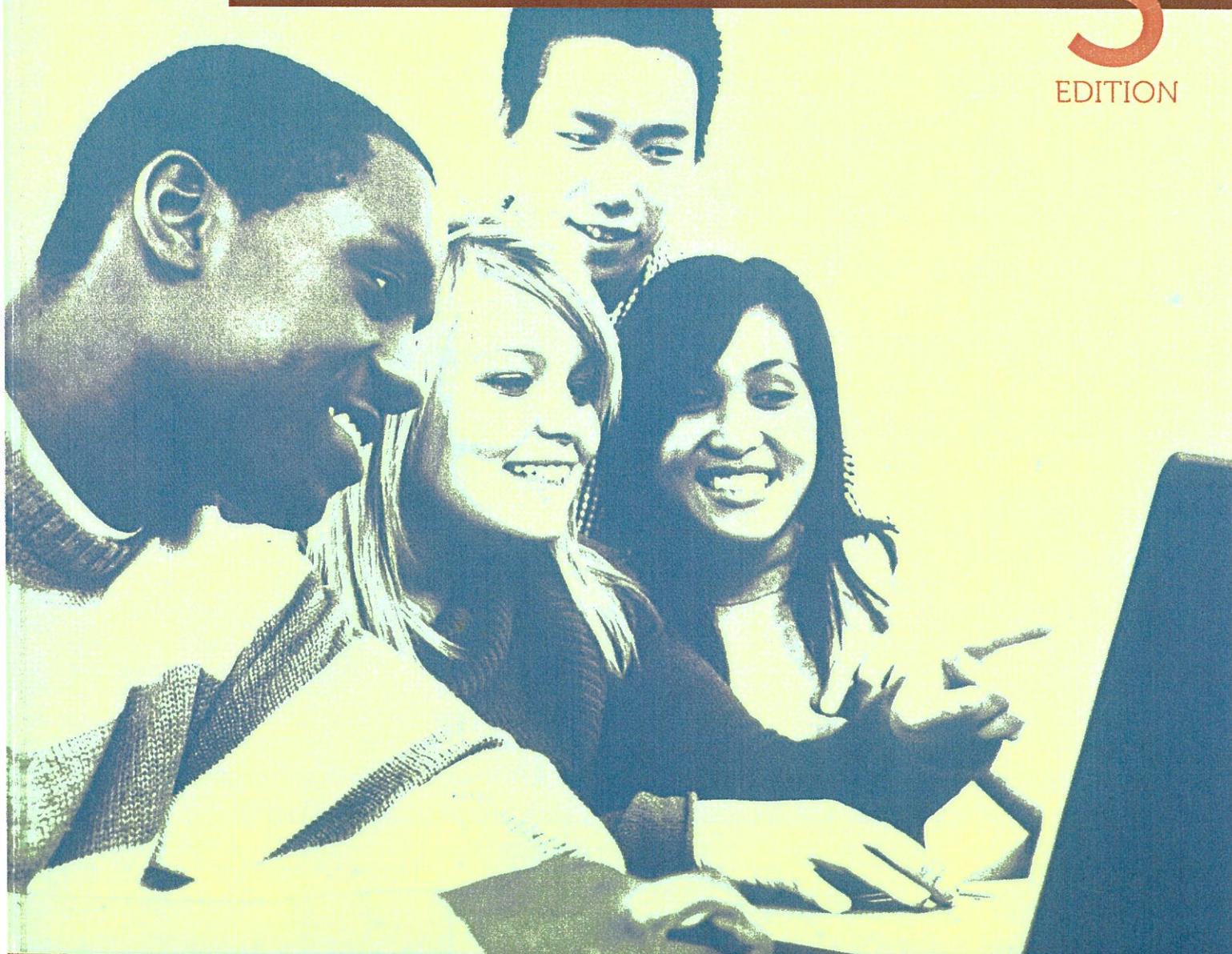


RESEARCH AND EVALUATION in Education and Psychology

Integrating Diversity With Quantitative,
Qualitative, and Mixed Methods

3
EDITION



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Donna M. Mertens



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For information:



SAGE Publications, Inc.
2455 Teller Road
Thousand Oaks, California 91320
E-mail: order@sagepub.com

SAGE Publications India Pvt. Ltd.
B 1/I 1 Mohan Cooperative
Industrial Area
Mathura Road, New Delhi 110 044
India

SAGE Publications Ltd.
1 Oliver's Yard
55 City Road
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United Kingdom

SAGE Publications Asia-Pacific
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Appendix

Writing the Research Proposal

Getting the Research Idea

Many students reading this document will already have some idea of what they want to study for their research. However, several sources of research ideas (for students who are still searching for the right topic) include your personal experience, reading in the professional literature, discussions with professors or students, and current issues in your field.

Research Concept Paper

Before proceeding with a full proposal, you should start with a research concept paper that is used for discussion purposes with the professor. This provides a basis for further development of the proposal itself. The purpose is to describe the research idea, present a brief commentary on the literature, and propose an appropriate methodology to conduct the inquiry.

Formal Research Proposal

The formal research proposal is begun after the professor approves the research concept or topic. Typically, the formal research proposal is written in the future tense and includes the specific information that will form the basis of the first three chapters of your dissertation.

Educational and psychological researchers are engaged in a paradigm debate that influences decisions about approaches to research. A paradigm is a worldview that includes certain philosophical assumptions about the nature of ethics, reality, knowledge, and systematic inquiry (i.e., axiology, ontology, epistemology, and methodology). The four major paradigms that are currently being discussed in the research community include postpositivism, constructivism, transformative, and pragmatic. The assumptions associated with these paradigms are discussed in Chapter 1. As is made clear throughout this text,

a researcher's paradigmatic stance has implications for choices of method. For example, postpositivism typically employs a preordinate, quantitative design, which means that the researcher establishes the research questions prior to data collection (research questions are "preordained").

The constructivist paradigm is typically associated with qualitative research designs that are described as contextual, inclusive, involved, and emergent. In the constructivist paradigm, an emergent, qualitative design means that the research questions are allowed to emerge from the data as the study progresses.

The transformative paradigm represents a third worldview that explicitly addresses the issues of oppression, power, and politics in research. Feminists, ethnic minorities, and persons with disabilities are among those who have written about the philosophical assumptions and methodological implications of this paradigm. Methodologically, this paradigm leads to decisions about method based on an understanding of cultural norms and power issues. Mixed methods designs are often used by researchers whose belief systems align with this paradigm.

The pragmatic paradigm serves as the philosophical basis for mixed methods designs that place primary focus on allowing the nature of the research questions to drive decisions about methods. Researchers who hold that some research questions are better answered by quantitative, qualitative, or both types of data tend to align themselves with the pragmatic paradigm.

It is beyond the scope of these guidelines to explore the underlying axioms of each paradigm; however, researchers should be familiar with the paradigm debate, read and reflect on this topic, and establish their own worldview as it affects their research activities.

The researcher's worldview influences the nature of the research questions and proposed methodology. These three elements (i.e., worldview, research questions, and proposed methodology) place you in one of the major research paradigms discussed in the professional literature concerning the researcher's philosophical orientation. Currently, the postpositivist paradigm is most closely associated with quantitative methods and the constructivist paradigm is associated with qualitative methods. In the transformative paradigm, scholars generally include qualitative methods; often, they also include the use of quantitative methods. Pragmatic researchers commonly used mixed methods designs. You should not confuse paradigm with method. You may choose to use a design that mixes both quantitative and qualitative data collection; however, the study will reflect one philosophical orientation by the philosophical assumptions that guide the research.

You should place yourself within one of the major paradigms for your research based on the correspondence with your worldview and the assumptions associated with each paradigm. The suggestions that follow describe the three chapters that make up the proposal (i.e., problem statement, literature review, and methodology).

Proposal Considerations

Chapter 1: Problem Statement

- A. Area of Study. This provides a general introduction to the area of study. It briefly outlines the problem to be investigated, the purpose of the study, and significance of the problem and the justification for investigating it. If you are proposing to use qualitative methods, you should recognize the evolving nature of the problem statement and acknowledge that this is just a beginning point for the study.

- method. For example, which means that the research questions
- research designs and the constructivist questions are allowed
- explicitly addresses ethnic minorities, the philosophical methodology, this of cultural norms and whose belief
- mixed methods questions to drive questions are better themselves with
- underlying axioms of paradigm debate, read reflects their research
- ch questions and ch questions, and signs discussed in citation. Currently, methods and the re transformative o include the use methods designs. use a design that ly will reflect one re research. or your research s associated with that make up the
- f study. It briefly and significance proposing to use of the problem r the study.
- B. *Definition of Terms*. Important terms and concepts should be defined. If you are proposing a qualitative study, initial definitions for important terms and concepts should be included, while recognizing that these will change as the study proceeds.
 - C. *Paradigm and Assumptions*. You should discuss your choice of the paradigm for the proposed study and explain the philosophical assumptions that make that paradigm choice appropriate.

Chapter 2: Literature Review

- A. *History*. Chapter 2 in the proposal provides a review of the historical background and the theory relevant to the major questions of the research.
- B. *Current Literature*. A review of current relevant literature should be included. To exhibit adequate mastery of the literature, both supporting and opposing views should be presented. Emphasis should be placed on critically analyzing the strengths and weaknesses of previous research.
- C. *Research Problem*. The literature review should build to the description of the research problem described in Chapter 3 of this text and the research questions described in Chapter 3 of the dissertation. If you are proposing qualitative research, acknowledge that the study may uncover other areas of literature that will need to be explored as the study progresses.

Chapter 3: Methodology

- A. *Research Questions and Hypothesis*. For quantitative research, you should present major and minor research questions that emanate from the literature review. These questions should be translated into researchable hypotheses when the design requires the use of such. For qualitative research, you should present the initial questions and objectives that will focus the study. A qualitative study usually focuses on a specific phenomenon (e.g., rules for classroom interaction) that emanates from the inadequacies of current theory and research. The precise nature of the questions to be researched evolves in the process of collecting and analyzing data. The initial questions may be vague, but stating the questions is important because they frame the procedures for collecting and analyzing data. The questions should follow from the theoretical and research background and should guide the design of the study. If mixed methods are proposed, then the researcher should clearly indicate the questions associated with quantitative, qualitative, or both types of data.
- B. *Research Design*. The research design should be described. Many available references discuss research design; therefore, that information will not be repeated here. For quantitative research, you may conduct research using a variety of approaches, such as experimental, survey, and comparative data analysis. Basic assumptions of the selected designs must be addressed. If you are using an experimental or quasi-experimental design, inclusion of a schematic drawing of the design is appropriate. For qualitative research, many different design options are available to a student who works in the emergent, qualitative tradition. You should describe the design that will be used, such as ethnography or phenomenology. This will communicate to the reader whether the emphasis

will be on cultural issues or individual, subjective experiences. You should present a rationale for the design of choice in terms of the research problems identified. For mixed methods, the design options are presented in Chapter 10 of this text. You should justify your choice of the mixed methods design and support your arguments with a rationale for the contribution of using a mixed methods design to the quality of the study.

- C. *Sample.* For quantitative research, you should describe the general characteristics of the population from which data will be collected. In addition, the sampling technique must be fully described, as well as the rationale for the method used for selecting the sample. Choice of sample size should be defended. For qualitative research, you should discuss the criteria for the selection of the participants and the setting of the study. Qualitative studies typically occur in natural settings and all individuals in the settings are considered as participants. You should describe the method that will be used to identify those participants who will serve as a subsample to provide in-depth information. For mixed methods design, explain clearly both the quantitative and qualitative sampling strategies and provide a justification for each.

All research involving human beings, no matter where those people are located (on or off campus), must be reviewed by the university's institutional review board (IRB). This is necessary prior to conducting any research. (Even research that will ultimately be ruled exempt from IRB approval must be reviewed by an IRB.) The current members of the board and procedures for submitting a research proposal are generally available from the institution's/university's Web site. Approval for the study should occur after the proposal is accepted by the committee and before beginning to collect any data.

- D. *Measures.* For quantitative research, you should describe the variables that will be measured and delineate how they will be operationalized. You must address the issues of reliability and validity in measurement. In many studies, pilot testing of the instrument and procedures is necessary. For qualitative research, the researcher is the data collection instrument in the collection of much of the data. Therefore, the researchers must describe themselves in terms of closeness to the topic, values, and the like. In mixed methods studies, follow the recommendations for both quantitative and qualitative instrumentation.
- E. *Data Collection Procedures.* For quantitative research, you should describe the procedures by which the data will be collected (e.g., survey, test, observation, etc.; administered by mail, researcher, collaborating teacher, etc.). For qualitative research, you should describe the design for the data collection, including a clear description of the procedures that will be used. The researcher's role should be described in terms of the degree of participation in which the researcher will engage. Supplemental methods of data collection, such as videotapes, audiotapes, diary notes, or journal entries should be described. The time period for data collection should be identified. You should acknowledge that data collection and analysis overlap in qualitative studies and should reflect on possible changes in the type of data or the focus, time, or strategies used in the study. You should address the qualitative parallels to reliability and validity in measurement as they are explicated in the literature, including credibility, transferability, dependability, and confirmability, and describe the methodological strategies that will be used to ensure that high-quality data are collected. Mixed methods studies should address

both the quantitative and qualitative data collection strategies and support their choice based on a rationale for using mixed methods in the study.

- F. *Pilot Testing*. In many studies, pilot testing of the instrument and procedures is necessary. This is especially important in qualitative studies, because pilot studies are often necessary in qualitative studies to help provide a framework and research questions. You should describe the pilot study procedures and results as well as insights from the pilot study that will affect the research itself.
- G. *Data Analysis Procedures*. For quantitative research, the data analysis section should describe how you plan to handle the data in terms of processing of data, data coding and entry, and accuracy checks. In addition, you should provide information on which statistical procedures will be used for each research question. For qualitative research, data analysis strategies should be described. If triangulation is planned, you should explain the multiple sources of data and the conditions under which corroboration of evidence will be sought. Mixed methods studies should explain how the two types of data will be integrated.
- H. *Limitations of the Study*. Anticipated limitations of the study should be explained. For example, limitations may arise because of the nature of the available sample or instruments. You should explore the limitations and any strategies that will be used to minimize their impact. Implications for conducting and generalizing the study should be discussed.
- I. *Timelines*. You should include a proposed timeline that clearly depicts the approximate time in which each research activity will be completed (e.g., instrument selected or developed, pilot test conducted, etc.).

Recommended Proposal Document Format

Sequencing Layout of Proposal

Title page
 Abstract
 Table of contents
 List of tables (if any)
 List of illustrations (if any)
 Chapter 1: Statement of the problem
 Chapter 2: Review of the literature
 Chapter 3: Methodology
 Appendixes
 References