Research Topic and Supervisor Selection

(A Guide for Master Students)

Selection of topic/area and the research supervisor for Master research project are the two very important steps towards successful completion of the project. Normally, these two tasks are completed simultaneously in coordination with the student's academic advisor (who is normally the Program Director). In case a student is interested in a particular research area, the academic advisor guides the student in selection of the appropriate research supervisor who has experience in that particular field. On the other hand some students may be interested in working with particular research supervisors in areas of the supervisor's expertise. In such case, the academic advisor would guide the student about suitability of the research project for him/her and coordinate between the student and prospective supervisor. The academic advisor will also be able to advise the student whether the university can support the project, i.e. whether it has the equipment, facilities and staff expertise to do the study. Some broad guidelines are provided here for graduate students that can be utilized in the selection of research topic and the supervisor.

Selection of Research Topic

1. Select Broad Areas:

Think about what interests you particularly in your specialty keeping in mind the following factors.

- What areas you were particularly interested during your undergraduate studies?
- What are the current 'hot' areas in your field i.e. what areas are in most discussion either in the research papers or in the dental journals?
- Has the area of your interest been investigated before or currently under investigation?
- Are there any issues in your field which are particularly important to our country?
- Are there any research groups or Chairs in your Department or College that you are interested in working with?

Write a list of the topics that come into your mind keeping the above mentioned interests in view. Then, eliminate ideas that are not feasible in terms of availability of equipment or expertise.

2. Select interesting topics within those Areas:

Narrow down the list you have prepared to a smaller list. Then rank the list in order of interest for you. You should be able to make a list of two or three top topics of interest in coordination with your Program Director.

3. Research questions:

An important aspect of any research project is that it must investigate a question. So, think of some important questions that might be appropriate in relation to each of the two or three topics that you have listed with you.

4. Select a question and determine its viability

From the questions list that you have developed, identify two or three that are particularly interesting for you, and then choose one that interests you the most. Check with your academic advisor and other seniors whether it is a reasonable/ sensible question. Similarly, check whether it is a viable topic i.e. is it a question that needs answering and if it can be answered in a Master project.

5. Making final decision

There may be several possible projects you will consider for viability before finalizing a suitable topic. Make sure that this topic really interests you, as you will be living with the topic for a long time.

6. Additional tips

While finalizing a topic, there are a number of important issues to think about. Your academic advisor will also emphasize these issues.

- Do not choose a project that is too large in terms of data or time required. Most graduate students choose research projects that are too ambitious, involving numerous variables and large amounts of data collection. Your project must be focused on a very specific topic.
- Make sure that you already have some knowledge about the topic you are selecting.

- Try to finalize your topic selection by the start of the first semester of your 2nd academic year. Use your graduate courses to pursue a possible topic.
- It is strongly recommended that Master thesis subject should be innovative and original. However, be modest in your research objectives. For a Master thesis you do have to make a contribution to knowledge, but this is likely to be a small advance in understanding.

Selection of Research Supervisor

Finding a right research supervisor is critical to a successful research experience. The graduate students go through this process in coordination with their program director/academic advisor. There are two major factors to consider while choosing a research supervisor. These factors vary in importance depending on your own personality and your level of training.

***** Type of your Research Topic

The supervisor should be highly competent in the field of research you have selected, and must have a substantial background in the essential methodology for the proposed project. Graduate students also consider supervisor's research and publication record.

* The Personality and Supervision Style of the Supervisor

You must try to select a research supervisor/group with whom you expect to feel comfortable.

1. Support or Co-Supervisor

The student can request a co-supervisor under the following situations:

- The research involves two different disciplines.
- The magnitude of research itself demands a co-supervisor.
- Some institutions do not permit utilizing their facilities unless a co-supervisor is appointed from these institutions.
- Research involving international collaborations.
- Any other situation where JGPC deems appropriate to appoint a cosupervisor.
- It is strongly recommended that the co-supervisor be selected during the thesis proposal writing and should be included in the submitted proposal.

• The co-supervisor needs to contribute actively to the research project in coordination with the student and the main supervisor.

2. Research Supervisor

The best research supervisors also coach, counsel and support the student. They are experienced scientists who not only guide you in research, but also try to develop independent thinking. They help you define your research goals, and then support you in achieving them. They share knowledge, provide encouragement, and inspire you.

3. Making Contact with Prospective Supervisor

You should obtain information about the scientific interest and experience of your prospective supervisor through Internet and other sources. Once you have identified a potential supervisor, you may contact him/her through your program director. You may then request a meeting with him/her detailing your research interests. Be prepared to discuss your background, scientific and personal interests, and your goals. Also, be ready to talk about any specific skills or knowledge (such as computer skills or biostatistics knowledge) that makes you a good candidate. During the meeting with the prospective supervisor, try to learn about the supervisor and his/her research activities and, determine if the supervisor is suitable for you, both scientifically and personality-wise.

4. Expected Role of the Research Supervisor

- Listens to you and to your ideas and help you define your research question at the outset and then in developing a thesis proposal.
- Provide guidance in communications with College, University and various organizations/agencies outside the University if and when required.
- Provide assistance in appropriate training (if required) for the project and obtaining all ethical approvals.
- Guide in seeking research funding, and procurement of research instruments/equipments.
- Meet with you regularly, one-on-one, to discuss your progress.
- Provide constructive and timely feedback on your scientific work.
- Support your growth through encouraging training opportunities and attending scientific conferences.

- Help in overcoming various hurdles that you may face during the research project.
- Guide you in data analyses, and thesis write-up in addition to the preparation of thesis presentation.
- Prepare you for thesis presentation and defense.

5. The Students' Responsibilities

Take advantage of this opportunity to learn as much as possible. Even the best research advisor-graduate student relationship requires effort. In order to get the most out of your advisor, you must fulfill your responsibilities. Some useful tips are:

- Always behave professionally and courteously.
- Take the initiative to schedule meetings.
- At each meeting, arrive on time and prepared for discussion, with relevant data or articles in hand.
- You must understand that even the best research supervisors can meet only some of your needs. You may seek additional advice from others with consent of your supervisor

In case of any serious conflict, first contact your program director, who will raise the matter with the supervisor, and later with the Department Chairman and Vice-Deanship of Graduate Studies if needed. Refrain from public talk about these matters.

PS: Please read the booklet titled "Unified Law Organizing the Graduate Studies in Saudi Universities; and The Organizational and Executive Rules and Procedures for Graduate Studies at King Saud University" for eligibility requirements to be appointed as Master Thesis Research Supervisor. In addition, the above text is by no means an exhaustive count of various aspects of the areas covered. The graduate students are encouraged to read more about it. Some references are listed below.

References:

- Dissertation and Thesis Topics. How to Choose Successful Research for Your PhD or Master's Degree. http:// Naomi-rockler-gladen.suite101.com/dissertationand-thesis-topics-a17177
- -10 Tips for Choosing a Suitable Graduate Thesis Topic or Idea. http:// www.tadafinallyfinished.com/thesis-topics.html