

Factors Associated with Conducting Academic Research for Master's Students in Myanmar

May Thet Htun ^{1*}, Htin Lin Oo ² and Chien-Kuo Li ³

¹English Department, Meiktila University, Ministry of Education, Myanmar.

Email: thethtun.may@gmail.com

²English Department, Sagaing University of Education, Ministry of Education, Myanmar.

Email: htinlinoo.oo3@gmail.com

³Information Technology and Management, Shih Chien University, Taiwan.

Email: ckli@mail.usc.edu.tw

*Corresponding author: thethtun.may@gmail.com

Abstract

According to Clifford (1986), research comprises defining and redefining problem, formulating hypothesis or suggested solutions, collecting data, organizing and evaluating data, making deductions and reaching conclusions and at last carefully testing the conclusion to determine whether they fit the formulating hypothesis. Research is an academic activity. It enables people to find answer to various questions raised by them. It helps to solve problem confronted by individuals in their day to day life. This research aims to make the first step towards a valuable discussion about the unique situation of Master's degree programs of different university types, and explore the quality, feasibility and general philosophy which surrounds research at the Master's level. A questionnaire was conducted among Master's students of the selected Universities of Myanmar to be able to extract conclusions about the research situation in Myanmar. Text comments and multiple-choice questions were used to ask the research opinions of the students and tend to find out the difficulties they face in conducting research. The data analysis displays some significant problems in conducting Master's research, and also points out the current academic requirements of Myanmar Universities in research sectors. According to the results, the major problems of the Myanmar researchers encountered with are inadequate funding and lack of effective research training to have adequate number of opportunities for findings to conduct effective research projects under the organizational challenges.

Keywords: Academic research, Master's Level, Myanmar, Student difficulties

Introduction

Master's Research in Myanmar

In 2019, total higher education enrollment increased to 923,062 including those enrolled in distance education. According to the Ministry of Education, there are more than 18,000 Master's students joined up the graduate programs of Universities, and it is obviously seen the intense interest of Myanmar students at Master's studies. However, most of the Master level research programs in Myanmar are insufficient fund and consequently Master's students cannot depend on their universities financially while working on their Master's degree. Part time jobs are not popular in Myanmar and most of the Master level students depend on their family income. And basic fundamental office devices such as computer, printers, internet access, reference books and etc...are beyond the reach of the students. As a developing country, the department cannot also provide essential office devices efficiently, and only a few funded research programs and research projects can be supported. One of the main points to conduct a complete research paper, research methodology is also dominant one. However, the effective research training program for Master level

cannot be arranged in local. The research methodology is not systematic. It is important for the researchers to be well-equipped with all the methodological aspects before they undertake their research projects. Without having enough background knowledge of the research methods, many researchers start to conduct their research work. Even the guides or supervisors do not have in-depth knowledge about the various methodologies. In all, lack of support from the institution and inappropriate funding of research activities are the hallmarks of failure to execute research tasks. For the above reasons, most of the Myanmar students stand on their family income for the studies or find someone or organizations who can support with the money to cover their living expenses. A person can have complex interests and motivations in individual for undertaking a Master's degree program (Leonard et al., 2004), and possible problems can increase during this process. The difficulties of master studies are necessary to be notified to the academic community. The purpose of this research is to expose and reveal the problems Master's students of Myanmar Universities have when they conduct a research. Furthermore, an effort was made to point out the major concerns and difficulties of Master's students and to express the situation under which research is conducted.

Literature Review

Many researchers have presented the challenges of conducting research for master level from different point of students and faculty members' (supervisors) views: (Welsh. 1980). In addition, many members of the academia have proposed solutions to problems of master research, and recommendations to make master studies an easier procedure for faculty and future candidates (Boud at al. 2006). Moreover, Al-Dhuwaihia (2019) aimed to identify the challenges faced by master students from the students' point of view focusing on administrative challenges, technical challenges, financial challenges and academic challenges. And the results pointed out that financial challenge was the highest one in it, followed by academic challenges, administrative challenges and finally technical challenges. Desmennu and Owoaje (2017) conducted to assess the barriers to research and training needs of the postgraduate research students at the University of Ibadan. Lack of funding, unreliable electricity supply, and lack of access to research materials were the most popular barriers for the researchers. In terms of accessing research funding, the identified barriers included lack of information and inadequate mentoring. In that paper, the requirement of training on proposal development was the most

distinct barrier followed by seeking funding, and evaluation of interventions. Ichsan, Wahyuniati and McKee (2018) identified a study focusing on attitudes, barriers and enablers/facilitators towards primary care research participation and implementation in this higher education institution. Among lower-and-middle-income countries some are actively participating as a leader in research innovation. Although the local faculty member's involvement in international conferences, meetings and seminars is growing, the interest of faculty members in conducting research is low, research fund is inequal and resources, infrastructures and research support are lack of. A comprehensive and effective research policy are essential tools to be able to upgrade and support successful research initiatives. In their study, the majority of the participants responded significantly in lack of infrastructure, lack of financial incentives and lack of training. Memarpour, Fard and Ghasem (2015) presented that the most distinct barriers of research were inadequate financial support followed by the preference for academic instruction over research, limited time and lack of research skill. Lack of research funding support can be related to the fact that limited fund for research involving expensive research materials and equipment in some countries lead to a low incentive for research.

Safari (2015) conducted the educational and research facilities, organization support (university), research and scientific experiences, other factors and finally the role of professors were necessary effective factors in research activities of higher education. In most of the previous studies, lack of funding support can be found as one of the main barriers in conducting research for the researchers. The results of the study indicated that educational-research facilities and organizational support play an important role in conducting research activities. Consequently, access to appropriate internet speed, different databases, equipping the research labs for scientific research and providing the advanced laboratory devices, financial support of university research unit and encouraging the postgraduate students in different ways, can strengthen the participation of students in conducting research activities.

Although there are innovative efforts were mentioned above, the actual process knowledge is still considered to be limited. The different personality of each one involved in master studies, the uniqueness of academic institutions and the constantly evolving global economic conditions are the reasons which can be different in the process for each individual. For the above reasons, the academic community should give awareness of the problems of researchers

in conducting a research and the problems of each different academic system to be able to make generalizations leading to the re-evaluation and improvement of the process.

(i) Methodological challenges in qualitative studies (Jirwe. 2011)

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. A researcher presents a number of methodological challenges engaging with qualitative research. After being identified the initial research question, an appropriate methodology such as ethnography or grounded theory is needed to make a crucial choice. Subsequent decisions are made about which methods of data collection are appropriate to the methodology and relevant to the research question, the participants and the research setting. In-depth or semi-structured interviews and participant observation are the most commonly used in qualitative research, but focus group discussions; documentary analysis and diaries are also popular. Once qualitative data have been collected, data analysis, as Jirwe (2011) recently pointed out, raises yet more challenges.

(ii) Ethical challenges in qualitative studies

Research ethics are the set of ethics that govern how scientific and other research is performed at research institutions such as universities, and how it is disseminated. When most people think of research ethics, they think about issues that arise when research involves human or animal subjects. While these issues are indeed a key part of research ethics, there are also wider issues about standards of conduct. While qualitative research is carrying out, some important ethical concerns such as anonymity, confidentiality and informed consent that should be taken into account. Researchers should always be aware of the precise reason for involvement in a study in order to prevent undesirable personal issues. Interviews should be well-planned to be able to get the response from the participants which can provide the researcher during the sufficient interview time and it should be less the risk of emotional exhaustion concerning with analysis of the objective and emotional aspects of the research. The post-interview to be as overt as possible and findings should be recorded. Although absolute confidentiality cannot be guaranteed, openly recording field notes assists participants to comment sheet could assist the researcher to note the feelings of informants, as well as interpreta-

tions and comments that occurred during the interview. Data collection needs decide what they wish to have on the record.

According to Richards and Schwartz' (2002) findings, the term 'confidentiality' conveys different meanings for researchers. Moreover, these also include the importance of publishing findings in a transparent way, not plagiarizing others' work, and not falsifying work. Ethical challenges may be occurred when researchers have to concern with contradicting issues and choose between different methodological strategies in conflict arises. In such cases, there may be unavoidable disagreements among different components such as participants, researchers, researchers' discipline, the funding body and the society. It is sometimes even necessary that the researcher clarify in writing which persons can have access to the initial data and how the data might be used.

Informed consent has been recognized as an integral part of ethics in research carried out in different fields. For qualitative researchers, it is of the utmost importance to specify in advance which data will be collected and how they are to be used. The principle of informed consent stresses the researcher's responsibility to completely inform participants of different aspects of the research in comprehensible language. Clarifications need to include the following

issues: the nature of the study, the participants' potential role, the identity of the researcher and the financing body, the objective of the research, and how the results will be published and used.

Informed consent naturally requires ongoing negotiation of the terms of agreement as the study progresses. Many people consider it necessary to participate in research that their peers, community and or society may be benefit from.

(iii) Organizational challenges in doing educational and other research

(Donald, Saroyan & Denison. 1995)

(a) Funding

Funding is usually awarded as a research grant to the researcher. Adequate financial resources can be regarded as an important success factor for research systems to get the support for purchasing original, and even ongoing hardware and software maintenance and support. If grant funds supporting a research system or upgrades run out, there may have unique problems. The aims of research must change over time in response to funding agency interests and scientific progress. Research funding is an important aspect of academic life. As a result, allocation of research funding for researchers in humanities is less. This means that researchers have less number of opportunities to pursue research tasks and publish

their work.

(b) Training and Support

Research training may include coursework elements, focusing on research skills or more general skills that graduates will need for research related careers. Research training is the most important pathway to careers in research and research related roles. Another key strategy for success is provision of adequate training and support. Although training and support are equally important for research systems, only a small number of people are selected to train for the research task and the technology. Furthermore, the number of evolving and disparate systems being used in many modern research laboratories is larger than in the clinical environments.

(c) Project Management

Research project management is responsible for the completion of both research and project management deliverables, including setting up, monitoring and reporting on research project. Management expertise is required for all research projects relating to system implementation and maintenance and it should be an institutional function that supports research IT and administrative systems implementation groups. To be a good project management, it depends on the three keystones are the management of resources, of the schedule,

and of the quality of the outcome. Careful planning of each keystone takes part as the most important one to be a good management. When one objective change, plans for the others must be changed accordingly. Project management is not common, particularly in smaller laboratories though it is equally critical for research systems implementation and project management strategies are adopted to organize experiments that require novel roles and capacities not locally available to the laboratory.

Research Methodology

To get the needed data on investigating the factors associated with conducting Master's level research, a survey was conducted during the academic year 2018-2019. The respondents were more than 160 active Master's students (out of the almost 200 asked to participate, with a response rate of 80%) studying on different specializations of selected universities. The survey method with multiple-choice questions was used as the most appropriate one because it is convenient not only for the surveyors but also for the correct data along with a quite easy circulation of the questionnaires which can be achieved among many participants and with many ways. Questionnaires were sent via mass e-mails to survey participants personally and to Master's students and

teacher supervisors by phone interviews. The survey used multiple-choice answers to questions and also allowed many text comments be able to describe individually their unique situation without being limited by standardized answers. Students' opinions about methodological, ethical and organizational challenges in doing educational research were asked to express and reveal the major factors they encounter during their studies and research. While they were studying at universities, the situations-difficulties what they face were revealed using open ended questions on subjects where a more detailed opinion was considered to be more helpful. The major results of the conducted research are mentioned below followed by a discussion on their analysis. As for the demographics of the survey, most of the participants age were between twenty-one and twenty-five years (70.18%), followed by students between twenty-six and thirty years old (26.09%), and students over thirty are (3.73%). The survey participants had already held a bachelor's degree before enrolling on the Master's program. The funding sources of 59.20% participants are funded by parents and family income and 30% of the participants depend on their salary working in the private sector together with their research.

Table 1 Demographic of the participants (n=161)

SN	University Type	Responses				
		Gender		Age		
		Male	Female	Between 21 and 25 years old	Between 26 and 30 years old	Older than thirty years
1	Arts and science	10	31	30	10	1
2	Economics	7	16	20	2	1
3	Education	2	28	12	16	2
4	Technology	15	30	41	4	-
5	Medicine	7	15	10	10	2
	Total	41	120	113 (70.18%)	42 (26.09%)	6 (3.73%)
		161		161		

Table 2 Funding sources of the students (n=161)

Sr No	University Type	Responses				
		Part-time job	Full-time job	Family funds	University funds	Scholarship
1	Arts and science	37%	-	60%	-	3%
2	Economics	41%	-	54%	-	5%
3	Education	19%	26%	54%	-	1%
4	Technology	22%	-	72%	-	6%
5	Medicine	31%	-	56%	-	13%
	Average	30.00%	5.20%	59.20%	0%	5.60%

The dominant problem indicated by almost every survey participant is inadequate research funding. According to the data, university funding cannot provide sufficiently for research and academic programs. It shows that more than 50% of the participants take the support of their family, only 5.20% of respondents are working at the full-time job or 5.60% of them is studying on a scholarship but 30.00% are having evening part-time jobs. Most of these respondents insist that they “frequently” use private funds to cover the above-mentioned expenses.

Results

In conducting a qualitative research paper, the foremost difficulty is to design an appropriate methodology as well as appropriate methods to collect data and to find the solution. The same method can be considered in two problems, but methodology may be different. Methodological challenges and the responses of the research participants can be seen in table 3 as follow:

Table 3 Methodological challenges in qualitative studies (n=161)

SN	Methodological challenges	Responses		
		Agree	Not Sure	Disagree
1	Once the initial research question has been identified, the first challenge for researchers is to have crucial decisions that need to be made about an appropriate methodology, such as ethnography or grounded theory.	68%	23%	9%
2	Another big challenge is subsequent decisions about which methods of data collection are appropriate to the methodology and relevant to the research question, the participants, and the research setting.	61%	20%	19%

Table 3 (Continued)

SN	Methodological challenges	Responses		
		Agree	Not Sure	Disagree
3	Once qualitative data have been collected, the third challenge for researchers is to improve data analysis that raises yet more challenges.	66%	24%	10%
	Average	65%	22%	13%

Due to the experiences, potential respondents agreed with a number of methodological challenges. Making decisions to have appropriate methodology, such as grounded theory have been difficult for 68% of the researchers. Once qualitative data have been collected, the respondents 66% respond that data analyzing raises yet more challenges. In average, 65% of the participants agree that they encounter with the methodological challenges in doing qualitative research.

Moreover, researchers encounter with ethical challenges in all stages of the study, from designing to reporting. Research ethics is paramount important in conducting a research task because it is mostly related to the ethical principles of social responsibilities. Anonymity, confidentiality, informed consent and researchers’ potential impact on the participants include in it. In table 4, ethical challenges of the participants can be seen obviously.

Table 4 Ethical challenges in qualitative studies (n=161)

SN	Ethical challenges	Responses		
		Agree	Not Sure	Disagree
1	Anonymity In most contexts, in-depth qualitative research could not be carried out without breaching anonymity so defined: researchers not only know participants’ identities, but usually meet them in person.	7%	20%	73%

Table 4 (Continued)

SN	Ethical challenges	Responses		
		Agree	Not Sure	Disagree
2	Confidentiality Researchers employ a number of methods to keep their subjects' identity confidential.	51%	33%	16%
3	Informed consent The human rights of research participants must be protected.	71%	22%	7%
4	Publishing findings It is very important to publish findings in a transparent way, not plagiarizing others' work, and not falsifying work.	80%	17%	3%
Average		52%	23%	25%

Anonymity is one form of confidentiality – that of keeping participants' identities secret. Anonymizing qualitative research data can be challenging, especially in highly sensitive contexts. This article discusses the issues they faced in trying to maximize participant anonymity alongside maintaining the integrity of their data. However, only 7% of the researchers agree that researchers could not be carried out qualitative research without breaching anonymity and 73% disagree about anonymity. Confidentiality refers to separating or modifying any personal, identifying information provided by participants from the data. According to the data, 51% of the research students respond that they use the methods to keep the confidentiality of their subject's identity. Seventy one percent agree that the human rights of research participants must be protected. Conducting and publishing qualitative research requires the same principal skills as quantitative research. In addition, there may be special challenges for the qualitative researcher (80%). Without plagiarizing and falsifying other's work, publish findings in a transparent way is very important and only 3% of the student participants disagree about that.

In conducting a qualitative research, adequate financial support, sufficient research training to improve research related careers and technical support for example updated e-libraries and modern research laboratories. According to table 5, the responses of the researchers about these challenges can be seen as follow.

Table 5 Organizational challenges in research studies (n=161)

Sr No	Organizational challenges	Responses			
		Agree	Not Sure	Disagree	
1	Funding	I have adequate number of opportunities for findings to pursue research projects and publish my work.	11%	16%	63%
2	Training and Support	University research training provides insights on training and development trends and best practices, offering actionable recommendations and the opportunity to benchmark our learning and development practices.	24%	20%	56%
3	Project Management	As I prepare to manage my research project, research project management tools are available to facilitate the requisite tasks to guarantee research success.	17%	22%	61%
Average			17%	19%	60%

Most of the researchers in Myanmar always encounter with financial problems in doing a research paper because they have inadequate number of opportunities for findings to pursue research projects and publish their work and only 11% of the participants agree that they get financial support or funding. Finally, 63% of the people questioned feel that a Master degree is a significant step towards the career they would like to follow. On average, the research participants 60% do not get the necessary funding, training and support and project management to implement their research.

Discussions

According to figure 1, the most distinct challenge for the researchers is organizational challenge and 60% of the participants respond that they encounter with the difficulties dealing with research funding, inadequate training and support and research project management tools. Only 17% of the respondents agree that they can get adequate support. Although 52% of Myanmar researchers agree about research ethics, 25% of the participants respond 'disagree' and 23% are not sure about research ethics. Moreover, 65% of the research participants agree that they can acquire appropriate research methods and methodology to collect data and to analyze the data.

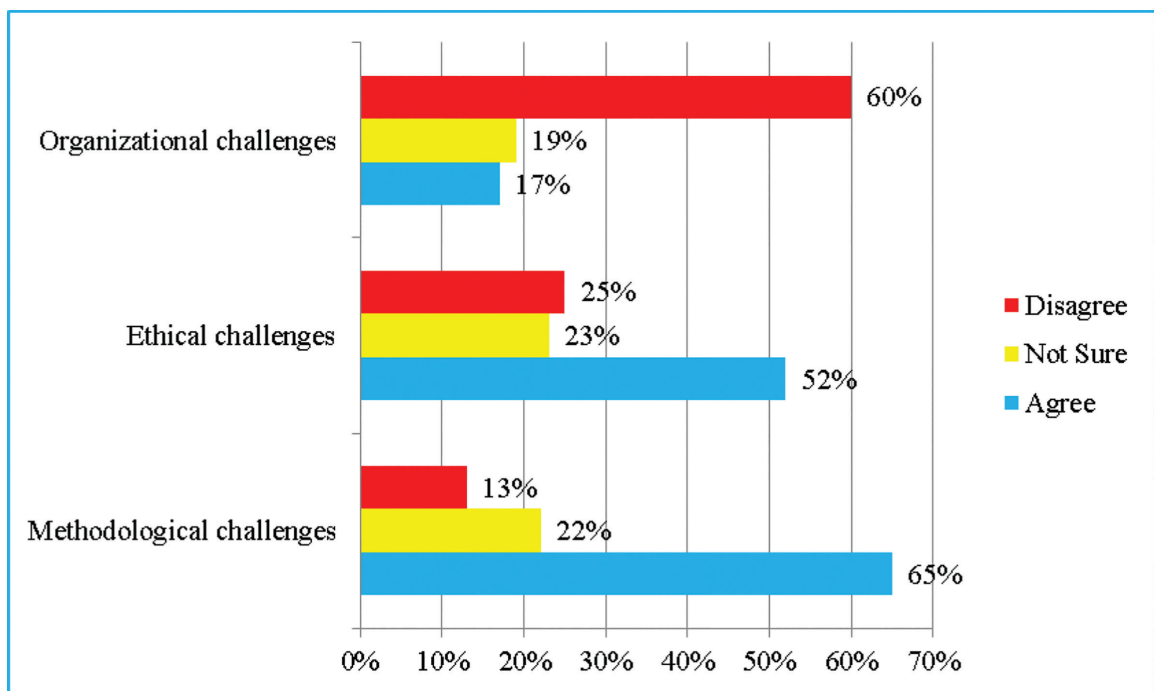


Figure 1 Challenges encountered by students in qualitative studies

By analyzing the findings, the difficulties Master's students have and recommendations can be assumed that refining graduate work is to step up a doctoral level. As it was mentioned above, the major problem of the students was that of research funding and the fact that only few students are getting any financial support from the University. More than half of the participants working together with their research assumed that the psychological pressure, fatigue and lack of time can create the conflict of the research and work duties, and decrease their motivation, time and courage to conduct a research work.

Most of the research students can participate in research programs with the support of the University, the Myanmar Government, Research Committee or some kind of salary or the programs' fund receiving from other private institutions and organizations but most of the times the subject of that research program has nothing to do with the subject of the students' Master's thesis. The above can create time-management problems to students who have to balance their everyday workload between the research program and their own individual research. Consequently, it can be obviously seen that lack of funding can seriously affect some students' research, and result in serious concerns and their deep frustration (Holdaway et al. 1995).

For master's students, the ideal situation could be that of a lack of University pay-roll by being appointed as research assistants and teaching assistants or by receiving more scholarships for conducting research. Furthermore, students should get relief of scientific expenses such as conference participation, the purchasing of research-related books and others. It should be considered costly actions in case the world economic crisis happens again as it has caused so many difficulties in the economy of the European Union and particularly in Myanmar before. Despite the above, education is one of the stepping stones of our

society and ways which can economically support. It is obvious that the University research economic boosting should be done more and further measures should be taken in order to overcome the funding difficulties which Master's research faces. All the above need an extensive amount of time, and more important much funds to be spent from the Myanmar Government, funds which are difficult to be found.

Conclusion

Education and research are two extremely pivotal factors of modern society. However, difficulties found in conducting academic and Master's level research can be caused by world economic problems and unique difficulties of each institution. The difficulties students face in Universities can vary or can be unique for each individual, but the problems this research revealed cannot be avoided for the majority of Master's students. As organizational problems, poor funding and inadequate facilities problems are a reality for the Myanmar academic system as a whole. When the major findings of the conducted survey are highlighted, insufficient funding for master's research and low motivation for doctoral research are the significant difficulties indicated by most participants. Furthermore, actions which intend to improve infrastructure, motivate

University students and faculty, and create a way to get regular pay-roll for the doctoral students in order to encourage research in Myanmar Universities. In addition, models from other countries cannot be substituted for improving the current conditions because of the uniqueness of the Myanmar educational system under which Master's research is conducted. The most applicable solution for facing the difficulties seems to be the initiation of a new three-way dialogue between master's students, academic members, and the Myanmar Government. In this dialogue, the research in Myanmar Universities at a master's should be discussed to upgrade experimental and productive level, and a whole new research framework can be recommended for promoting knowledge and education and for improving the conditions under which Master's research in Myanmar is conducted. An innovative survey which examines the faculty views is proposed to be conducted for expanding the conducted

survey and for being a more holistic approach of the master's research difficulties of doctoral candidates. The limitation of the present study is just extracting and drawing conclusions via students' options and students' perspective and not taking under consideration faculty views. Conducting a survey among master's research supervisors and combining the results of those two different surveys make the academic community track different opinions which could head to safer conclusions about the difficulties Myanmar Universities face, and the actions that need to be taken for materializing students' and supervisors' ideal research projects. Moreover, there are more than 18,000 master's students enrolled in Myanmar Universities and it is expected to validate the results of the present paper by a survey which could cover the biggest part of the student body of Myanmar and could create safer, and more detailed results.

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