
Ed695

Research in Educational Practice

Fall 2021
Wednesday 4-7 pm
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Office Hours: By appointment

Overview

Education 695 is designed to serve as a first introduction to the design and practice of educational research.

Goals

The course readings and lectures will examine fundamental issues of research design and practice from a variety of methodological perspectives — qualitative, experimental, and non-experimental multivariate methods. Upon completion of this course you will be able to:

- Appreciate the complexity of the issues that are faced by educational researchers, and understand how different methodological traditions approach these issues;
- Critically evaluate research literature and evaluate the evidence on which generalizations are made in the published literature; and,
- Use appropriate reasoning to synthesize a body of literature.

We will, by necessity, use some basic math along the way in order to better understand the statistical concepts we will be studying, but please note that our primary focus will be on developing a conceptual understanding of qualitative and quantitative research methods.

Since educational research is usually a group activity, we will emphasize group work during the course. You will be encouraged to collaborate during and outside of class periods on course projects described in detail below.

Readings

There are a few required texts for this class:

Machi, L.A. and McEvoy, B.T. (2016). The Literature Review: Six Steps to Success (3rd Ed.). Thousand Oaks, CA: Corwin, A Sage Company. ISBN 9781506336244

Salkind, N.J. (2019). Statistics for People Who (Think They) Hate Statistics (7th Ed.). Thousand Oaks, CA: Sage. ISBN 9781544381855

Stage, F.K., and Manning, K. (eds). (2016). Research in the College Context: Approaches and Methods (2nd Ed.). New York, NY: Brunner-Routledge. ISBN 9781138824782

Although the ISBN numbers are to paperback copies, please feel free to get either the paper or electronic version of these texts. A book I recommend (but did not order due to its availability) is the most current publication manual of the American Psychological Association. If you do not already have a copy, consider purchasing it as a general writing resource for all of your classes. Any assigned readings and materials not included in the basic texts will be available on reserve at the Undergraduate Library or posted on Canvas.

Course requirements

All assigned readings and lectures need to be completed before class on the assigned date. I want students to participate actively in class, including attending class and preparing materials in advance. Much of the value of the class comes from the contribution of the students. If you miss a session, most sessions will be recorded so you can catch up on the discussion you missed.

You will be asked to provide two critical reviews of published articles in your area of interest. The first of these will be based on research conducted with qualitative methods, while the second will be a review of a statistical piece of research. You will need to send an electronic copy of the article with your review.

The capstone course activity will be a literature review paper of 15-20 pages using research analysis skills learned in this course. The intent is that this assignment be done in groups of three or four students; we will discuss group formation during class as the time approaches. Each group will make a short video presentation on the group's review efforts at the end of the term.

In addition to completing a literature review as a group, each student will review a draft literature review written by another group and provide suggestions for improvement. Each group will make decisions on final paper revisions to address the suggestions of these reviews. These reviews will count toward the reviewer's grade for each project, but will not have any impact on the grade of the paper being reviewed.

All written assignments must be typed, edited for spelling and grammar, and formatted in APA style. We will make an exception for long quotes, which should be single-spaced. Please use double spacing, one-inch margins, and a 12-point font. Students should submit all assignments through Canvas unless otherwise indicated by the instructor.

The Sweetland Writing Center is an excellent resource if you confront any dilemmas when writing papers. Do take advantage of this center, but make contact early – this resource is popular.

Integrity

Academic honesty is essential to this class, both to conduct our conversations and study do and to have faith that research we will discuss and analyze was crafted with integrity. I encourage you to read your rights and responsibilities as a student. Information on these topics is at: <https://rackham.umich.edu/academic-policies/section8/>

DEI

I intend to present materials and activities that are respectful of our diverse world. I encourage you to provide suggestions on how we can incorporate new materials to improve the course for all students. The University of Michigan has a strong commitment to diversity, equity, and inclusion; you can gain some of the background at: <http://www.diversity.umich.edu>

Accommodation

The University of Michigan recognizes disability as integral to diversity and is committed to creating inclusive and equitable educational environments for students with disabilities. Students who experience a disability-related barrier should contact Services for Students with Disabilities <https://ssd.umich.edu/>; 734-763-3000; ssdoffice@umich.edu). For students connected with SSD, accommodation requests can be made in Accommodate. If you have questions or concerns please contact your SSD Coordinator or visit SSD's Current Student webpage. SSD considers aspects of course design, course learning objects and individual academic and course barriers experienced by the student. Further conversation with SSD, instructors, and the student may be warranted to ensure an accessible course experience.

Assessment and Evaluation

For the purpose of assigning grades, student performance will be evaluated as follows:

1. Class participation — 1/6 of course grade

Criteria for this include regular attendance in class, preparation to participate in the day's discussion, focused participation that goes beyond a regurgitation of the information, and respectful engagement with classmates during discussion.

2. Critiques of published research — 1/3 of course grade

You will be expected to provide a critical evaluation of an article published after December 2017 that is not otherwise assigned for this course. The article should be a research study, not a literature review or conceptual essay. The article should focus on college students and be from one of the following journals:

Research in Higher Education
Journal of Higher Education
Review of Higher Education
Journal of College Student Development
Journal of Student Affairs Research and Practice

As you critique this article, areas to emphasize include:

Literature Review: What are the main theoretical frameworks used? Are they compatible with the research question? Would other theoretical frameworks be more useful?

Research methods: What is the research question? What subquestions exist? What research method was used to address these questions?

Results: Highlight the most compelling findings in the results. You can use graphical depictions (tables, figures, charts) to make this easier to describe. What interested you, and why?

Discussion: What are the important points discussed? What implications for further research or for practice do you see here? Does this address the research question and the theoretical framework described earlier in the article? Is this a credible part of the ongoing research-based conversation about this topic?

Students will submit two critiques of published research: One critique of qualitative research, and one critique of quantitative research. Each critique will be 5-7 pages long.

3. Literature review paper — 1/3 of course grade

Groups will create a literature review, which classmates will peer review in full draft format before its final submission. This

Page limits?

Where page limits are given, those are both minimum page expectations and maximum page limits. The final grade for a project will be reduced if the paper falls outside of this range.

Milestones

September 23 at 9 am

GROUP: Research issue and initial citation list for literature review

September 30 at 9 am

INDIVIDUAL: Critique of qualitative research paper

October 27 at 9 am

Complete draft of literature review, distributed to instructor and to peer reviewers

November 3 at 3 pm

Review of draft literature review, distributed to instructor and to authors

November 18 at 9 am

Critique of quantitative research paper
Class presentation videos submitted

December 2 at 9 am

Final literature review;
Class presentation discussions:
1 and 8 December.

paper will require analysis of research literature surrounding a particular higher education issue. The format of these projects will be that of conference presentations or short research articles that appear in scholarly journals. The format of the final written products should conform to the standards in the American Psychological Association publication manual. Two thirds of this grade will be given for the paper, and one third for the accompanying class presentation by the group. The literature review will be 15-20 pages long.

4. Review of literature review paper — 1/6 of course grade

Each student will review a paper written by another student and provide suggestions for improvement. These reviews will count toward the reviewer's grade, but will not have any impact on the grade of the person being reviewed. This review should be 2-3 pages.

Tentative Course Schedule

| <u>Date</u> | <u>Topics</u> | <u>Readings (Chapters)</u> |
|-------------|---|--|
| Sept. 1 | Course overview Fundamental research concepts Initial group exploration | Machi & McEvoy: Introduction and 1. |
| Sept. 8 | Introduction to literature reviews Introduction to qualitative research Group formation | Machi & McEvoy: 5, 6. Skim the rest for now. Stage & Manning: 1-2 |
| Sept. 17 | Applications of qualitative research | Stage & Manning: 3-5; 7-8 |
| Sept. 22 | Interpreting qualitative research | Stage & Manning: 6, 13 |
| Sept. 29 | Conceptual issues in quantitative research Central tendency and variability Introduction to distributions | Salkind: 1-4 |
| Oct. 6 | Reliability and validity Correlations, creating and testing hypotheses | Salkind: 5-8 |
| Oct. 13 | Statistical inference and estimation | Salkind: 9-12 |
| Oct. 20 | Analysis of Variance (ANOVA) | Salkind: 13-14 |
| Oct. 27 | Linear regression, factor analysis | Salkind: 15-16 |
| Nov. 3 | Chi Square, other topics | Salkind: 17-18 |
| Nov. 10 | Any outstanding topics | |
| Nov. 17 | Preparation for final presentations | |
| Nov. 24 | Thanksgiving Break – no class session | |
| Dec. 1 & 8 | Group presentation discussion | |