

UEL-CN-7000 Mental Wealth; Professional Life (Dissertation)

Week 1 – Reading Material

Overview of Research/Dissertation

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INTRODUCTION

The material for the first week of this module will introduce you to the fundamental concepts of research/dissertation. A dissertation is a lengthy academic writing assignment that must be delivered as part of an undergraduate or graduate degree program. It is based on original research. Your field will determine how your dissertation is organized, although it will typically have at least four or five chapters. This chapter provides a brief overview of the purpose and ethics of research/dissertation, the research dissertation process, deciding on the content type of a dissertation, how to do good research/dissertation, and research methods.

LEARNING OBJECTIVES

This chapter will familiarize you with the following concepts:

1. Understand what research/dissertations are.
2. Familiar with the research/dissertation process and methods.
3. Describe the classification and methods of the research/dissertation.

PURPOSE AND ETHICS OF RESEARCH AND DISSERTATION

All institutions that award graduate degrees are dedicated to helping graduate students and faculty members achieve the objectives of consistency, logical structure, appeal, and accuracy in academic writing. This chapter is intended to offer advice to the master's candidate on how to prepare the master's research or dissertation following the program's criteria. The processes of the dissertation process, the types of dissertations, how to do effective research and write a strong dissertation, and research techniques are all covered in this article. The candidate is in charge of making sure that each of those procedures is followed and that all necessary submissions are submitted by the timeframes provided.

Candidates should get familiar with it and discuss any concerns they have with their advisers before beginning their research or dissertation work because it is important, subject to change, and the candidate is responsible for sticking to it all. The research/dissertation process will go more smoothly for everyone involved with a clear grasp of and adherence to the following:

The master candidate and the dissertation chair are primarily accountable for assuring ethical behavior throughout the research/dissertation process and ethical treatment of participants. There are three areas in which graduate students should exercise extra caution since the conferral of a graduate degree involves personal integrity and mastery of academic methods: *(a) appropriate citation of works, (b) the use of copyrighted content, (c) and authorization for research involving human beings* are all requirements.

Plagiarism is described as "to steal and pass off (the ideas or words of another) as one's own" in the Merriam-Webster Dictionary (<http://www.merriam-webster.com/dictionary/plagiarism>). Any information used from another source has to be acknowledged and recorded; it is never acceptable to claim credit for someone else's work. Students engaged in joint research should use

extreme caution to prevent accusations of plagiarism. If in doubt, students should inquire about the matter with the graduate school and the dissertation chair. When plagiarism is suspected, it will be looked into and, if it is found to exist, prosecuted. Figure 1 explains the ethical principles of research/dissertation in detail.



Figure 1 Ethical Principles of Research/Dissertation

Permission to quote often does not need to be requested when copyrighted material is utilized in a restricted fashion. However, if substantial portions of a work that is protected by copyright are to be utilized, authorization from the owner of that work is required to avoid violating their rights. The student should take into account the amount of the material to be cited concerning the content of the overall work when calculating the length of a written work that may be quoted without authorization. Workbooks, exercises, tests, response sheets, surveys, and other such consumable materials should never be reproduced and incorporated into a dissertation without express consent.

The publisher typically has the power to consent to requests to quote portions of works protected by copyright or to send such to the owner of the rights or their approved agent. The owner of the

copyright may charge for the right to quote. Permissions must be acknowledged in the acknowledgments, and the source must be listed in the manuscript's reference section.

Several government authorities keep an eye on whether the rules regulating the use of human subjects, animal care, radiation, prescription medications, recombinant DNA, or the management of hazardous chemicals in research are being followed. Due to these rules, graduate students' research compliance is a crucial issue to consider when conducting their work.

THE RESEARCH/DISSERTATION PROCESS

The dissertation is an original and scholarly research contribution to the candidate's chosen area of specialization. It should demonstrate the competent application of appropriate research procedures and ethical guidelines in the investigation of a significant problem or issue chosen by the candidate with the guidance of the candidate's dissertation chair and committee. One thing that the above definition of research recognized is that research must be considered an activity.

Figure 2 explains the research process overflow from the beginning to the end.



Figure 2 Research Process

In other words, your research activity should adhere to a defined procedure rather than being carried out whenever you feel like it. (Blaxter et al., 2006) identify four common views of the research process: *sequential, generalized, circulatory, and evolutionary*:

Sequential: The simplest perspective is that of a sequential process. A sequence of tasks is carried out in this procedure one after the other in a "set, linear succession of steps." The systematic process model is an illustration of such a procedure.

Generalized: In that, a predetermined series of tasks are completed one after the other, the generalized research process is the same as the sequential process. The generalized model acknowledges that not all phases are appropriate and that certain processes would need to be carried out differently depending on the type of research being conducted. In light of the nature and results of the research, the extended model, therefore, provides alternative paths that may be chosen at certain phases.

Circulatory: The circulatory method takes into account the fact that all research is truly just a part of an ongoing cycle of discovery and inquiry. Research frequently raises more questions than it does answers, so the process might start afresh by attempting to address these fresh inquiries. You could revisit or reinterpret earlier phases of your work as a result of your research experiences. The circulatory interpretation also acknowledges the never-ending nature of the research process and allows anybody to engage at any moment.

Evolutionary: The evolutionary notion advances circulatory interpretation by recognizing that research must vary and evolve through time rather than always adhering to a predetermined circulatory pattern or using the same techniques for analysis and interpretation as in the past. Each evolution's results have a greater or smaller influence on those that follow after it.

DECIDING ON THE CONTENT TYPE OF THE DISSERTATION

Most theses fall into one of two categories: qualitative (which includes creative), or quantitative.

Most graduate-level work will fall into one of many categories, while some may not. This section is divided into two parts that describe each since the structure and formatting vary for each. It is crucial to identify the sort of dissertation you are writing early in your graduate career, even if certain information is common to all dissertations.

Qualitative or Creative Dissertation

Students who worked in a descriptive, exploratory, analytical, or creative manner produced this kind of thesis. Instead of explaining, these techniques are "mainly concerned with enhancing comprehension of a substantive issue." In the discipline of information science, qualitative methods—which include techniques like case studies and surveys—are more prevalent. Graduate students writing these kinds of theses may be found in departments that cover the arts and humanities.

Quantitative Dissertation

Data, or pieces of information created or measured by scientific instruments (such as spectrophotometers, polymerase chain reaction cycles, microscopes, and stopwatches) and recorded numerically on some sort of scale, are frequently found in these types of theses.

Examples of this kind of thesis include the following:

- Evaluating materials' conductivity while subjecting them to various temperatures.
- Monitoring the impact of a novel Alzheimer's medication on the rate of nerve conduction in mice.
- Comparing strength training programs for track athletes to see which is the most effective approach.

- Complementing survey data with variables.

HOW TO DO GOOD RESEARCH/DISSERTATION

Now that you know what research is and how to categorize it, you might be wondering what constitutes good research.? (Phillips and Pugh, 2005) identify three characteristics of good research:

- *Open minds.* Work with an "open system of mind," as the saying goes. Be receptive to the inquiries made. Conventional wisdom and accepted dogma might be insufficient.
- *Critical analysis.* Analyze data with care. Are these numbers accurate? Have they experienced any effects? What do these data mean? Alternative data are available? Can multiple interpretations of these facts be made?
- *Generalizations.* Researchers find generalizations and place boundaries on them. Generalization enables the interpretation and application of research to a broad range of contexts. Researchers must be aware of these generalizations' limits, though. Your wisdom and deductive reasoning drive you to make generalizations about things you have never encountered before, but with some qualifiers.

Failure to adopt these traits ensures that the status quo will continue and that nothing will be challenged. You cannot contribute to knowledge if you lack an open mind, a critical eye, and the capacity to generalize your learning to many situations. After all, this is the fundamental objective of your research.

RESEARCH METHODS

The four most popular research techniques are *action research*, *experiment*, *case study*, and *survey*, which you may combine or employ alone:

- *Action research* includes "the meticulously recorded (and supervised) examination of an endeavor by you to actively address an issue and/or modify a condition". It entails working on a particular project or problem with a person, or more frequently, an organization, and analyzing the outcomes. This practice is sometimes referred to as participant observation. When conducting action research, you must be careful to avoid getting too caught up in carrying it out and losing sight of the true purpose of performing it, which is to evaluate it for your academic project (Herbert, 1990).
- *The experiment* involves utilizing tests that you control to look into causal linkages. Quasi-experimental research will frequently be required owing to limitations with limited access to samples, ethical concerns, and other factors. According to literature, experiments typically involve:
 - Formulating a theoretical hypothesis;
 - Choosing samples from known populations;
 - Assigning samples to various experimental settings;
 - Introducing planned changes to one or more variables;
 - Measuring a limited number of variables;
 - Controlling all other variables.

Projects involving development, assessment, and problem-solving typically involve the use of experiments.

- *Case study* An extensive examination of one situation is what a case study is. It entails looking at a certain circumstance, issue, business, or set of businesses. Examining corporate reports or other firm paperwork can be done either directly, such as through

interviews or observation, or indirectly, such as through this research. (Berndtsson et al., 2008) emphasize that you should try to "generalize from the unique specifics of the investigated context, seeking to identify the scenario for which the researched organization is typical" in addition to reporting on the findings of the case study inquiry.



Figure 3 Types of Research Methods

To draw conclusions that are useful, accurate, and fair, you must sort, evaluate, and interpret the substantial amounts of subjective data that are often generated by case studies. If you directly do the case study, you should be conscious of your effect.

- *Survey* Usually, questionnaires or interviews are used to conduct this. It enables "the very efficient collecting of a significant amount of data from a sizable population." You may need to choose samples and sample sizes for a survey, create questionnaires and decide whether interviews are necessary.

The "time period" of research methodologies may also be used to classify them. To put it another way, does the research produce a snapshot of what you have seen, or do your data give your insight into what has been happening over time? A cross-sectional study is a term used to describe a quick snapshot of a situation or occurrence. On the other hand, a longitudinal study is a long-term view in which data are continuously acquired throughout time. The nature of your research and your goals will determine the type of study you do, as illustrated above figure 3.

SUMMARY

This chapter covers research/dissertation that is undertaken as part of master's degrees such as MSc. Students research/dissertation will have several *stakeholders*, the most important of which is you. Others include your supervisor(s), the client(s), user(s), examiner(s), software testers, and evaluators. This module is arranged chronologically into the following sections: Overview, Development, Methodology, Elements, and Style, Presenting the Research/Dissertation, Presentation of Findings and Results, Conclusions and Recommendations, and finally the 'end game.

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