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Constructing a Research Model

By Dr Elspeth McFadzean

Every chapter within a dissertation must have a value and a purpose otherwise it becomes a brain dump. The aim of a literature review is to develop a structure and focus for the research project. The structure usually comes in the form of a model or framework and the focus is constructed by presenting research questions, propositions or hypotheses.
In order to develop a research model, the author needs to critically evaluate the appropriate literature. The literature should help the researcher to:

- Define relevant terms
- Provide background information about the topic including its value and importance
- Develop a focus for the project.

In order to achieve the latter, the researcher often - although not always - develops a model, which acts as a “map” or guide for the project. Research modules are beneficial because:

- They can provide an overview of the research
- They can stipulate the boundaries of the research
- They can present the phenomena or variables involved in the research
- They can illustrate how the phenomena or variables relate to one another

A research model is developed from a critical evaluation of the literature. In other words, the researcher needs to examine the strengths and weaknesses of the theory and/or synthesise the theory in such a way as to develop a cogent model on the research topic.

Research models should be relatively simple and uncomplicated. Their purpose is to act as a guide for the research.

To illustrate the development of a research model, the following topic will be used:

Managing Culturally Diverse Problem Solving Teams
Developing a Research Model on Managing Culturally Diverse Problem Solving Teams

The first step is to define the terms of the research. In this case, the following terms would need to be defined:

- Problem solving teams
- Cultural diversity

A literature review does not require an in-depth analysis of the definition of terms. Indeed, the author can present an appropriate definition by stating that for the purposes of this research, problem solving teams can be defined as... It should always be referenced, though, whichever definition is chosen. Moreover, the researcher should explain why he or she has chosen to define the term in this way.

In their paper on trust, Mayer, Davis and Schoorman (1995, p. 712) only presented half a page on their definition of this term. Moreover, the definition that they used for the paper is specific, simple and jargon free.

A literature review should also provide some background information on the topic. This normally includes a general introduction to the subject together with reasons why it is important to investigate it. Thus, for a topic such as managing culturally diverse problem solving teams, background information may include the following:

- Problem solving teams - the reasons why they are necessary in organisations
- Cultural Diversity - the benefits of cultural diversity in teams and the potential problems that may occur from these types of heterogeneous groups if they are not managed correctly

Mayer, Davis and Schoorman (1995, pp. 709-711) provide two and a half pages of background information including their introduction and a section on the need for trust.
The next step is to examine the literature for the research’s primary topic. In the example, the primary topic is on problem solving teams and, within this area, the study will explore cultural diversity:

Exploring Problem Solving Teams

In this section of the literature review, the researcher should examine some of the theoretical models on problem solving teams and from this critical evaluation, he or she will develop the first stage of his or her research model.

For example, the researcher might analyse the following theoretical models:

- Gladstein (1984)
- Pinsonneault and Kraemer (1990)
- Briggs and Nunamaker (1996)
- McFadzean (2002)
Exploring Gladstein’s Model:


Answer the questions below pertaining to this model and insert the model’s strengths and weaknesses into the table:

- Was the methodology and research design undertaken by the theorist appropriate?
- Does the theory include all the relevant variables?
- Are there any gaps in the theory?
- Are there any variables that have been included in the theory but should not be?
- Can the theory be developed further by amalgamating the appropriate parts of more than one model?
- How can the theory be changed in the context of this research project?

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Exploring Pinsonneault & Kraemer’s Model:


Answer the questions below pertaining to this model and insert the model’s strengths and weaknesses into the table:

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Exploring McFadzean’s Model:


Answer the questions below pertaining to this model and insert the model’s strengths and weaknesses into the table:

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Exploring Diverse Problem Solving Teams:

There may well be variables in these models that will help the researcher specifically explore the topic of diversity.

For example:

- Gladstein (1984) presents variables on open communication, supportiveness, training and adequate skills.
- Pinsonneault & Kraemer (1990) provide more detail on communication and interpersonal characteristics such as clarification and cooperation.
- Briggs and Nunamaker (1996) suggest that goal congruence is a vital element for effective problem solving groups.
- McFadzean (2002) recommends the development of process congruence, the stipulation of roles and responsibilities and the development of trust.

All of these variables will help in the management of diverse problem solving teams.

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These variables together with other information from the literature could be used to construct a research model. For example:
Mayer, Davis and Schoorman (1995, pp. 714-730) develop their research model by critically evaluating other theories on trust. They then add the appropriate variables together in order to construct their framework.

Using the model, the researcher can then develop (a) the structure of his or her chapter and (b) his or her research questions.

**Developing a Structure for the Literature Review Chapter**

The researcher can use his or her research model to develop or adjust the chapter’s structure:
Each section and sub-section of the chapter is a brick which will help to build the thesis into a coherent whole.

The structure of a chapter or thesis will act as a "map" and help maintain focus.

The structure illustrates the route that he or should follow.
References


