

Course Number SoWo 102

Course Title Introduction to Research Methods in Social Work

Semester Spring 2002

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Course Description

This course introduces the student to scientific research methods. Topics include: problem formulation and definition; hypothesis formulation; measures of central tendency; causality; research designs; measurement, data collection and data analysis.

Required Text

Rubin, A. & Babbie, E. (2001) *Research Methods in Social Work* (4th Ed.)
Pacific Grove, CA: Brooks/Cole (Wadsworth/Thompson Learning)

The required text is available from the University bookstore. Additional readings will be provided and/or placed on reserve in the student reading room.

Course Objectives

By the end of this course the student will be able to:

- 1) List and describe each of the steps of the scientific approach to human inquiry, the accumulation of knowledge, and social work research.
- 2) Compare and contrast the scientific approach with other ways of obtaining knowledge, and understand how the methods differ with regard to causality and generalizability.
- 3) Compare the major research designs and discuss the strengths and weaknesses of each.
- 4) Articulate the advantages of the scientific approach to practice.

- 5) Define basic statistical terms and concepts, and discuss the concepts of measurement, sampling and data collection.
- 6) Explain how the scientific approach may be affected by ethics, and issues relating to diversity, minority status or oppression.
- 7) Describe how the scientific approach can be used to test the efficacy of social interventions.
- 8) Design and conduct a study intended to improve practice.
- 9) Employ appropriate professional journal styles and formats when writing.
- 10) Objectively critique published studies in the social work literature.

Course Outline

This course includes a Professional Practice Improvement Project (PPIP) in which the student will conduct a self-improvement study relating to practice. The PPIP will be formally related to the Learning Agreement between the student and the Field Education Program. The PPIP also will include data collection and analysis, statistical testing if appropriate, and presentation of the project results to peers. In order to meet the learning objectives of this course and complete the Professional Practice Improvement Project, students should read all assigned readings prior to the date they will be discussed. Students should come to class prepared to discuss the assigned topics and readings. In order to complete the PPIP during the allotted time, students need to manage the implementation of their PPIP in their field setting, and submit required sections of the PPIP for timely evaluation and feedback.

January 11: Introduction to course: Why scientific inquiry? And, what is it anyway?

Readings: R&B Ch. 1: Scientific Inquiry and Social Work

January 18: Developing an orientation to research, and understanding the context of research.

Readings: R&B Ch. 2: Philosophical Issues in Science and Research

R&B Ch. 3: Theory and Research

R&B Ch. 4: The Ethics and Politics of Social Work Research

Myers, L. L., & Thyer, B. A. (1997). Should social work clients have the right to effective treatment? *Social Work, 42*, 288-298

January 25: Introduction to Single-Case methods and designs.

Readings: R&B Ch. 11: Single Case Evaluation Designs

Gabor, P. (1988). Increasing accountability in child-care practice through the use of single case methodologies.

The Professional Practice Improvement Project

Introduce the PPIP, handout PPIP outline and grading schema. Define “problem,” discuss “measurement,” introduce the “AB” design. Discuss the 5 sections of the PPIP (Problem Selection/Importance of Research, Introduction, Methods, Findings, Discussion), and discuss due dates and structure for the overall PPIP.

Assignment: “Problem Selection/Importance of Research” section of PPIP, due at beginning of class on February 1. (It will have been helpful if you read R&B Chapter 5: Problem Formulation, while doing this assignment.)

February 1: What to “research”? How are research questions developed?

Readings: R&B Ch. 5: Problem Formulation

Webster-Stratton, C. (1997). From parent training to community building. *Families in Society*, 78, 156-171

Plus: discussion of measurement in general; measurement in relation to PPIP.

Assignment: “Introduction and Methods” section of PPIP, due at beginning of class on February 15.

February 8: Stating social work constructs in measurable ways.

Readings: R&B Ch. 6: Conceptualization and Operationalization

R&B Ch. 7: Measurement

Kirk, R. S. (1996). A colloquial discussion of the development of measures and measurement systems.

February 15: Assigning “labels” and “values” to phenomena of interest.

Readings: R&B Ch. 8: Constructing Measurement Instruments

Anderson, D. G. (2000). Coping strategies and burnout among veteran child protection workers. *Child Abuse and Neglect*, 24(6), 839-848

Benda, B. B. (1999). Testing the problem syndrome among males in boot camp: Use of theoretical elaboration with reciprocal relationships. *Social Work Research*, 23, 28-41

Berrick, D. J. & Frasch, K. Fox, A. (2000). Assessing children's experiences of out-of-home care: methodological challenges and opportunities. *Social Work Research*, 24(2), 119-127

Assign schedule for PPIP presentations during last class.

February 22: Studying a few to learn about many: Issues relating to sampling in research.

Readings: R&B Ch. 9: The Logic of Sampling

Azmi, S. H. (1999). A qualitative sociological approach to address issues of diversity for social work. *Journal of Multicultural Social Work*, 7(3/4), 147-164

Hill, M.R., & Thomas, V. (2000). Strategies for racial identity development: Narratives of black and white women in interracial partner relationships. *Family Relations*, 49(2), 193-200

Martin, J. I. & Knox, J. (2000). Methodological and ethical issues in research on lesbians and gay men. *Social Work Research*, 24(1), 51-59

March 1: How do we know if our services are effective? Searching for “cause” and “effect.”

Readings: R&B Ch. 10: Causal Inference and Group Designs

Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., & Williams, R. A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578

de Anda, D. (1999). Project Peace: The evaluation of a skills-based violence prevention program for high school adolescents. *Social Work in Education*, 21, 137-149

March 8: Managing data during research. And, Introduction to univariate statistics.

Readings: R&B Ch. 15: Processing Data
R&B Ch. 16: Interpreting Descriptive Statistics

March 15: SPRING BREAK!!

March 22: Bivariate and Multivariate statistics

Readings: Reread R&B Ch 16: Interpreting Descriptive Statistics

March 29: Single-S statistical tests and presentation of single-S results and findings.

Readings: Robinson, F.F., Morran, D. K., & Hulse-Killacky, D. (1998). Single-subject research designs for group counselors studying their own groups. *Journal for Specialists in Group Work*, 14(2), 92-97

April 5: Statistical significance: the holy grail of quantitative research.

Readings: R&B Ch 17: Inferential Data Analysis, Part I

Gorey, K. M. (1996). Effectiveness of social work intervention research: Internal versus external evaluations. *Social Work Research*, 20, 119-128.

Gorey, K., M., Thyer, B. A., & Pawluck, D. E. (1998). Differential effectiveness of prevalent social work practice models: A meta-analysis. *Social Work*, 43, 269-278

April 12: GOOD FRIDAY

April 19: Statistical testing, and the difference between “significant” and “important.”

Readings: R&B Ch 18: Inferential Data Analysis, Part II

Bowen, N. K. (1999). *The Blue Ridge mentor program: Effectiveness analysis*.

Final preparation for PPIP Presentation of Findings and Discussion

April 26: Individual Poster or PowerPoint presentations of PPIPs.

Course Evaluation

Your final grade in the course will be based on the total accumulation of points earned on the PPIP, quizzes/critiques, etc., and the Final Exam. The total number of points possible is 500. Breakdown of points is as follows:

PPIP Problem Selection/Importance of Research (due Feb 1)	40 points
PPIP Introduction and Methods (due Feb 15)	80 points
PPIP Findings/Discussion (due Apr 26)	<u>80 points</u>
Subtotal for PPIP	200 points
Quizzes, article critiques, etc, @ professor's discretion	100 points
Final Examination (Time and type TBA)	<u>200 points</u>
Course total	<u>500 points</u>

Your final grade in the course will be determined by dividing the 500 total possible points by 5, to standardize the grading continuum to a 100-point scale. Grades will be assigned as follows:

<u>Points</u>	<u>Grade</u>
94-100	H
80-93	P
70-79	L
<69	F

Format for Written Work

Assignments must be typed and use APA format (including, but not limited to APA guidelines on spacing, margins, punctuation, within-text citations, reference list and headings). Students should refer to the *UNC School of Social Work Style Guide: A Writing manual for Social Work Students*, and/or the *Publication Manual for the American Psychological Association (4th ed.)* for information on APA format. In addition, students should refer to the *School of Social Work Style Guide*, pages 26 – 32, for guidelines on how to cite others' work properly and avoid plagiarism.

Policy on Unexcused Absences

It is important and expected that students attend class. However, absences may be excused by the instructor for good cause. Students should request an excused absence before class, if possible, or within a week of the absence if it was unanticipated.

Policy on Incompletes and Late Assignments

Students must notify the instructor via email before the due date if an assignment is going to be turned in late. Whenever possible, notify the instructor at least 24 hours before the due date. Extensions may be given at the instructor's discretion for extenuating circumstances. Students will lose 10% of the available points for the assignment for each 24-hour period that an assignment is late beyond the due date and time.

Consideration for a grade of incomplete will be made on a case-by-case basis depending upon circumstances.

Policy on Academic Dishonesty

All written assignments (exams, projects, etc.) should include the following signed pledge:

“I have neither given nor received unauthorized aid in the preparation or completion of this work.”

Students are responsible for properly citing references in their written work. This topic is discussed at length in the SSW Writing Guide content on citations and plagiarism.

Students in the class who are aware of academic dishonesty on the part of classmates are expected to inform the instructor. Academic dishonesty is contrary to the ethics of the social work profession, unfair to other students, and will not be tolerated in any form.

Policy on Accommodations for Students with Disabilities

Students with disabilities that affect their participation in the course or fulfillment of course requirements may notify the instructor. Special accommodations in instructional format, or the format of assignments will be considered.

List of Relevant Readings

The following articles represent a sampling of the social work research literature. Some of the articles are about methods, per se, and others are examples of research that rely on particular methods. Some of the articles exemplify the use of research results to investigate practice effectiveness. The articles are annotated “minimally,” and in most cases italicized key words or content follow the reference. These key words or concepts are (*bold and in parentheses*).

Some of these articles are required reading, and are listed in the weekly schedule as such. Others are included for your information.

Abel, E. M. (2000). Psychosocial treatments for battered women: a review of empirical research. *Research on Social Work Practice, 10*(1), 55-77. (**review of relevant literature on a particular topic, in this case battered women; examining outcomes of practice research; drawing conclusions from a body of research studies**)

Anderson, D. G. (2000). Coping strategies and burnout among veteran child protection workers. *Child Abuse and Neglect, 24*(6), 839-848. (**quantitative analysis; cross-sectional analysis, self-report methodology; scaling of affective dimensions; using results of research to design interventions**)

Azmi, S. H. (1999). A qualitative sociological approach to address issues of diversity for social work. *Journal of Multicultural Social Work, 7*(3/4), 147-164. (**ethics in research; how ethics and diversity can bias research approaches and results**)

Benda, B. B. (1999). Testing the problem syndrome among males in boot camp: Use of theoretical elaboration with reciprocal relationships. *Social Work Research, 23*, 28-41. (**testing measures themselves – how well do particular measures work in a given research endeavor; this article has an understandable theoretical question that is addressed with factor analysis; results clearly support an answer to the question; factor analysis results are clearly presented**)

Berrick, D. J. & Frasch, K. Fox, A. (2000). Assessing children's experiences of out-of-home care: methodological challenges and opportunities. *Social Work Research, 24*(2), 119-127. (**evaluation; administrative, practical, legal and pragmatic barriers to research; obtaining a sample; developing research instruments; training research staff**)

Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., & Williams, R. A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology, 63*, 569-578. (**design issues; determining what to measure and how to measure it; good discussion of data analysis; good example of empirically based intervention and high quality research design**)

- Bowen, N. K. (1999). *The Blue Ridge mentor program: Effectiveness analysis*. (Unpublished agency report). Raleigh, North Carolina: Willie M. Program Evaluation, NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services. (***power analysis; effect sizes; non-parametric statistics; example of study carried out without sufficient statistical power; discussion of how an underpowered study may undermine good practice with null findings speculated to be due to the research rather than the practice model under investigation***)
- Collins, P. M., Kayser, K. & Platt, S. (1994) Conjoint marital therapy: A practitioner's approach to single-system evaluation. *Families in Society*, 75(3), 131-141. (***deciding the operational definition of a clinical problem; instrument design for a specific study; using research measures as part of a clinical intervention; directly measuring case practice effectiveness on a single case***)
- de Anda, D. (1999). Project Peace: The evaluation of a skills-based violence prevention program for high school adolescents. *Social Work in Education*, 21, 137-149. (***pretest/posttest design; issues of causal inference; difference testing using t-test; statistical significance; differences relating to gender and ethnicity***)
- Gabor, P. (1988). Increasing accountability in child-care practice through the use of single case methodologies. Paper presented at the International Child and Youth Care Conference of the Child Welfare League of America, Washington, DC. (***good introduction to single-s methods; use of single-s methods in case practice evaluation; defining the "s" in single-s: individual person, group, neighborhood, etc.; selecting measures appropriate for single-s applications***)
- Gorey, K. M. (1996). Effectiveness of social work intervention research: Internal versus external evaluations. *Social Work Research*, 20, 119-128. (***this article precedes Gorey, Thyer & Pawluck (1998) and covers similar topics; measuring differences among practice approaches based on different theoretical models***)
- Gorey, K., M., Thyer, B. A., & Pawluck, D. E. (1998). Differential effectiveness of prevalent social work practice models: A meta-analysis. *Social Work*, 43, 269-278. (***meta-analysis: looking at effect sizes; using research to demonstrate effectiveness of social work practice; internal evaluations/external evaluations; theoretical orientations affecting research***)
- Healy, K., & Mulholland, J. (1998). Discourse analysis and activist social work: Investigating practice processes. *Journal of Sociology and Social Welfare*, 25(3), 3-27. (***discourse analysis; investigation of 'activist practice processes'***)
- Hill, M.R., & Thomas, V. (2000). Strategies for racial identity development: Narratives of black and white women in interracial partner relationships. *Family Relations*, 49(2), 193-200. (***qualitative research; diversity/racial issues; use of interviews and focus groups to research racial issues; grounded theory methodology***)

- Hughes, M. (1998). Turning points in the lives of young inner-city men forgoing destructive criminal behaviors: A qualitative study. *Social Work Research*, 22, 143-151. **(this was just an interesting study using qualitative methods.)**
- Jarrett, R. L. (1994). Living poor: Family life among single parent, African-American women. *Social Problems*, 41, 30-49. **(qualitative research; race/ethnicity; using research to 'sort out' social theories by determining which ones possess empirical support)**
- Kirk, R. S. (1996). A colloquial discussion of the development of measures and measurement systems. Paper prepared for recipients of E. McC. Clark Foundation grants on Community-Based CPS Reform. **(primarily single-s but also generalizable; structure for assessing intended measures in relation to the clinical problem, assuring adherence to "rules of measurement" such as reliability, validity, directness, non-reactivity, etc.)**
- Martin, J. I. & Knox, J. (2000). Methodological and ethical issues in research on lesbians and gay men. *Social Work Research*, 24(1), 51-59. **(ethical issues and methodology; defining the study population; sampling; generalizability of results; preventing harm to subjects)**
- Myers, L. L., & Thyer, B. A. (1997). Should social work clients have the right to effective treatment? *Social Work*, 42, 288-298. **(argues for evaluating treatment efficacy, using research results to raise standards of social work profession)**
- Robinson, F.F., Morran, D. K., & Hulse-Killacky, D. (1998). Single-subject research designs for group counselors studying their own groups. *Journal for Specialists in Group Work*, 14(2), 92-97. **(application of single-s methods in the group work practice setting; discussion of variations on single-s designs; analysis of single-s data)**
- Twine, F. W. & Warren, J. (2000). *Racing research, researching race: Methodological dilemmas in critical race studies*. New York: New York University Press. **(This collection of ethnographic essays examines the political, methodological and ethical dilemmas of conducting research in racially stratified societies. These diverse case studies demonstrate how the "racialized" position of social scientists affects their findings and interpretations)**
- Webster-Stratton, C. (1997). From parent training to community building. *Families in Society*, 78, 156-171. **(problem formulation; experimental design; data analysis; using research findings to improve interventions)**

Professional Practice Improvement Project

A Professional Practice Improvement Project (PPIP) is required of all students. PPIPs are designed to improve your practice skills or your practice environment. When designing your PPIP, you will identify, monitor, and change practice-related behaviors, beliefs, circumstances or the practice environment itself. If you are currently in a field placement, you should involve your supervisor in your PPIP by describing the class assignment and then asking for assistance in using the field setting for implementing the PPIP. The focus of change may be a personal behavior, the acquisition of a new skill, or a change in the practice environment so as to improve practice for clients and/or the community.

After you select a behavior, skill, feeling, attitude, belief, or some aspect of the practice environment, you will need to devise a measurement system and an intervention. The measurement system may be as simple as a checklist of times that you experience the behavior or feeling, or it may be much more sophisticated, involving the use of standardized instruments or a detailed inventory describing the antecedent events, the actual event, and post-event conditions. Your supervisor might also collect data on your PPIP outcome measure (in research jargon, this would strengthen the design because he or she would be an objective observer).

For this project you will have time only to conduct an AB design, where you collect baseline data, implement your intervention, and measure the resulting changes. Because of limited time available during the semester, and the simplicity of the design, the intervention that you choose is important. Interventions are coherent strategies designed to change a feeling, way of thinking, way of behaving, or some aspect of organizational behavior or culture. You should attempt to choose an intervention that has good empirical support and is likely to lead quickly to change. Such well-documented strategies as self-instruction training, social skills training, or relaxation training might be good choices. Changing the manner in which your agency interacts with, or provides services to, particular clients might also be a good choice, although the challenges of measuring agency based interventions may be more difficult than those involved with personal change. However, if you have the support of your practice supervisor you may focus on an agency-centered change if you have confidence that it will occur within the allotted time.

Be both creative and empirical in your selection. In your paper, be sure to defend your choice of an intervention with citations from several scholarly articles from the social work literature (or other professional journals) or books. Do not rely solely on popular press such as newspapers, magazines, or popular self-help books.

An example of a PPIP

PPIPs are used in many Schools of Social Work across the nation. One student's goal at the University of California at Berkeley was to reduce the rate at which she interrupted instructors, peers, and clients. In her words, she wanted to "reduce my tendency to step on the sentences of other people." This was a problem about which she felt "shame and guilt." During the baseline

and intervention phases, she kept track of her interruptions on 3 x 5 cards. Her intervention strategy was to take long pauses between other speakers' comments and her comments. Although the strategy was unsuccessful with peers and instructors (they kept talking), she was greatly relieved to find that she interrupted clients in only three of the 22 counseling sessions that she monitored over a four-week period of time. Because she often found herself "finishing clients sentences" rather than letting them carry their own thoughts to conclusion, this was a gratifying change for her. Her graph and written report showed that the "long pause" strategy may be an effective tool in communicating with clients, but with friends and instructors it led to one-sided conversations.

The report of your PPIP

Your report should be written in the style of a professional publication. Use APA guidelines. If you do not already own an APA Manual, you should purchase one. For examples of well-written articles, see some of the journals that publish single-subject research reports (The Journal of Applied Behavioral Analysis, Behavior Modification, Behavior Therapy), or any of the numerous journals that generally publish social work articles.

This assignment is graded in three sections, and is handed in throughout the course of the semester. The sections that are required for your PPIP report, the maximum points available for each section, and the grading criteria are indicated below.

The first section of the project, which is not actually part of the final report, is a brief (less than three pages) paper describing the problem you wish to address and the importance of the research to you, your agency, or the clients/community you serve. Your instructor will give you additional instructions on this part of the project during the second or third week of the semester. This section of the project is worth 40 points out of a total of 200 points for the entire project.

The remainder of this assignment is an exercise in strict adherence to the format and prescribed content. To increase the likelihood that you will be awarded the maximum points for each section, your paper must adhere to APA journal format and style. Do not freelance or "free-form" this writing project. Your paper should be in the general form of a well-written APA article. You should pay close attention to the structure of each section as specified in the APA manual. Your paper should include an APA-style abstract and cover page. Your references should appear both in the text and on the reference page in APA style (look carefully at the examples in the APA manual; it is easy to make mistakes). Pay close attention to professional grammatical style and spelling. For example, "data" are plural, not singular. Therefore, data are, show, or indicate (note the plural form of the verbs). The singular form of data is datum, and a datum is, shows or indicates. Be sure that the paper reads clearly with appropriate transitions between sections.

Your paper should follow the major headings listed and described below. Do not use the sub-headings in your paper. They are provided here to assist you during your writing, and to give you information about the distribution of points associated with the sections.

ABSTRACT. The abstract is a very brief paragraph describing the problem, approach, intervention, methods, results/findings and conclusions. (Hint: usually each of these topics is addressed in a single sentence. Crafting an acceptable abstract is difficult, and may best be done after the rest of the paper/article is written. Review abstracts from several APA-style journals to get an appreciation for the terseness of the prose.) **The abstract is worth 10 points.** Although the abstract is the first thing to appear in the journal article, during this project it will be handed in as part of the final submission of this project, since it cannot be written until the data have been collected, analyzed, and interpreted.

The introduction and methods sections of the article, described below, are to be handed in together, and **together are worth 80 points.** You will be given additional information about instructor expectations for these two sections. The following is a general description of the sections.

INTRODUCTION. Introduce your paper by succinctly summarizing its purpose and include a brief critical review of at least five separate articles, in which key components of the problem, measures, or intervention strategy are discussed. You will be graded on how well your introduction "makes a case" for the project that you have undertaken. **The introduction is worth a total of 50 points,** and should include the following components or areas of emphasis. Please note that these four areas should not be listed in the form of sub-headings within the introduction.

Rationale for the selection. Your introduction should present the rationale for your selection of the particular behavior, belief, feeling, or other target phenomenon that you are trying to change. Be precise and give examples. Indicate why you chose to focus on this particular problem or phenomenon, and discuss the criteria used for making the selection. You may wish to cite several articles supporting your rationale for selecting the particular problem or phenomenon under investigation. **This section is worth 20 points**

Intervention plan. The intervention plan is your blueprint for action. You should describe the techniques that you intend to use to change the target behavior or phenomenon. You should also explain your rationale for choosing these techniques or strategy. This is where you might cite several articles that indicate the potential effectiveness of your intervention. You should build a case, based on the literature, that your intervention is a reasonable one for resolving the problem or changing the behavior that you have selected. **This section is worth 20 points.**

Statement of the hypothesis. Construct a straightforward statement that clearly specifies what will happen as a result of your intervention. Specify the level of change that will constitute success. **This section is worth 10 points.**

METHODS. The methods section describes your overall approach to the study and is particularly concerned with the details of your intervention, and the measurement system you will use to track changes in the target behavior or phenomenon. This is the "nuts and bolts" section of the paper describing the details of implementation and measurement. **The methods section is worth a total of 30 points**, split approximately evenly between the topics of intervention and measurement.

Implementation of the intervention. **This part of the Methods section is worth 15 points** and describes the way that you implemented your intervention. Discuss the timing of the intervention, the components of the intervention, such as, frequency, intensity, duration.

Measurement and recording. **This part of the Methods section is worth 15 points.** It is here that you operationally define the target behavior or phenomenon. You should describe the procedures used for recording its properties, such as absence, presence, frequency, intensity, duration, and how it will be measured (when, by whom, over what period, etc.) including any special instruments, tools, devices. Discuss the reliability and validity of your measures.

You will hand in the Introduction and Methods sections at the same time. **These two sections are worth a total of 80 points.**

FINDINGS. The results that you achieved from your intervention should be succinctly reported in this section. This includes the reporting of preliminary or baseline data, and data gathered throughout the intervention or following the intervention. You should also present the results of any statistical analyses that you have performed. **The Findings section is worth 40 points.**

Baseline data. Baseline data should be presented in this section. Baseline data are those data gathered prior to your intervention. Baseline data provides insight as to the trends exhibited in the problem data prior to intervention. The baseline data can be discussed as trends, stabilities, or even average levels within phases. **This part of the Findings section is worth 20 points**

Effects of the intervention. The outcome of your intervention efforts, including graphic and written presentation of the results should be presented in this section. You should compare and contrast the baseline data with the intervention data and note any differences between them. Declare whether or not you were successful. Discuss whether or not the differences that are observed could have occurred by chance. If you changed your intervention during the course of your data collection, discuss the rationale for the change and discuss its impact on the target behavior or phenomenon. **This part of the Findings section is worth 20 points.**

DISCUSSION. Your results should be summarized in this section, in terms of implications for practice, research, program development or program effectiveness. You should consider and discuss any alternative explanations for the observed outcomes, such as special client

characteristics, weaknesses or problems in the data collection methods, as well as, validity issues. You should also discuss the generalizability of your findings or any limitations. In a closing paragraph, summarize the overall results and implications of your study. **The Discussion section is worth 30 points.**

The Abstract, Findings and Discussion are all due at the same time, and **are worth a total of 80 points**. At this point you will have submitted all of the necessary sections of the simulated journal article. All five sections together are worth 200 points, or 40 percent of your term grade.