studying a single setting may come up with different data and produce different findings. Both studies can be reliable.

2.4.5 Funding, Time and Advising

According to Derebssa (2004), one of the key factors that seem to be affecting volume and quality of research in Addis Ababa University is under funding. Under-funding of research is manifested in university budget. Funds for conducting research in the university are relatively scarce out of the total budget; the amount set aside for research is relatively small as compared to other nations. In advanced nations, it is around 33 percent of the budget in general universities and much higher in research universities. Most universities in developing countries are spending less than 5 percent of their total university budgets on research. It is recommended by many that the allocations for research be at least 25 percent of the budget of the universities in the country.

Time is also another factor that affects quality of research. In this regard, Derebssa added that university teaching and research are painstaking and time consuming activities. For superior teaching and research, it is necessary for the university teacher to devote a greater deal of time to the study of current literature in order to keep abreast of scientific developments, as there is a veritable explosion of new knowledge. Derebsa (2004) also reported comparatively that the student teacher ratio in the university was around 30:1 as against 7:1 in the UK universities at the time of report, leaving the scientists on the faculty little time for research and guidance of students.

Concerning students advising, (Derebssa,2004) further states that the importance of engagement in research ensures that the teachers are able to

supervise research by their students more efficiently .Teachers are called up on every years to supervise research of their students for undergraduate and /or postgraduate studies in partial fulfillment of their degree. Changes in research methods, materials, procedures of analysis, and current literature can only be known by those teachers who are up to date in research .Thus, their work and the works of students they are supervising will benefit tremendously by their active engagement in research.

Chapter Three

Research Design and Methodology

3.1 The Research Design

This research is descriptive in design to examine errors which were committed by graduate students in the research process. In order to achieve the main research objectives, mixed methods approach was adopted. The purpose of using mixed method approach is to gather data that will not be obtained by adopting a single method and for triangulation so that the findings with a single approach could be substantiated by others possible. This design helps to show the extent to which research studies carried out by postgraduate students met a minimum quality standard.

3.2 Research Setting

The main objective of this study was to assess research studies carried out by postgraduate students at St. Mary's University. The Graduate Study has been chosen as the research site because the researcher believed and heard from others that St. Mary's University is one of the private Universities that have been offering graduate education over the past years.

3.3 Participants of the Study

For the purpose of this study, instructors, advisors, dean and IGNOU's program coordinator of the university were participated in the study. Moreover, graduate students' theses, which were produced as partial fulfillment of their degrees during their stay in the university, were used as quantitative data source.

3.4 Sampling Technique

A systematic sampling technique was used to draw from a total of the available theses that are listed down in the University's library index. Systematic random sampling was used to select samples for every 10th thesis. Finally, 27 theses were drawn from St. Mary's University library index. Purposive sampling was used to get the relevant informants for the interview as well.

Table 1: Summary of Selected Programs and Student Enrollment

No	Program	Enrolled students	Graduated students
1	MBA	516	70
2	MARD	626	225
3	MPA	515	152
4	MEC	872	115
5	MSW	468	43
6	MLIS	20	5
Total		3017	610

Note= MBA=masters of arts in Business Administration MARD= Masters of arts in Rural Development

MPA=Masters of arts in Public Administration MEC=Masters of arts in Economics

MSW=Maste 0f arts in Social Work

According to St. Mary's University IGNOU's international program office enrollment records, there were six programs which have graduated 610

students in different Mater's programs from July (2006) to January (2013). Thus, this study focused on these programs, other programs that research is not mandatory were not included in the study. Moreover, the regular program MBA was also a focus in point.

Table 2: Population of the Study and Sample Size

No	Program	Available these (population) in graduate library	Sample size 10% of the available theses
	IGNOU'S program		
1	MBA	39	4
2	MARD	72	7
3	MPA	32	3
4	MEC	29	3
5	MSW	33	3
6	MLIS	3	1
Total		208	21
	Regular program		
	MBA	58	6
Total		58	6
Grand total		266	27

Note=IGNOU =Indra Ghandi National Open University MBA =Masterrs of arts in Business Administration

MARD=Masters of arts in Rural Development MPA=Masters of arts in Public Administration

MEC=Masters of arts in Economics MSW=Masters of arts in Social Work

3.5 Data Collection Instruments

In this study, documentary analysis and interview were used as methods of data collection.

3.5.1 Documentary Analysis

An assessment of research studies carried out by postgraduate students were made using quality assessment checklist, which are adopted from Alberta Heritage Health Foundation, as a principal tool to collect quantitative data from their theses.

3.5.2 Interview

For the interview, purposive sampling was used to obtain relevant and rich informants in the selected programs Interviews were conducted with instructors, dean, advisors and coordinator. This is used to complement the information gathered by documentary analysis. This is also intended to provide opportunity for participants to examine their experience and point of view.

3.6 Data Analysis

Quantitative data analysis was carried out through quality assessment checklist Whereas the interview data were presented and analyzed through selected themes, categories and patterns. Finally, both quantitative and qualitative data are integrated. The data collected through the checklist were analyzed using the formula given bellow. The data were reduced into descriptive statistics such as percentage, frequency, and mean. The qualitative data were also transcribed, coded and interpreted thematically. Then analysis of quantitative data was presented and then confirmed by qualitative data analysis in the form of texts and quotes.

The researcher adopted the checklist, which is used for this study, was developed by Alberta Heritage Health Foundation, following a review of various quality assessment

documents and discussions by the authors of the elements considered central to internal validity.

Along with this checklist there is also a scoring manual, which guide the researcher how to score "yes", "partial", "no" or "n/a" by giving definitions and instructions for quality assessment scoring for every item in the checklist.

On the checklist the scale "yes", "partial", "no" and "n/a" were given the value 2,1,0, and not applicable respectively. Then all items in the checklist were computed using the formula which is adopted from Alberta Heritage Health Foundation.

> For the quantitative studies, 14 items were scored depending on the degree to which the specific criteria were met (Yes=2, partial= 1, No=0). Items not applicable to a particular study design were marked n/a and were excluded from the calculation of the summary score. A summary score was calculated for each paper by summing the total score obtained across relevant items and dividing by the total possible scores (i.e. 28- (number of n/a x2).)
>
> **How to calculate the summary score**
>
> - Total sum= (number of "Yes" X2) + number of "partial" X 1)
> - Total possible sum = 28- (number of "n/a" X 2)
> - Summary score = $\frac{\text{Total sum}}{\text{Total possible sum}}$
>
> Whereas scores for qualitative data were calculated in a similar fashion, based on the scoring of 10 items. Assessing "n/a" was not permitted for any of the items, and the summary score for each paper was calculated by summing the total score obtained across the ten items and dividing it by 20 (the total possible score).
>
> Finally, where the cut of point selected for article inclusion is relatively conservative (e.g. 75%) or relatively liberal (e.g. 55%).

For this particular study, the researcher used 0.75 (75%) to check whether minimum quality standard are met of the research studies carried out by postgraduate students in St. Mary's University.

3.6.1 Conceptual Model

An important component of the process of carrying out research concerns the conceptualization of research which consists of the strict procedure it demands a salient features of research. The general format of research report consists of three major parts. These include: preliminaries; textual body and reference which are thoroughly assessed or investigated in this study. In this context, good research is the one that passes through research techniques to come out with fairly satisfactory results. It is also understood that all the challenges encountered in the research process affect the quality of the research out comes

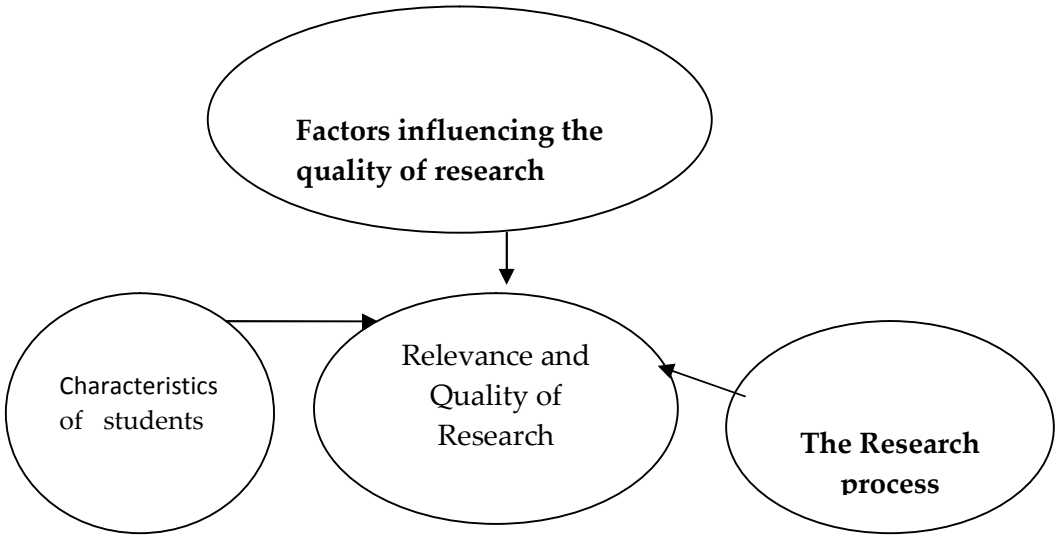

Fig.1 conceptual model of the study

3.6.2 Relevance and Quality of Research is influenced by:

a. characteristics of student researchers :knowledge and skill identifying research problems, design the study, competence and produce useable knowledge.

b. the research process: proposal, approval, report writing defense.

c. Factors that influence the quality of research: funding, advising and time

3.6.3 Some of the factors that may influence the quality of research studies include:

1. Knowledge and skill of students about the methods and techniques of research.
2. Advisement and support is limited because of excessive teaching or administrative load. In this case advisors left with very little time for consultation.
3. Funding/ resource allocated for research by the university. For example, Addis Ababa University cannot offer research grant for extension post graduate students. Most universities in developing countries are spending less percent of their total university budget on research.
4. Expertise and experience of advisors. University teachers should possess research skill and knowledge. However, some higher education institution teachers have no training in conducting research. The research competence of advisors affect their
5. Research carried out by postgraduate students is relevant when.
    - The problem of their research study coincides with their degrees of specialization. The research study by itself is not an end. It should bring benefits by active engagement in research.
    - It should be problem solving. The result of the research study must be applicable in a certain situation like for decision making purpose for societal needs, for development etc.

It is within this conceptual model that data collection and analysis in the current study has been carried out. Judgment of good research was also evaluated by mainly check lists for assessing the quality of research adopted from Alberta Heritage health Foundation February 2004.

Chapter Four

Data Presentation and Analysis

The main goal of this investigation was to assess whether the theses of postgraduate students meet a minimum quality standard. The quality scores used to define a minimum threshold for inclusion of studies in the systematic review is 0.75 in this particular study.

Checklist was used for assessing the quality of quantitative studies. The data collected through the checklist were analyzed and interpreted in descriptive ways. The findings of each case analysis are attached in Annex D.

4.1 Characteristics of respondents

Informants who participated in the interview were selected based on their experience in the institutions, engagement in different academic office posts involvement in teaching and advising and their fields of specialization. These characteristics were important to get rich and valuable information about the university.

Table 3: Background Characteristics of Participants

Characteristics		**No**	**%**
Sex	Male	6	100%
Age	36-47	4	66.6%
	>48	2	33.3%
Qualification	PhD	1	16.6%
	MA	3	50%
	Assistant professor	2	33.3%

The main concern of this analysis is to assess the Status of Postgraduate Students Research Study, some of the factors that Influence Research Study, Research Knowledge and Skill Gaps in Conducting Relevant and Quality Research. The analyses of these central issues are presented along vis a vis the research questions.

4.2 The Status of Postgraduate students' Research Study

Table 4:Quantitative Results

Departments	Number of sample theses	Summary scores		Mean scores
IGNOU'S Program				
_	NUMBER OF SAMPLE THESES	Low score	High score	_
MBA	4	0.55	0.83	0.69
MARD	7	0.66	0.88	0.77
MPA	3	0.72	0.88	0.80
MEC	3	0.77	0.90	0.83
MSW	3	0.88	0.95	0.91
MLIS	1	0.83	_	_
Regular program				
MBA	6	0.80	0.94	0.87

As Table 4 shows, the average score for IGNOU'S program ranges from 0.69 to 0.91, which indicates most students' theses meets the minimum quality standard except for MBA. Similarly, the theses of MBA, from the regular program satisfies the minimum quality standard. It's lower score is 0.80, the higher score is 0.94 and its mean result is 0.87. In IGNOU'S program, MBA the lower score is 0.55, the higher score is 0.83, but the total mean result of MBA in IGNOUS program is 0.69 which is less than 0.87 by 0.18 from the mean result of the regular program (MBA).The interview results confirm that in IGNOU'S distance masters program the research status almost similar with the regular program in the university. According to I2, the reason behind is that in both programs the advisors and advising process is the same even though the grading system is different.

The results of the interview showed that the university prepares students' forum and different national and international research conferences sponsored by them. The purpose is to create strong research capacity and motivated personel in the university in particular and in the country in general.

Regarding the universities policy, all the informants agreed that the policy is encouraging and supporting. However, IGNOU has its own research guide and policy. The paper is graded in India. There is no defense session to be held. On the other hand, the regular program has defense session with internal and external examiners. Based on the grading criteria set by the university, the paper was graded.

Table 5: Quality cut point

Quality cut point	Frequency	Percent
<0.55		
0.55	1	3.7%
0.6		
0.66	1	3.7%
0.72	1	3.7%
0.75		
>0.75	24	88.89%
Total	27	100%

Based on the Qual Syst reviewing tool, Table 5 shows that 88.89% the summary scores of sample research papers fulfilled the quality cut point used by the researcher (0.75)whereas one research thesis scored 0.55 (3.7%) and another two papers scored 0.66(3.7%) and 0.72(3.7%) of the total sample papers don't fulfill the minimum quality standard,0.75. However, most of the sample papers

reviewed 24(88.89%) have satisfied the minimum quality standard out of the total 27(100%) of the sample papers.

4.3. Some of the Factors that Influence Research Study of Postgraduate Students

Table 6: Scoring criteria of the checklist from the sample papers

Criteria	Yes		Partial		No	
Number	Frequency	Percent	Frequency	Percent	Frequency	Percent
1=Questions/objectives sufficiently described?	27	15.88%	0	_	_	_
2=Study design evident and appropriate?	15	8.82%	11	14.47%	1	50%
3=Method of subject/comparison group selection or source of information/input variables described and appropriate?	15	8.82%	12	15.78%	_	_
4=Subject (and comparison group, if applicable) characteristics sufficiently described ?	19	11.17%	8	10.52%	_	_
5=If interventional and random allocation was possible, was it described?	_	_	_	_	_	_
6=If interventional and blinding of investigators was possible, was it reported ?	_	_	_	_	_	_
7=If interventional and blinding of subjects was possible, was it reported ?	_	_	_	_	_	_
8=Out come and(if applicable) exposure measures(s)well defined and robust to measure/misclassification bias? Means of assessment reported?	21	12.35%%	5	6.57%	_	_

9=Sample size appropriate ?	12	7.05%	15	19.73%	_	_
10=Analytic methods described /Justified and appropriate?	20	11.76%	6	7.89%	_	_
11=Some estimate of variance is reported for the main results ?	5	2.94%	2	2.63%	_	_
12=Controlled for confounding?	_	_	_	_	_	_
13=Results reported insufficient details?	16	9.41%	10	13.15%	1	50%
14=Conclusions supported by the results?	20	11.76%	7	9.21%	_	_
Total	170	100%	76	100%	2	100%

Form the total 27 papers, it was observed that student researchers faced various difficulties in the research process. These includes, the major challenges assessed in the documentary analysis using the checklist were criteria number 9, 2, 3, 13 and 4 in Table 6.They were investigated as major challenges regarding their difficulty level respectively because these criteria were scored "partial" in the quantitative analysis results of the sample theses more frequently in the papers 12,15,16 and 19 times across the above mentioned criteria.

Criterion number 9 asks the appropriateness of sample size. Incomplete description or justifications of sample size were observed in most students papers. It resulted in insufficient data to assess sample size. Criteria number 2 and 3 were also revealed as challenges to some students in the present study because the design they used were not appropriate to answer their research questions and sometimes the research questions were not clearly identified in some papers. Regarding method of subject selection, criterion number 3, was not described well and appropriate. The selection strategies were not ideal. It

was likely to introduced bias. In addition the quantitative findings showed that students' research report contained insufficient detail, and it was difficult to assess the study questions or the research questions, criterion 13. Similarly, criterion 4 of the scored results depicted that incomplete relevant demographic information were given in some students' research papers. The results of the interview supported the quantitative results of major challenges students faced. For example, the second informant, I_2 said "my advisees didn't correct their feedback properly." And another informant I_3 and his colleagues explained that they had observed some students were challenged in their research work in the advisory process. This implies that students encountered difficulties in the research process. Thus, all the challenges students faced in the research process affect the quality of the research study.

4.4 Research knowledge and Skill gaps in Conducting Relevant and Quality Research by Postgraduate Students

The analysis of students papers in annex D depicted that the students experienced errors in doing research as clearly observed across the criteria in the checklist. For example, Annex D, Table 4, in MBA of IGNOU'S program, criterion number 13 in the checklist implies that the student who produced this paper experienced a big weakness in report writing skills. The interview results confirm that writing skills and statistical knowledge mentioned as students

extreme challenges according to I2 (informant 2). Another informant added that when they wrote review of literature they used outdated materials. They didn't know even which materials are relevant to be included in the review of literature.

Similarly, in annex D Ttable 13 (MARD) criterion number 2, revealed that the student researcher had also knowledge gaps. The study design was not appropriate to answer the research questions. We can also easily observe the students research knowledge and skill gaps or weaknesses by observing the scored results across the criteria contained in the checklist shown in annex D.

The findings of the interview data also confirmed the results of quantitative analysis. For example, as most interviewees agreed, students had the opportunity to acquire knowledge and skill for research. However, in the case of IGNOU'S program, most students were not willing to attend tutorial program. Thus, this implies that to some extent students lacked research knowledge and skill that affect the quality of their research studies.

Chapter Five

Summary, Conclusion and Recommendation

5.1 Summary

Depending on the quantitative and qualitative data, an attempt was made to summarize the core points so as to comprehend the research findings that are revealed in this particular study.

The assessment results depicted that a good number of theses were carried out by postgraduate students in the university compared to their potential as a private institution and their number of student enrolment. The university is also prepares different national and international conferences and encourage students to present their work in the conference. On the other hand, they are developing

the research culture in the university's community. It is an opportunity for the students as well as other researchers. All these show the university's research status.

Analysis of the participants' interview data revealed the following two major points as factors influencing the quality of postgraduate students' research studies. The first one concerns, problems related to lack of attendance of tutorial in IGNOU's program. Many students did not attend tutorial class for various reasons: the distance where the students live, their willingness to attend tutorial class, and tutorial is not mandatory because of IGNOU's policy are the main reasons mentioned by interviewees. Some informants believed that the students lacked some research skill and knowledge. These skill and knowledge gapes were observed from the students research work during documentary analysis. It had its own impact in the quality of their work.

Based on the quantitative data, among the 27 samples only three theses from MBA,MARD and MPA all in IGNOU's program did not satisfy the minimum quality standard. However, in the regular program MBA all the papers met minimum quality standard.

The assessment results also depicted that in IGNOU as well as regular program, student researchers faced various difficulties and research skill gaps in the research process.

According to the quantitative findings, the following issues were summarized as major challenges and knowledge gaps student researchers faced.

- Appropriateness of sample size to assess sufficient data from the sample papers.
- Appropriateness of the research design used to address the research question or objective.
- Appropriateness of subject selection to obtain unbiased sample of the relevant target population.

- Appropriateness of subject characteristics: sufficient and relevant demographic information wouldn't be given.

5.2 Conclusion and Recommendation

5.2.1. Conclusion

This study tired to assess the research studies carried out by post graduate students at St. Mary's University. The following conclusions are drawn based on the research findings.

It is believed that institution of higher learning need to integrate teaching and research. Within five years of time, sufficient amount of practice related to research were being produced by the graduate students in St. Mary's University compared to their potential as a private institution, and number of students enrollment.

A good research, it is argued, is one which fulfilled certain criteria developed by the researcher. A few observations can be made based on the findings of the interview and the documentary analysis in this particular study. The findings revealed that some of the major challenges and/ or major knowledge and skill gaps student researchers faced are in consistent with those results reported in the literature review. Thus, the fulfillment of these observed facts have great contribution to quality of research study.

The assessment results indicated that various issues or relevant problems were raised by the students' research studies which encountered in their working conditions in particular and the society in general. Therefore, the assessment of the research study revealed that both the distance postgraduate program (IGNOU) and the regular postgraduate program MBA, in this specific study, acquired minimum quality standard.

5.2.2 Recommendation

- Advisors should emphasized how to report the findings in sufficient details in particular and report writing skills in general.

- Of all the departments in this particular study MBA, MARD and MPA all in IGNOU's program produced a good number of papers. However, their quality be considered because a relatively low minimum quality standards 0.55, 0.66 and 0.72 respectively were recorded. Thus, special attention should be given.

- The university should be responsible to urge students so as to attend the research methodology course properly. Their major difficulties in the research process were appropriateness of sample size, research design, methods of subject selection and subject characteristics are points to be emphasized.

- It is advisable to design certain mechanisms to help students, like how to analyze data using SPSS.
- Further research is also recommended to find other factors or methods than those considered in the present study that influence quality of students' research study.

Bibliography

Alberta Heritage Foundation for Medical Research.(2004). *Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a variety of Fields. HTA Initiative* #13.Retrieved September 21, 2013 from http:// www. ihe.ca / documets / HTA-FR 13.Pdf.

Ascherof, K. (2003). Emerging Models of Quality, Relevance and Standards in Ethiopian Higher Education Institutions. *The Ethiopian Journal of Education, XXIII(2),1-25.*

Aschroft, K. (2004). The Massification of Higher Education: A comparison of the UK Experience and the Emerging Ethiopian Response. *The Ethiopian Journal of Higher Education,1(1),21-40.*

Belay Kassa. (2006). Linkage of Higher Education with Agricultural Research: Extension and Development in Ethiopia. *The Ethiopian Journal of Higher Education:3(1):21-61.*

Best, J. W. (1999**).***Research in Education*. 7th ed. Newdelhi: Prentice-Hall of India.

Best, J. W. (2006).*Research in Education:*10th ed. Boston: Eerson, Allyan and Bacon.

Cohen, L. , Manion, L., and Morrison, K. (2007). *Research Method in education:* 6th ed. London;Newyork:Routhledge.

Cohen, L., and Manion, L. (1994). *Research Methods in Education:* 4th ed. London; Newyork: Routhledge.

Danish Council for Research Policy. (2006***). A tool of Assessing Research Quality and Relevance. Danish Agency for Science, Technology and Innovation Bredgede 40 : DK-1260 Copenhagen K. Retrieved November 29,2013 from***WWW.dasti.dk,dfr@fist.dk

Derbessa Dufera.(2004). The Status of Research Undertaking in the Ethiopian Higher Institution of Learning with Special Emphasis on AAU. *The Ethiopian Journal of Higher Education, 1(1), 83-104.*

Gayetal, LR. (2009). *Educational Research*: Competencie for Analysis and Applications. 9th ed. Pearson PLC.London.

Ministry of Education. (20013). Education Statistics: *Annual Abstract,2012/2013.* Education Management Information System Addis Ababa: MoE.

Mulu Nega. (2012). Quality and Quality Assurance in Ethiopia Higher Education: Critical Issues and Practical Implications. Degree of Doctoral Dissertation: University of Twenty, CHEPS/UT, Enschede, the Netherlands.

Nuru Mahammed. (2005). Aspects of Quality in Research papers of Undergraduate: A case study. *The Ethiopian Journal of Higher Education, 2(1),151-163.*

Ruane,J. M. (2005). *Essentials of Research Method:* a guide to Social Science Research. Black well Publishing Ltd. USA.

Teklegerima Zenawi. (2012).Quality and Implementation of research studies in Tigray Region Colleges of Teacher Education. Master's Thesis: Addis Ababa University.

Tesfaye Semela. (2006). Higher Education Expansion and the Gender Question in Ethiopia: A case study of women in a public University: *The Ethiopian Journal of Higher Education,3(1),63-86.*

Teshome Yizengaw. (2004). The status and Challenge of Ethiopian Higher Education System and its contribution to development; *The Ethiopian Journal of Higher Education. 1(1);1-19*

Usher, R. (1996). *Understanding Educational Research: a critique of the neglected epistemological assumptions of educational research*. New Fetter Lane, London.

Wana Leka. (2008**).** *Training* Materials Prepared for the in –house conference Training. IER, Addis Ababa University, Unpublished.

Yohannes Woldetensae. (2010). Globalization and Internationalization in Higher Education : a Quality Assessment Perspective. Proceedings of the 8th National Conference on Privet Higher Education in Ethiopia .Organized sponsored by St. Mary'S University College at UN Conference Center,Addis Ababa, Ethiopia.

Annex A

Checklist for Assessing the Quality of Quantitative Studies

Item	Criteria	Yes (2)	Partial (1)	No (0)	N/A
1	Question/ objective sufficiently described?				
2	Study design evident and appropriate?				
3	Method of subject/ comparison group selection or source of information /input variables described and appropriate?				
4	Subject (and comparison group, if applicable) characteristics sufficiently described?				
5	If interventional and random allocation was possible, was it described?				
6	If interventional and blinding of investigators was possible, was it reported?				
7	If interventional and blinding of subjects was possible, was it reported?				
8	Outcome and (if applicable) exposure measure (s)well defined and robust to measurement / misclassification bias? Means of assessment reported?				
9	Sample size appropriate?				
10	Analytic methods described /Justified and appropriate?				
11	Some estimate of variance is reported for the main results?				
12	Controlled for confounding?				
13	Results reported insufficient detail?				
14	Conclusions supported by the results?				

Annex B

Checklist for Assessing the Quality of Qualitative Studies

Item	Criteria	Yes (2)	Partial (1)	No (0)
1	Question/ objective sufficiently described?			
2	Study design evident and appropriate?			
3	Context for the study clear?			
4	Connection to a theoretical framework/ wider body of knowledge?			
5	Sampling strategy described, relevant and justified?			
6	Data collection methods clearly described and systematic?			
7	Data analysis clearly described and systematic?			
8	Use of verification procedure(s) to establish credibility?			
9	Conclusions supported by the result?			
10	Reflexivity of the account?			

Annex C

Interview Schedule for Deans and Advisors

1. What is the status of research studies conducted by post graduate students in your college?
2. Do you think that students acquired basic knowledge and skill in research during their stay in the university?
3. Do you support students in conducting their research work? How?
4. In your opinion, what efforts has your college made to equip students with the required research competence?
5. Do you think that the students are in the position to conduct research independently?
6. Could you explain the major factors that influence the quality of research studies conducted by students?
7. How do you evaluate the quality of research? What are the indicators?
8. Can you explain plagiarisms and its consequences to the quality of students' paper? How serious is the problem in your university? How ethical are your students in conducting research?
9. Do you think that the research undertaking by your students geared toward problem solving?
10. Have you ever assessed the quality of research carried out by your students? How do you evaluate it?
11. Is there research policy in this university? How it contributes to promote quality research work to the students?
12. How is funding of research activities held by the students in this university?
13. How is advisors advisees' relationship in the university? Are they responsible, willing and punctual to give feed back to the students? Do they give enough support?
14. What is the university's trend of funding for student researchers? Does the university facilitate or offer research grant?

Annex D

Quantitative Analysis

The main goal of the investigation was to meet a minimum quality standard. The quality scores will be used to define a minimum threshold for inclusion of studies in the systematic review.

Papers in

MBA

Table 1: Case 1

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4		Partial		
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11		partial		
12				N/A
13		Partial		
14	Yes			
Total sum	16			
Total possible sum	20			
Summary score	0.80			
Percentage	80%			

According to table 1 result show that total sum of specific item score is 16 and its total possible sum is 20. Since the summary score is 0.80 (80%), this research study meets minimum quality.

Table 2: case 2

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13		Partial		
14	Yes			
Total sum	15			
Total possible sum	18			
Summary score	0.83			
Percent	83 %			

Table 2 indicates that the total sum of scores is 15 and its total possible sum is 18. The summary score point is 0.83 (83%) which is beyond the quality cut point 0.75. Thus, this research work fulfills the minimum quality.

Table 3: Case 3

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8		Partial		
9	Yes			
10	Yes			
11				N/A
12				N/A
13		Partial		
14	Yes			
Total sum	15			
Total possible sum	18			
Summary score	0.83			
Percent	83 %			

The quantitative information obtained in table 3 depicted that the total sum is 15 and the total possible sum is 18. The results of the summary score became 0.83(83%). Hence, this paper meets minimum quality.

Table 4: Case 4

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4		Partial		
5				N/A
6				N/A
7				N/A
8		Partial		
9		Partial		
10		Partial		
11		Partial		
12				N/A
13			No	
14		Partial		
Total sum	11			
Total possible sum	20			
Summary score	0.55			
Percent	55 %			

The quality score (table 4) provided that total sum of the research study is 11 and the total possible sum is 20. The summary score is 0.55 (55%). This paper fulfilled the minimum quality standard in the eyes of relatively liberal reviewers whose cut point is 0.55. However, the cut point of the researcher in this case is 0.75 (75%) relatively conservative. Therefore, this paper doesn't meet the minimum quality standard.

Table 5: Case 5

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10		Partial		
11	Yes			
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	20			
Summary score	0.80			
Percent	80 %			

The overall score assigned in (table 5) results indicates that total sum in 16 and its total possible sum is 20. As the summary score point 0.8 (80%) implies that the research study fulfills the minimum quality standard.

Table 6: Case 6

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11				N/A
12				N/A
13		partial		
14		partial		
Total sum	15			
Total possible sum	18			
Summary score	0.83			
Percent	83 %			

The overall scores assigned by the researcher in table 6 are 15,18,0.83 and 83% which are total sum, total possible sum, summary score and percentage respectively. Thus, this research study meets minimum quality standard because its summary score is 0.83.

Table7: Case 7

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4		Partial		
5	yes			
6				N/A
7				N/A
8				N/A
9	Yes			
10				N/A
11	Yes			
12				N/A
13	Yes			
14		Partial		
Total sum	15			
Total possible sum	18			
Summary score	0.83			
Percent	83%			

As the study assigned reports in table 7, case 7, the total sum is 15 and total possible sum is 18. The summary score is 0.83 (83%). This result implies that this research study meets the minimum quality standard point.

Table 8: Case 8

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10		Partial		
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88 %			

Based on the assignment reported in table 8, the total sum is 16 and the total possible sum is 18. Therefore, the summary score point 0.88(88%) fulfills the minimum quality standard.

Table 9: Case 9

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3		Partial		
4		Partial		
5				N/A
6				N/A
7				N/A
8		partial		
9		partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14		Partial		
Total sum	12			
Total possible sum	18			
Summary score	0.66			
Percent	66%			

The information provided in table 9, shows that the total sum is 12 and total possible sum is 18. The summary score is 0.66 (66%). This research study doesn't meet the minimum quality standard because the researcher used for this study relatively conservative cut point 0.75 (75%).

Table 10: Case 10

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88 %			

Findings shown in table 10, case 10 indicate that total sum of scores is 16 and its total possible sum is 18, the indicated summary score is 0.88 (88%) fulfills the minimum quality standard.

Table 11: Case 11

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4		Partial		
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10		Partial		
11		Partial		
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	20			
Summary score	0.80			
Percent	80 %			

As shown in table 11, results of total sum is 16 and total possible sum is 20. The summary score is 0.80 (80%) explained by the reviewer meets minimum quality standard.

Table 12: Case 12

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4		Partial		
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13		Partial		
14		Partial		
Total sum	13			
Total possible sum	18			
Summary score	0.72			
Percent	72%			

As noted in table 12, the total sum of scores is 13 and total possible sum is 18. The summary score 0.72(72%) doesn't fulfill the minimum quality standard because the quality cut point used by the researcher relatively conservative 0.75 (75%).

Table 13: Case 13

Criteria	Yes	Partial	No	N/A
1	Yes			
2			no	
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14		Partial		
Total sum	14			
Total possible sum	18			
Summary score	0.77			
Percent	77%			

According to table 13, results shown that total sum of specific item score is 14 and its total possible sum is 18. As the summary score is 0.77 (77%), the research study fulfills minimum quality standard.

Table 14: Case 14

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88 %			

Table 14 indicates that the total sum of scores is 16 and its possible sum is 18. The summary score point is 0.88 (88%) which is beyond the quality cut point (0.75). Therefore, this research study meets minimum quality standard.

MEC

Table 15: Case 15

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13		Partial		
14	Yes			
Total sum	14			
Total possible sum	18			
Summary score	0.77			
Percent	77 %			

The information assigned in table 15 depicted that the total sum is 14 and its possible sum is 18. The results of the summary score 0.77(77%). Thus, we can say that this research work meets minimum quality.

Table 16: Case 16

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8				N/A
9	Yes			
10	yes			
11				N/A
12				N/A
13		Partial		
14		Partial		
Total sum	14			
Total possible sum	16			
Summary score	0.875			
Percent	87.5 %			

The overall score assigned in table 16 results indicate that total sum is 14 and its possible sum is 16. As the summary score point 0.87(87%) implies that the research study fulfills the minimum quality standard.

Table 17: Case 17

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11	Yes			
12				N/A
13		Partial		
14	Yes			
Total sum	18			
Total possible sum	20			
Summary score	0.90			
Percent	90 %			

The quality score (table 17) provided that total sum of the research work is 18 and the total possible sum is 20. The summary score is 0.90 (90%). So, this paper meets the minimum quality standard.

Table 18: Case 18

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4	Yes			
5		Partial		
6				N/A
7				N/A
8				N/A
9	Yes			
10	Yes			
11	Yes			
12				N/A
13	Yes			
14	Yes			
Total sum	19			
Total possible sum	20			
Summary score	0.95			
Percent	95%			

The overall score assigned by the reviewer in (table 18), 19,20,0.95,95 are total sum , total possible sum, summary score and percentage respectively. The research study fulfills minimum quality standard because its summary score is 0.95.

Table 19: Case 19

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4		Partial		
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88 %			

As the study assigned reports in table 19, the total sum is 16 and the total possible sum is 18. The summary score is 0.88 (88%). This result implies that this research paper meets the minimum quality standard.

Table 20: Case 20

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88 %			

The information provided in table 20 shows that the total sum is 16 and total possible sum is 18. The summary score is 0.88 (88%). This research work fulfills the minimum quality standard.

MLIS

Table 21: Case 21

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8		Partial		
9	Yes			
10	Yes			
11				N/A
12				N/A
13		Partial		
14	Yes			
Total sum	15			
Total possible sum	18			
Summary score	0.83			
Percent	83%			

As shown in (table 21), results of total sum is 15 and its total possible sum is 18. The summary score is 0.83 (83%) assigned by the reviewer meets the minimum quality standard.

Regular Program

MBA

Table 22: Case 22

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	17			
Total possible sum	18			
Summary score	0.94			
Percent	94 %			

As noted in (table 22), the total sum is 17 and the total possible sum is 18. The summary results 0.94 (94%) meets the minimum quality standard.

Table 23: Case 23

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	17			
Total possible sum	18			
Summary score	0.94			
Percent	94 %			

Based on the information in the above table 23, the total sum is 17 and the total possible sum score is 18. The summary score is 0.94 (94%). Thus, we can say that this paper meets the minimum quality standard.

Table 24: Case 24

Criteria	Yes	Partial	No	N/A
1	Yes			
2		Partial		
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	17			
Total possible sum	18			
Summary score	0.94			
Percent	94%			

Regarding the assessment result in table 24, the researcher assigned calculated result. The total sum is 17 and the total possible sum is 18. The summary score point 0.94 (94%) implies that the research study fulfills minimum quality standard.

Table 25: Case 25

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4		Partial		
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10		Partial		
11	Yes			
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	20			
Summary score	0.80			
Percent	80%			

The overall score results shown in table 25, the total sum is 16 and the total possible sum is 20. The summary score 0.80 (80%) and it meets the minimum quality standard.

Table 26: Case 26

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3		Partial		
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9		Partial		
10	Yes			
11				N/A
12				N/A
13	Yes			
14	Yes			
Total sum	16			
Total possible sum	18			
Summary score	0.88			
Percent	88%			

Table 26 assessment results indicate that the total sum is 16 and the total possible sum is 18. Thus, the summary score is 0.88 (88%) result implies that the paper fulfills the minimum quality standard.

Table 27: Case 27

Criteria	Yes	Partial	No	N/A
1	Yes			
2	Yes			
3	Yes			
4	Yes			
5				N/A
6				N/A
7				N/A
8	Yes			
9	Yes			
10	Yes			
11				N/A
12				N/A
13		Partial		
14	Yes			
Total sum	17			
Total possible sum	18			
Summary score	0.94			
Percent	94%			

The overall score assigned by the researcher in table 27, the total sum is 17 and the total possible sum is 18. The result of the summary score 0.94(94%) shows that this research study acquires minimum quality standard.

A Summary of Analysis Results of Sample These **(Annex E)**

No	Department	Cases	Total sum	Total possible sum	Summary score	Percentage
	IGNOU'S Program					
1	MBA	1	15	18	0.83	83.3
		2	15	18	0.83	83.3
		3	15	18	0.83	83.3
		4	11	20	0.55	55
2	MARD	5	16	20	0.80	80
		6	15	18	0.83	83.3
		7	15	18	0.83	83.3
		8	16	18	0.88	88.8
		9	12	18	0.66	66.6
		10	16	18	0.88	88.8
		11	16	20	0.80	80
3	MPA	12	13	18	0.72	72.2
		13	14	18	0.77	77.7
		14	16	18	0.88	88..8
4	MEC	15	14	18	0.77	77.7
		16	14	16	0.87	87.5
		17	20	22	0.90	90.9
5	MSW	18	19	20	0.95	95
		19	16	18	0.88	88.8
		20	16	18	0.88	88.8
6	MLIS	21	15	18	0.83	83.3
	Regular program MBA					
1	MBA	22	17	18	0.94	94.4
		23	17	18	0.94	94.4
		24	17	18	0.94	94.4
		25	16	20	0.80	80
		26	16	18	0.88	88.8
		27	17	18	0.94	94.4