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Course Website: https://q.utoronto.ca/courses/123739

Course Description: This course provides an overview of various methods used in criminological and social-legal research, such as interviews, focus groups, surveys, and linear regression. The course does not assume that students have a strong background in either statistics or research methods. By the end of the course students should feel comfortable reading the methodology section of research published in the field, should understand the strengths and weaknesses of commonly employed methodologies, and should be able to identify methodological limitations in published work. For students who intend to carry out their own research using conventional social science methods, this course will introduce you to some of the basic issues, concepts, principles, and procedures important for thinking about how to go about your research. This course, however, will not teach you how to analyze data. For those interested in the analysis of quantitative or qualitative data, you should take the Centre’s or another department’s data analysis course(s).

Readings: The text for the course is Research Methods in Criminal Justice and Criminology, by Mark M. Lanier and Lisa T. Briggs. Students can purchase either the 1st or 2nd edition, although the 2nd edition is preferred. The 2nd edition of the text is available for purchase at University Bookstore. Either edition can be purchased online. This basic text assumes no background in research methods; those of you who have had a methods class before may find it covers much of what you already know. Other readings for the course are available either on the course website (indicated by *) or through the U of T library system’s electronic journal article search (indicated by #). If you don’t know how to locate journal articles through this system, see Andrea Shier (in our library) or me.

Course Format: Two types of readings are assigned for most weeks: 1) required readings, most of which come from the textbook, and 2) review articles; these are journal articles that have various methodological problems and that you can choose to write reviews of. For each week’s class, you are expected to have completed the required readings as well as the review article, even if you do not write a review of it, because we discuss these articles in class. (These class discussions are a key part of the teaching/learning process, so it really is important to be familiar with the review article, even if you haven’t written a review of it.). You should come to class prepared to ask questions and engage in discussion of both the required reading and the review article.
**Evaluation:** There are two components of your final mark in the course:

1) **60%** of your final mark will be based on written reviews of **four** of the review articles on the reading list. Each review will be worth **15%** of your final mark and should not exceed 1300 words (indicate word count on your review). Reviews must be handed in by 2:00pm (the start of class) on the day of the class in which the article is assigned. **No late reviews will be accepted.** You may do more than four reviews if you wish, in which case your top four marks will count. I encourage you not to wait until the last few weeks of the course to do your reviews. Writing some of them early in the course will give you feedback about how to improve your work.

2) The remaining **40%** of your final mark will be based on a 3-hour exam, which will probably be given on Dec. 9th at 2pm. You will be asked to write reviews (similar to the reviews you will have written during the course) of two hypothetical studies and perhaps to answer some short-answer questions. An example of an exam from a previous year’s course will be posted on the course website and discussed during the review class.

**Academic Dishonesty**
Plagiarism and other academic offenses will not be tolerated at the University of Toronto. Academic discipline ranges from a mark of zero on an exam or assignment to dismissal from the university. For important information see UofT’s Academic Integrity website at http://academicintegrity.utoronto.ca. See also these academic integrity websites:
- School of Graduate Studies at http://www.sgs.utoronto.ca/facultyandstaff/Pages/Academic-Integrity.aspx
- Faculty of Arts and Science at http://www.artsci.utoronto.ca/osai

**Schedule**

**Week 1:** **Introduction to the Course**  
**Readings:**  
Lanier & Briggs, Chapters 1 – 3.

**September 11th**

**Week 2:** **Validity, Reliability, and Ethics**  
**Readings**  
Lanier & Briggs, Chapter 4

Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC), and Social Sciences and Humanities Research Council of Canada (SSHRC). 2018 *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, pp. 5 – 11.


***come prepared to talk about the methodological weaknesses of the article***

Week 3: Measurement September 25th
Reading:
* Quantitative and Qualitative Measurement

For Review:

Week 4: Sampling October 2nd
Readings
Lanier & Briggs, Chapter 8

For Review:

Week 5: Qualitative Research October 9th
Readings


For Review:

Week 6: Surveys and questionnaires October 16th
Readings
Lanier & Briggs, pp. 177-186 (1st edition); pp. 189-199 (2nd ed.)


For Review:

Week 7: Experimental and research October 23rd
Readings
Lanier & Briggs, pp. 154-173 (1st edition); pp. 166-184 (2nd ed.)

For Review:

Week 8: Quasi-Experiments October 30th
Readings:


For Review:

Week 9: Analyzing Data and Interpreting Results (part 1) November 13th
Readings
Lanier & Briggs, Chapter 9

* Example in the R programming language: A hypothetical analysis of police data

For Review:

Week 10: Applied Research and Evaluation November 27th
Readings:

For Review:

Week 11: Crime Statistics November 27th
Readings:
For Review:

**Week 12: Review Class**  
December 4th

**Final EXAM: December 9th 2-4pm in CG-160**
The first thing to keep in mind in writing a review is that no research is perfect and all research must make compromises. The question then becomes: how do the inevitable compromises that social science researchers make affect conclusions that can be drawn from their research?

You should begin your review not by summarizing the article, but by stating what the article is about. So, begin by briefly (i.e. 2-3 sentences) noting:

1) What is the purpose of the research?
2) What questions are the researchers trying to answer; what hypotheses are they examining?

The rest of your review should focus on the article’s limitations, specifically on problems with the research design, such as measurement, sampling, data analysis, presentation of the findings, interpretations of the findings and conclusions. But don’t just identify a problem. Discuss how it might have affected the study’s findings and the authors’ interpretations and conclusions. Focus on problems that could have been avoided had the researchers been more thoughtful, not on problems that all research inevitably faces. If there are ways in which the problems could feasibly have been avoided, you could (briefly) note these. Thinking about alternative ways the study could have been done to more adequately answer the questions it poses may be a useful way of identifying the article’s limitations.

Focus the main part of your review on ‘fatal flaws’ – i.e. problems with measures, sampling, data, and the authors’ interpretations and conclusions that raise major concerns about the article. You can then discuss other, more minor problems with the study. The ability to distinguish between major and minor flaws is important for your marks on the assignments.

The following questions may help you identify limitations with an article. You won’t find all of the problems raised by these questions in a single article, so don’t worry if you don’t discuss more than three or four main problems in each review.

- How do the researchers measure (operationalize) their concepts? Focus on the key independent variable(s) and the dependent variable(s). Do the ways these variables are measured make sense given the concepts they are intended to represent?
- Who or what are data being collected from/on in the study? Is it (for example) individuals, organizations, cities? These are the units of analysis for the study. Are these individuals (organizations, cities) representative of the population of individuals (organizations, countries) that the researcher wants to make claims about and generalize her/his findings to?
- How have these individuals (organizations, cities) been selected (sampled)? Does the sampling procedure limit or potentially bias the conclusions that can be drawn from the study?
- Some studies compare individuals (organizations, cities) with other individuals (organizations, cities) to determine if they are different on the dependent variable. Are the comparison groups sufficiently similar to begin with to ensure that pre-existing differences aren’t responsible for any differences on the dependent variable?
- Researchers should present descriptive statistics (i.e. such as means, counts, ranges) on their sample and measures, and these usually appear in tables early in the article. Do these statistics make sense? Do they suggest there may be problems with the measures or the sample? Are there lots of missing data?
- You are not expected to critique the statistical methods used in the study, and the review articles have not been chosen because they have used incorrect statistical techniques (although they
might have). Nevertheless, you should look at any tables reporting results and try to draw some basic information from them. In particular, tables will often list an $N$, such as $N = 245$. This tells you how many people (or things) the statistical analysis was done for. If this $N$ is smaller than the number of people (or things) in the original sample, the researcher should give a reason for this and explain why some people (or things) are not in the analysis. You should consider whether this attrition from the sample might have affected the results. Might those that have been excluded from the analysis or dropped out of the study be different in some important respect from those that remain in the analysis/study?

- Sometimes researchers will acknowledge a problem with their study, but will go on to draw conclusions that ignore how the problem might affect those conclusions. Acknowledging problems is good; but it doesn’t mean a researcher can draw conclusions as if those problems didn’t exist.
- Are there alternative explanations for the findings that the authors do not consider? Are there other factors that might account for the findings that are not adequately addressed in the design or analysis? Think, in particular, about threats to internal validity (see attached sheet).

Again, keep in mind that all research has limitations. For example, any one study cannot analyze data from all people, times and places. (This means that the generalizability or external validity of a study’s findings is always somewhat limited.)

All of these questions get at whether the basic design of the study is appropriate for drawing inferences about the phenomenon of interest. Again, some methodological problems are more important and consequential than others. For example, if key concepts and characteristics are measured poorly, then any analysis based on these measures may be meaningless. However, some concepts and characteristics in a study are not as important as others; so if they are measured poorly, it probably matters less. Therefore, you should focus your critique on the measurement of key variables. Similarly, if the sample is chosen poorly or if many people drop out of the sample, then the analysis may not provide useful information. So the first things to consider in your critique are measurement and sampling. This means reading the sections on measurement and sampling carefully, but also reading the discussion and conclusion to see if the author(s) make claims or draw conclusions that are not appropriate, given their measures and sample(s). If there are important problems with any of these, they should get priority in your critiques.

**Submission Instructions**

You should identify yourself on all reviews and on your final exam by student number, not by name. Please hand in your review (stapled and printed on one side – which leaves room to write comments) in a manila envelope with your student number printed on the outside of the envelope. Once marked, your review will be returned to your mailbox in the same envelope.

I encourage you to form study groups and discuss the articles and the limitations of them with each other. You’ll learn a lot by doing so. But be sure to write your own critique; see p. 2 of the syllabus for information on what constitutes plagiarism and how it is dealt with at the University of Toronto.
Major Threats to Internal Validity

Each of these threats is discussed in more detail in the textbook. This synopsis is meant to help you with your reviews.

• **Selection**: the outcome or observed effect (or the value of the dependent variable) reflects pre-existing differences between experimental and control (or comparison) groups, rather than the effect of the intervention (or the independent variable).

• **History**: the outcome or observed effect is caused by some event occurring at the same time as the intervention, and not (solely) by the intervention.

• **Maturation**: the outcome or observed effect reflects a continuation of pre-existing trends (for example, normal human development).

• **Instrumentation**: the outcome or observed effect is caused by a change in the method of measuring the outcome, rather than by the intervention.

• **Testing**: the pre-test measurement (rather than the intervention) causes a change in the post-test measure.

• **Regression to the mean**: where an intervention is implemented on units with unusually high scores (e.g. people or areas with high crime rates), natural fluctuation will cause a decrease in these scores on the post-test, which may be mistakenly interpreted as an effect of the intervention. The opposite (i.e. an increase) happens when the interventions are applied to low-crime areas or people.

• **Differential attrition**: the outcome or observed effect is caused by differential loss of people (or things) from the experimental group compared to the control group; or by the loss of people (or things) from a sample who share characteristics that might be related to the outcome.

• **Questionable causal ordering**: it is not clear whether the intervention (or independent variable) preceded the outcome (or the dependent variable).