SOWO 940

Development of Social Intervention Models

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OFFICE HOURS: Call or email to schedule appointment

COURSE DESCRIPTION

This PhD-level course focuses on preparing advanced graduate students with the knowledge and skills needed to design and develop interventions that address social needs, problems, and conditions.

COURSE OBJECTIVES

Upon completion of the course, students are expected to be able to:

- Identify and assess the social-environmental factors involved in defining a specific social need, problem, or condition;
- Analyze a social need, problem, or condition relevant to a particular population and identify appropriate interventions;
- Assess the theoretical and empirical support for alternative interventions that address a selected need, problem, or condition with a particular population;
- Describe and apply a logical sequence of research activities that guides the design, implementation, and evaluation of social interventions;
- Select and apply appropriate research methodology in developing a social intervention;
- Demonstrate awareness of the effect on intervention outcomes of moderators such as age, class, culture, disability status, ethnicity, gender, language, race, religion, and sexual orientation;
- Generate hypotheses for guiding empirical inquiry for testing social interventions;
- Develop a NIH Exploratory/Developmental Research Grant (R21) proposal, including a treatment manual

REQUIRED TEXTS


Required journal articles and other readings listed in the Course Outline section are available at the Sakai course website. The principal texts are available for purchase at the Health Affairs Bookstore.

RECOMMENDED RESOURCES


**EXPANDED DESCRIPTION**

This course will use a seminar format. In our discussions, we will examine and critique the assigned readings, provide consultation to one another, and respond to presentations by seminar participants and guests. Students are expected to attend classes, to be prepared for class, and to contribute to discussions and exercises. If you find you will not be able to be in class for the full time period, you should notify the instructor in advance.

Students are expected to complete assigned and independent readings, contribute to the development of a positive learning environment in the seminar, and demonstrate learning through written assignments and seminar participation. Required readings are identified in the course schedule. Students should conduct substantial independent readings, and this reading should be reflected and cited in papers and assignments. Emphasis should be placed on peer-reviewed journals.

Content on populations-at-risk is central to this course. Historical events and current issues that have particular impact on racial and ethnic groups, women, and gay, lesbian, or transsexual persons should be addressed across course assignments and products. *In the design and development of a new intervention, explicitly addressing social, economic, and health disparities is required.* If, for example, you are interested in developing a novel intervention for the treatment or prevention of obesity, you should explain how your intervention will address disparities in the incidence and prevalence of obesity. This should involve a review of the intervention research literature on obesity (e.g., a discussion of the effect of relevant moderators). *Students are expected to have mastered the research and practice literatures related to social and health disparities in their problem areas.*

**TEACHING METHODS**

Teaching methods include lecture, discussion, and group activity. Students are expected to contribute during classroom. Questions on course topics and other issues in research and professional development are welcome.

**CLASS POLICIES**

**Attendance**

Students are expected to attend all class meetings, complete assigned and independent readings on time, and contribute to the development of a positive learning environment in the seminar. Students who miss three class meetings (excused and/or unexcused, and including cumulative partially missed classes) will be required to take an Incomplete in the course and to retake either the missed sessions or the entire course the following year before receiving a grade. Attendance and participation will be assessed weekly. Students who miss a class are responsible for obtaining all missed information and materials from classmates.

**Class Assignments**

Course discussions and activities will be responsive to student interests. It is hoped that students will share relevant knowledge and experience to enrich the learning of other seminar participants. In addition, contributions based on independent exploration of topics beyond the course content are welcome.

**Use of Cell Phones, Laptops, and Other Electronic Devices**

Please turn off all electronic devices that can disrupt the class learning environment.

**Bad Weather Policy**
In the case of snow, ice, or other threatening or unsafe conditions, students should follow UNC’s Adverse Weather announcements at [www.unc.edu](http://www.unc.edu) or Adverse Weather and Emergency Phone Line (919) 843-1234. If you have any questions or concerns, please contact UNC Public Safety at 919-962-3951 (M-F, 7:30-5:00) or after business hours at 919-962-8100.

**FORMAT FOR WRITTEN WORK**

Except as specified otherwise, all written work should comply with the guidelines of the *Publication Manual of the American Psychological Association, Sixth Edition*, the format required by many leading journals in social work and related fields. For help, see: [http://www.apastyle.org/apa-style-help.aspx](http://www.apastyle.org/apa-style-help.aspx)

Please give special attention to Chapters 3 and 4 (pp. 61-124) of the APA *Publication Manual*, which focus on the mechanics of writing with style. In addition, please attend to Chapters 6 and 7 (pp. 169-224), which focus on crediting sources, including use of digital object identifiers in the reference list. APA style writing is expected and will be considered in evaluating papers.

**Acceptable Submission Format and Methods**

Assignments should be submitted on time in hardcopy. Except as otherwise specified, use APA layout editing style (single-spacing with double-spacing between paragraphs).

**Late Assignments**

Late submissions will be penalized 5 points for a major assignment and .5 point for a mini-assignment. Students should notify the instructor of a late submission before the due date. Failure to notify the instructor will double point penalties.

**Code of Honor Affirmation**

All written products in the course must have a signed Honor Code statement. Independent work is expected. Papers without this affirmation will not be accepted. The statement should read as follows:

*I have neither given nor received any unauthorized assistance on this assignment.*

(Your Signature)

In addition to a pledge of no plagiarism, inclusion of this statement is interpreted by the instructor as a pledge that submissions are the original work of the student. Please be sure to see: [https://writingcenter.unc.edu/tips-and-tools/plagiarism/](https://writingcenter.unc.edu/tips-and-tools/plagiarism/) An originality detection program, such as iThenticate, may be used by the instructor to screen submitted assignments.

**COURSE ASSIGNMENTS**

1. **Draft of R21 Proposal.** Prepare, present, and submit a six-page NIH proposal for the design and development of an intervention. **Due March 7.**

2. **Seminar Leadership.** Each seminar participant will be expected to take a special leadership role for one session. This role will involve preparing and conducting a class session related to quasi-experimental or experimental design. Plans for the session will be developed in consultation with the instructor. Seminar leadership will include the following elements:
   - Selecting and presenting appropriate conceptual material from assigned, supplementary, and independent readings;
   - Preparing questions to focus discussion;
   - Involving the class in the application of concepts;
   - Facilitating discussion; and
   - Preparing a list of references and other materials.
3. **Draft of Treatment Manual.** Prepare and submit a draft of your treatment. It should be at least 25 pages in length, excluding the title page and the table of contents. **Due April 4.**

4. **Intervention Research Proposal.** Prepare, present, and submit a R21 NIH proposal to design and develop an intervention. For guidelines and tips, see: [http://grants.nih.gov/grants/funding/424/](http://grants.nih.gov/grants/funding/424/) Due on **April 25**, proposals may not exceed six pages, excluding Specific Aims. They should include:
   - **Specific Aims** – should include a statement of and justification for the intervention; state 2-3 aims and hypotheses (if any)
   - **Significance** – should explain why the proposed research is important at a national level; how the field will change; (as appropriate) use incidence and prevalence information to specify social and health disparities; link the *Significance* statement to *Healthy People 2020* (see [http://www.healthypeople.gov/](http://www.healthypeople.gov/)); conceptualize your study as a building block of a series of studies
   - **Innovation** – should describe novel methods; explain refinements over existing practices
   - **Approach** – should include a description of the intervention and a research plan; explain how you are going to do the study
     i. Description of the Intervention (based the extension or synthesis of existing models; append an intervention manual of at least 45 pages);
     ii. Description of Research Methods – a research plan for developing the intervention, including at least two phases of development and a description of the research design to be used in each phase; *[Tip. Descriptions of research designs usually include the plan for recruiting/sampling participants, method of group assignment, means for measuring outcomes and covariates (i.e., data collection methods, waves, and measures), methods for retaining participants, and a plan of analysis related to each Specific Aim. You should propose activities that have high practical value for your dissertation. Consider effect sizes, intracluster correlations, and measurement precision in estimating reasonable sample sizes. Consider also the issues of causal inference. Be sure to link your intervention model to the measurement model.]; and
     iii. Description of Implementation Issues, including potentially hazardous procedures and precautions to be taken.
     iv. Limitations, including strategies for minimizing the threats to validity associated with the research design
   - **Preliminary Studies** – a summary of pilot data that have been collected by the principal investigator (PI) or the proposed research team; emphasize the strength of the PI and others on the project
   - **Appendix: Treatment Manual** – append a treatment manual of at least 45 pages in length. It should be linked to your conceptual framework and it should target malleable mediators. Include step-by-step instructions for intervention agents. Give suggestions for making population-specific adaptations. Include artwork, graphics, and worksheets. Be careful not to inadvertently plagiarize artwork or exercises from other manuals or the Internet. NIH reviewers are widely read, knowledgeable, and savvy. They will spot plagiarism and you’ll be disqualified.

*Note. To guide your work, consider the tips in the NIDA Research Assistant tutorial available at [http://www.theresearchassistant.com/tutorial/4.asp](http://www.theresearchassistant.com/tutorial/4.asp), or you might seek background help at the NIH Grant Submission portal ([www.grants.gov](http://www.grants.gov)).

*Note. CDFA is Catalog of Domestic Federal Assistance; FOA is Funding Opportunity Announcement; FON is Funding Opportunity Number; and PA is Program Announcement.*

<table>
<thead>
<tr>
<th>Course Deliverables (i.e., graded assignments)</th>
<th>Due Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Draft of NIH proposal</td>
<td>March 7</td>
<td>2:00 p.m.</td>
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<tr>
<td>Draft of treatment manual</td>
<td>April 4</td>
<td>2:00 p.m.</td>
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<tr>
<td>R21 NIH proposal and treatment manual</td>
<td>April 25</td>
<td>2:00 p.m.</td>
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<tr>
<td>Oral presentations</td>
<td>See schedule</td>
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**GRADING SYSTEM**

The course uses the standard grading cutoffs.

- **High Pass** = 94-100
- **Pass** = 80-93
- **Low Pass** = 70-79
- **Fail** = 69 and below

The final grade is based on a possible 100-point score and will be estimated from evaluations of seminar participation and written assignments. Scoring rubrics for assignments are available on the course website. The point distribution is shown below:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Points</th>
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<tbody>
<tr>
<td>• Seminar Participation and Completion of Minor Assignments</td>
<td>20</td>
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<tr>
<td>- Class participation and preparedness (10 points)</td>
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<td>- Completion of mini-assignments (10 points)</td>
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<td>- Specifying the need or problem (2 points)</td>
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<td>- Identifying core concepts or constructs (2 points)</td>
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<td>- Identifying innovative intervention strategies (2 points)</td>
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<td>- Drawing a conceptual model (4 points)</td>
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<td>• Draft of Proposal</td>
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<tr>
<td>- Oral Presentation (5 points)</td>
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<td>- R21 Proposal* (10 points)</td>
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<td>• Seminar Leadership Project*</td>
<td>15</td>
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<tr>
<td>• Draft of Treatment Manual*</td>
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<tr>
<td>• Intervention Research Proposal</td>
<td>45</td>
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<tr>
<td>- Oral Presentation (5 points)</td>
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<tr>
<td>- Treatment Manual* (15 points)</td>
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<tr>
<td>- R21 Proposal* (25 points)</td>
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*major assignment

**POLICY ON ACADEMIC DISHONESTY**

Academic dishonesty is contrary to the ethics of the social work profession, is unfair to other students, violates the UNC Code of Honor, and is acceptable in no circumstances. Original work is expected. Submitted work must conform to the Honor Code of the University of North Carolina. For information on the UNC-CH Honor Code, including guidance on representing the words, thoughts, and ideas of others, see: [https://studentconduct.unc.edu/students/honor-system-module](https://studentconduct.unc.edu/students/honor-system-module)

Please note that plagiarism is defined in the *Instrument of Student Judicial Governance*, Section II.B.1 as, “...the deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise.” In keeping with the UNC Honor Code, if reason exists to believe that academic dishonesty has occurred, a referral will be made to the Office of the Student Attorney General for investigation and further action as required. Violations of the Honor Code result in an “F” grade.

**Quotations:** When directly quoting an outside source, the borrowed text must be surrounded by quotation marks or, if the quoted material is 40 words or more in length, it must be set as a block quote. See the *Publication Manual* of the American Psychological Association (2010, p. 92). Every quote must include a source – the author, year, and page number. The source must appear in the reference section at the end of your paper.
Here is an example of alternative ways to cite the same material:

*Original Text (more than 40 words; set as block quote):*

Unks (2016) found the following:

> Our best teachers do not convey information by filling heads or stretching minds with some sort of required content; they impart instead a way of looking, a way of perceiving, a way of investigating the wonder of life in such a fashion that students learn how and what to see. (p. 42)

*Internal Reference (less than 40 words):*

Unks (2015, p. 42) argued, "Our best teachers…impart instead a way of looking, a way of perceiving, a way of investigating the wonder of life in such a fashion that students learn how and what to see."

*Paraphrase:*

Responding to Barth (2017), Unks (2016) argued that the top teachers show students a way to engage with the wonder of life as a means of learning.

**Policy on Accommodations for Students with Disabilities**

The School of Social Work aims to create an educational environment that supports the learning needs of all students. The University of North Carolina – Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, temporary disabilities, or pregnancy complications resulting in difficulties with accessing learning opportunities. The Accessibility Resources and Service (ARS) Office at UNC has been established to coordinate all accommodations. If you might need accommodations at any point during the semester, please contact ARS prior to the beginning of the semester or as early in the semester as possible so that they can assist you. This process takes time. You can visit the ARS website at [http://accessibility.unc.edu](http://accessibility.unc.edu), and contact ARS by email: accessibility@unc.edu or phone at 919-962-8300. The accommodations process starts with ARS, which helps advise Faculty at the School of Social Work on how best to proceed. As a School, we are committed to working with ARS to implement accommodations for all students who need them. In addition to seeking ARS supports, please also reach out to me to communicate how best your needs can be met once you have begun the ARS process.

**Course Website**

The course description, lecture notes, and other course materials are available online through the Sakai website. See [http://sakai.unc.edu](http://sakai.unc.edu)
<table>
<thead>
<tr>
<th>Class date</th>
<th>Readings, Discussion Topics, and Speakers</th>
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<tbody>
<tr>
<td>January 10</td>
<td>No Class: Annual Meeting of the Society for Social Work and Research</td>
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<tr>
<td>January 17</td>
<td>Class #1: Introduction</td>
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<td></td>
<td>• Review course syllabus</td>
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<td>• What is an intervention?</td>
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<td>• What is intervention research?</td>
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<td>• Counterfactual perspective</td>
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<td>• Causal description versus causal explanation</td>
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<td>• Randomized experiment</td>
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<td>• Quasi-experiment</td>
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<td>• Natural experiment</td>
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<td>• Observational study</td>
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<td>• Overview of NIH funding mechanisms</td>
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<td><strong>Discussion:</strong></td>
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<td>• What are your intervention interests?</td>
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<td>• How do your intervention interests relate to a social or health disparity?</td>
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<td>• In your area, what interventions have been shown to reduce social and health disparities (e.g., race or ethnicity has been shown to moderate an outcome)?</td>
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<td><strong>Reading Assignments:</strong></td>
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<td>Fraser, Richman, Galinsky, &amp; Day (2009), pp. 3-44</td>
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<td><strong>Just When You’ve Mastered APA Style (4:00-4:50)</strong></td>
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<td>• Vancouver citation style</td>
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<td>• Writing proposals versus journal articles</td>
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<td><strong>Guest Speaker:</strong> Diane Wyant</td>
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<td><strong>Key Definitions</strong> (Glossary: <a href="http://grants.nih.gov/grants/glossary.htm#A">http://grants.nih.gov/grants/glossary.htm#A</a>:</td>
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Program Announcement
A Program Announcement (PA) is a formal statement about a new or ongoing extramural activity or program. It may serve as a reminder of continuing interest in a research area, describe modification in an activity or program, and/or invite applications for grant support. Most applications in response to PAs may be submitted to a standing submission date and are reviewed with all other applications received at that time using standard peer review processes. NIH may also make funds available through PARs (PAs with special receipt, referral, and/or review considerations) and PASs (PAs with set-aside funds).

Request for Application
A Request for Application (RFA) is a formal statement that solicits grant or cooperative agreement applications in a well-defined scientific area to accomplish specific program objectives. An RFA indicates the estimated amount of funds set aside for the competition, the estimated number of awards to be made, whether cost sharing is required, and the application submission date(s). For cooperative agreements, the RFA will describe the responsibilities and obligations of NIH and awardees as well as joint responsibilities and obligations. Applications submitted in response to an RFA are usually reviewed by a Scientific Review Group (SRG) specially convened by the awarding component that issued the RFA.

Request for Proposals
A Request for Proposals (RFP) announces that NIH would like to award a contract to meet a specific need, such as the development of an animal model. RFPs have a single application receipt date and are published in the NIH Guide for Grants and Contracts.

Research
The term research is used to describe a systematic, intensive study intended to increase knowledge or understanding, a systematic study specifically directed toward applying new knowledge to meet a recognized need, or a systematic application of knowledge to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements.

January 24  Class #2: Overview of Causal Inference

- Assessing the validity of causal inferences
- A typology of validity
  - Statistical conclusion validity
  - Internal validity
  - Construct validity
  - External validity

Guest Speaker (4:00-4:50):
Rainier De Vera Masa, Assistant Professor

Required Reading (before class):
Shadish, Cook, & Campbell (2002), pp. 1-32
Mini-Assignment #1 – The Need or Problem: Pick a need, problem, or condition to address throughout the semester. What you pick should have funding potential. Consider social and health disparities (e.g., Could you develop an intervention that reduces health disparities in your problem area?). Prepare a brief written statement (~ two pages) of your central social concern and intervention interest. Be prepared to share this with your colleagues. Note. For all assignments in SOWO 940, we will use single-spaced layout style.

In your statement, address the following questions:

1. What is the need, problem, or condition? What is its prevalence? How has the prevalence changed over time? How does the prevalence vary across gender, race, ethnicity, sexual orientation, etc.? Use primary data sources (e.g., CDC Youth Risk Behavior Surveillance or U.S. Census Bureau data). Do not rely on secondary sources, such as newsletters or advocacy websites.
2. What empirical and theoretical literature should you review? Key words?
3. What kinds of interventions might be needed and feasible at each level (e.g., individual, family, organizational, county or court jurisdiction, state, nation)?
4. What level of intervention is of interest to you?
5. What are the key outcome measures? Find and present reviews of measures in your field.

January 31 Class #3: Statistical Conclusion and Internal Validity

- How to assess the strength of causal inferences
  - Statistical conclusion validity
  - Internal validity
- Concept: The best available evidence

Required Reading (before class):
Shadish et al. (2002), pp. 33-63.

Mini-Assignment #2 – Identify the Core Constructs: Develop a list of constructs (i.e., units, settings, treatments, and outcomes) you will use to organize your literature review. Be prepared to share your list in class.

As part of the process of building an intervention, begin a bibliography on your area. Include theoretical, empirical, and practice literature that describes the interventions that have addressed this area in the past. To address the social need, problem, or condition, are multiple interventions needed? Which ones appear promising? Which ones have been shown to reduce social and health disparities? Can they be combined or sequenced along some continuum (e.g., developmental age)? Submit your list and bibliography. Use asterisks to indicate those interventions that you intend to review.

Tip: From a practical perspective, you should begin work on your proposal with an assessment of what is currently funded because an agency is unlikely to award funding for a new project if it is currently funding a similar project. To review abstracts of existing NIH research projects, use the Research Portfolio Online Reporting Tool (RePORT) at: https://projectreporter.nih.gov/reporter.cfm

February 7 Class #4: Construct and External Validity

- Threats to construct validity
- Threats to external validity
- Evidence-based practice: The challenge of implementation
- Proximal similarity
- Invariance of causal associations

**Required Reading (before class):**

Shadish et al. (2002), pp. 64-102


**Recommended Reading** (Read for awareness of the fascinating work of Elizabeth Stuart)


**Discussion:**

Based on statistical conclusion validity, internal validity, construct validity, and external validity, consider the strength of the literature in your area. How does the validity of knowledge vary by population and setting? What are the proximal similarity and causal invariance issues in scaling out?

**February 14**  
**Class #5: Independent Reading Week (and Consultation)**

**Reading:**

15 research articles on interventions in your area

**Mini-Assignment #3 – Identify Intervention Strategies in Your Area of Interest**

- Submit an annotated bibliography for 15 articles (describe sample size, design, intervention, and findings); no more than 150 words per article; be descriptive; develop a code, if you like
- Summarize in one page at least three implications for the design of an innovative intervention that may advance your field.
  - What has been tested and found to be promising?
  - What is the evidence that interventions in your area have the capacity to reduce social and health disparities?
  - How could you advance intervention knowledge?

**February 21**  
**Class #6: Developing Conceptual Frameworks for Interventions – Specifying Mediational Models and Theories of Change**
• How do we represent interventions in structural models?
• Specifying mediation in developmental and conceptual models
• Mediation and moderation
• Theories of change

**Example:** The Biopsychosocial Model of Conduct Problems in Adolescence – Integrating Individual, Family, Peer, and Sociocultural Risks

**Required Reading:**

Fraser et al. (2009), pp. 45-62.


**Recommended Readings** (review for format of your conceptual framework):


**Mini-Assignment #4 – Draw Your Conceptual Model:** Use the graphing techniques demonstrated in Orlando et al. (2005) and other reading assignments, draw a mediational model depicting mediators and distal outcomes related to your intervention. Next create a theory of change for your intervention. In one page, summarize the “demand” characteristics of your intervention. Be prepared to present in class.

**February 28**

**Class #7: Developing Culturally Congruent Interventions**

**Policies as Interventions**

**Developing Culturally Congruent Treatment Manuals**
• Specifying culture-based mediators in the design of social interventions
• Measurement considerations in cross-cultural intervention research
• Fidelity considerations in cross-cultural intervention research
• Consumer and parent groups, advisory boards, and consultants

**Required Reading:**

Fraser et al. (2009), pp. 63-156.


**Recommended Reading:**


**Policies as Interventions**

On Reserve in Rare Books at Wilson Library (Second floor rotunda): *Orders and Directions* (DA398 1630.G7):

*Sovereign (1625-1649: Charles I) Orders and directions, together with a Commission for the better administration of justice, and more perfect information of His Maiestie: How, and by whom the lawes and statutes tending to the reliefe of the poore, the well ordering and training of youth in trades, and the reformation of disorders and disordered persons, are executed throughout the kingdome / which His Royall Maiestie hath commanded to be published and inquired of, by the body of his Priuie Councell, whom he hath made principall commissioners for this purpose.*

Imprinted at London: By Robert Barker, printer to the Kings Most Excellent Maiestie, and by the assignes of Iohn Bill, 1630.

*Note.* You will have to complete a Rare Books Collection Application to see this document. Be sure to have your UNC One Card. The hours of the Rare Books Collection of the Wilson Library are 9:00 a.m. - 5:00 p.m. weekdays, 9:00 a.m. - 1:00 p.m. Saturdays, and 1:00 p.m. - 5:00 p.m. Sundays. If you have questions, contact Emily Kader (919-962-3765), Public Services Librarian in the Reading Room on the second floor.

**Examples of Policies Intended to Produce Systematic Changes:**

Adoption and Safe Families Act of 1997 (PL 105-89).

Fostering Connections to Success Act and Increasing Adoptions Act of 2008 (PL 110-351).

Patient Protection and Affordable Care Act of 2010 (PL 111-148).

**Discussion:**
What policies in your area might be considered interventions? Is there evidence that these policies have produced an effect? Have they reduced social and health disparities? Be prepared to share one example.

March 7  Class #8: R21 Research Proposal Presentation

**Assignment:** Prepare a single-spaced (.5” margins all sides, 11 point Arial, Helvetica, Palatino Linotype, or Georgia typeface), six-page draft of a proposal (including figures and tables, but excluding one page for Specific Aims and an appendix for references) that addresses each of the topics below.

Be realistic: *You should propose only what can actually be done by you.* Be sure that your proposal has high feasibility. Proposals are routinely scored on feasibility.

Be prepared to present your proposal for discussion in class.

Write to a specific R21 and submit a copy of the PA, RFA, or RFP to which you are responding with your proposal.

**Specific Aims** (1 page)
- Specify the aims of your study
- Specify any hypotheses
- Summarize the proposal

**Significance** (1 page)
- Describe the need or problem area in national terms by using incidence, prevalence, or other primary data. That is, make the case that you will address a problem of national significance. Be sure to consider social and health disparities.
- Develop and describe a conceptual framework or model (include a graphic image that specifies malleable mediators)
- Use research literature to support each construct in the conceptual framework. Describe (in detail) four to six relevant studies. Be sure to assess the statistical conclusion and internal validity of this literature.

**Innovation** (.5 page)

**Approach** (4.5 pages)
- Describe the design, including participants, recruitment and sampling procedures, assignment mechanism, measures, data collection strategy, data analysis plan, and power. Be sure to address such issues as reliability and validity of measures, expected attrition of sample, imputation of missing data (Can you make the MAR assumption?), and mechanisms for insuring treatment fidelity plus fidelity assessment.
- Describe your intervention and indicate that the treatment manual is appended.
- Describe preliminary studies

**References** (use Vancouver style)

**Recommended Resources:**

See prior proposals at course website.

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<thead>
<tr>
<th>March 14</th>
<th>Spring Break</th>
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March 21  Class #9: Seminar Leadership

**Seminar Leadership #1: Quasi-Experimental Designs**
• Designs without control groups
• Designs that use a control group but no pretest
• Designs that use both control groups and pretests
• Surprisingly strong designs
  o Regression discontinuity design
  o Interrupted time series design

**Required Reading:**
Shadish et al. (2002), pp. 103-245.

**Seminar Leaders for Seminar #1:**
1.
2.
3.

March 28  Class #10: Seminar Leadership

**Seminar Leadership #2: Experimental Designs**

• Theory of random assignment
• Designs with random assignment
  o Randomized controlled trial
  o Block randomized trial
  o Cluster randomized trial
  o Stepped-wedge randomized trial
• Conditions conducive to random assignment
• Recruiting participants to be in experiments
• Improving the random assignment process with matching
• Inducing and measuring implementation

**Guest Speaker (2:00-2:45):**
  Brianna M. Lombardi, Doctoral Candidate (tentative)

**Required Reading:**

**Seminar Leaders for Seminar #2:**
1.
2.
3.

April 4  Class #11: Treatment Manuals (draft due)

**Four Stages in Manual Development**
1. Formulation
2. Revision
3. Differentiation
4. Translation and Adaptation
Consultation from the Authors of Treatment Manuals

Rebecca J. Macy, MSW, PhD, Preyer Distinguished Professor
Amy Blank Wilson, MSW, PhD, Assistant Professor

Assignment: Bring draft of treatment manual (minimum 25 pages, excluding a title page and the table of contents).

April 11

Class #12: Developing the Non-Research Elements of Proposals

2:00-2:30 – Mary Anne Salmon, PhD, Director, IRB Office – informed consent
2:30-2:45 – Break
2:45-4:30 – Steve Day, Director, ORPD – pre-award work
Kelly Smith, CPA, Director, Business Office – post-award work

- Forms and sections of a full NIH proposal
- Biosketches – how to use them strategically
- Budgets – direct versus indirect costs (F&A)
- Budget justifications – how to use them strategically
- Sub-contracts
- Personnel – collaborators, consultants, and staff
- FTE, buyout
- Academic versus summer effort
- Human subjects protections
- Data safety monitoring boards

April 18

Class #13: TBD TOPIC (workshop format)

- Calculating power for proposals
- Multiple imputation
- Other

Guest: TBD

Required Reading: None

April 25

Class #14: Presentation of R21 Proposal – Mock Review

- Mock NIH Review of Proposals: Oral Presentation

Guest Reviewers: Panel of Faculty

Classic Reading and Viewing:

See also: Hans Rosling’s video and Six Simple Techniques for Presenting Data:

Course Deliverable: NIH proposal with treatment manual
Submit your proposal and treatment manual as separate documents. Please attach the PA to your proposal.