

Guidelines for Thesis by Publication

Thesis Format:

There are two options available to students: 1) a **traditional dissertation**; and 2) a **dissertation based on three separate papers**.

- 1) The **traditional dissertation** is a coherent document that provides a complete and systematic account of the thesis research. It is a single report, divided into chapters (e.g. introduction, literature review, theoretical underpinnings/conceptual framework, methods, results, discussion, conclusion). A reference list would be followed by various appended material, which might include data collection instruments, consent forms, additional related findings, etc.
- 2) The **three paper dissertation** is constructed around a set of related original manuscripts. The main body of the dissertation comprises a minimum of three complete, stand-alone manuscripts. At the time of the thesis defense these papers may be published in a peer-reviewed journal, submitted for peer review, or considered to be of publishable quality by the student's thesis committee. The three paper dissertation differs from the traditional dissertation in format rather than content. The amount of detail that can be included in papers prepared for publication is limited by journal page requirements. Therefore, in addition to manuscripts, the three paper dissertation will need to include one or more preliminary chapters expanding on relevant theory, substantive research and methods, and a final discussion chapter.

Timing:

The student and the supervisory committee members together determine the thesis format by the time of proposal defense. However, they may switch from one format to the other at any time provided that the dissertation committee approves the change.

Anticipated potential manuscripts should be identified and described in the approved thesis proposal, subject to revision as data are collected and analysed. A provisional outline of the chapters and manuscript content should be agreed upon shortly after the proposal approval and modified/updated if changed during the process of completing the thesis

Rigour:

The three paper option is based on the same fundamental principles of student independent work and scholarly rigor as the traditional dissertation. The student's committee has the major responsibility for maintaining the rigor of the dissertation and for negotiating issues as they arise. The committee is to determine the content and quality of each of the papers and the dissertation as a whole.

Important considerations:

While the three paper dissertation option allows students to learn how to prepare and get a head start on publishing their thesis results, there are possible challenges a student and their committee members should be aware of and be prepared to deal with. These include:

- A collection of manuscripts that lack a coherent theme;
- Inadequate or missing information related to the substantive literature, theory, methods, and/or results;
- Where manuscripts are co-authored, it may be difficult to determine the student's role/contribution, unless clearly stated; and
- Greater time and effort on the part of the student and committee members to produce manuscripts deemed to be of publishable quality for submission to peer-reviewed journals.

The following guidelines are suggested to help prevent problems arising from these challenges:

- The need for three papers (as opposed to just two) should be clear and approved by the dissertation committee, and not merely represent minor variations of a work that would be more appropriately reported in just one or two papers.
- The student must be first author on all manuscripts. Authorship of the manuscripts should be discussed and agreed to at the time of the proposal approval/defense stage and modified if necessary during the thesis completion process. For information on the determination of authorship, please consult Intellectual Property Guidelines for Graduate Students and Supervisor at the University of Toronto.
- Where the thesis contains manuscripts which have been authored jointly, the candidate is required to specify the contributions of all authors. The nature and extent of the candidate's input must be precisely expressed for each manuscript. The nature and extent of the intellectual input by others must be explained clearly and acknowledged in a Statement of Contribution by Others. The statement shall appear at the end of each manuscript. Please consult the International Committee of Medical Journal Editors' guidelines, Defining the Role of Authors and Contributors.

Overall Format Guidelines

1. The three papers should form a cohesive body of work that supports a theme or themes that are expressed clearly in the introduction chapter of the dissertation. The dissertation should include an abstract that synthesizes the three papers, as well as a conclusion chapter.
2. The literature review for each paper is distinct and highlights a unique aspect within a topic area. That said, a certain amount of overlap is acceptable. For example, portions of the literature review may need to be cited in the various papers because it delineates the entire historical background of the study's focal topic. Redundancy can be carefully reduced by citing one's own work. However, self-plagiarism – reusing one's own previously written work or data in a 'new' written product without letting the reader know that this material has appeared elsewhere – is prohibited.
3. The introduction chapter should weave the three papers together and briefly describe their combined contribution to the field. Components of the introduction chapter will normally include:
 - a. A definition or statement of the problem
 - b. The importance of the problem
 - c. The theoretical foundation(s) supporting the problem/issue.
 - d. An overview of the important literature (overview, as each paper will have its own unique literature review).
 - e. The research questions in each paper.
 - f. The methodology to be used to answer each question in each paper.
4. At least two of the three papers should be based on data that are analyzed by the student. If the third paper is conceptual in nature, or based on a synthesis of the literature, it must be connected to the theme or themes of the dissertation without overlapping heavily with the contents of either of the other two papers. Whether the extent of any overlap is excessive will be determined by the student's dissertation committee.
5. The conclusion chapter should present/discuss research imperatives, or knowledge gaps, not visible when each paper is considered individually, describe in detail the three papers' combined contribution to the field, and should articulate an agenda for future research on the issues addressed in the dissertation. The student also should present and discuss linkages (i.e., similarities and differences) among the three papers, striving as much as possible to present the document as representative of a coherent body of work. The conclusion chapter will normally include:
 - a. Brief summary of the dissertation's major findings
 - b. Limitations
 - c. Discussion
 - d. Recommendations.
6. All three papers must represent work undertaken while the student is enrolled in the PhD program.
7. As with any other dissertation, students must submit their thesis in accordance with the SGS guidelines. If an article is published prior to the dissertation defense, the student will be responsible for securing necessary permissions to use the article as part of their dissertation from the copyright holder and other authors.