WURZWEILER SCHOOL OF SOCIAL WORK
YESHIVA UNIVERSITY
MSW PROGRAM

Social Work Practice and Evaluation Research
SWK 6401

Fall/Spring/Summer
Instructor Name
Email
Phone
Office Hours

COURSE DESCRIPTION

The need to evaluate our social work interventions in a systematic way has become a necessity. It is essential to know empirically which interventions work with specific client systems. The first imperative is to do no harm. Responsible practitioners need to evaluate the effects of what they do, if only to protect their clients.

The purpose of Social Work Practice and Evaluation Research, a required generalist course, is to impart to students an understanding and appreciation of a scientific, analytic approach to building knowledge for practice and for evaluating service delivery. Students will learn the relationship between single-subject research and practice, the fundamentals of the language of social work research, the elements of research designs, data analysis techniques used in single subject research, skills required to use research literature and how to communicate research concepts.

Research is presented as a logical extension of service delivery, rooted in the ethical imperative not to harm clients and to ensure that the methods employed in service delivery are effective. The course demonstrates the connection between foundation practice and research in that students will learn how to objectively measure the impact of interventions taught in foundation practice.

The course affords students opportunity to develop quantitative and qualitative evaluative skills, especially those that can be used to assess their own practice methods and outcomes. The culminating experience of the course is an evaluative study conceptualized, formulated, designed, executed, and analyzed by the students.

Course lectures, readings, and lab assignments have been designed to assist students toward this end.

SOCIAL WORK COMPETENCIES (click the link for a list of all nine competencies)

The Council of Social Work Education requires all accredited schools of social work to assess nine competencies. The rubric below evaluates the following competency/competencies using assignment #3:

Competency 4: Engage in Practice-Informed Research and Research-Informed Practice

Social workers use ethical, culturally informed, anti-racist, and anti-oppressive approaches in conducting research and building knowledge. Social workers use research to inform their

practice decision-making and articulate how their practice experience informs research and evaluation decisions. Social workers critically evaluate and critique current, empirically sound research to inform decisions pertaining to practice, policy, and programs. Social workers understand the inherent bias in research and evaluate design, analysis, and interpretation using an anti-racist and anti-oppressive perspective. Social workers know how to access, critique, and synthesize the current literature to develop appropriate research questions and hypotheses. Social workers demonstrate knowledge and skills regarding qualitative and quantitative research methods and analysis, and they interpret data derived from these methods. Social workers demonstrate knowledge about methods to assess reliability and validity in social work research. Social workers can articulate and share research findings in ways that are usable to a variety of clients and constituencies. Social workers understand the value of evidence derived from interprofessional and diverse research methods, approaches, and sources.

Measure 4A: Social workers apply research findings to inform and improve practice, policy, and programs.
Measure 4B: Social workers identify ethical, culturally informed, anti-racist, and anti-oppressive strategies that address inherent biases for use in quantitative and qualitative research methods to advance the purposes of social work.

Competency Measure Rubric (Measured from Assignment #3):

Behavior Indicator	Not competent (1)	Developing competency (2)	Competent (3)	Advanced competency (4)
4A-1: Use practice experience to improve research	Does not demonstrate ability to gather or analyze practice data to improve research.	Demonstrates some ability to gather and analyze practice data to improve research.	Demonstrates the ability to gather and analyze practice data to improve research.	Demonstrates the ability to gather and analyze practice data to significantly improve research.
4A-2: Use research to inform practice.	Does not display ability to conduct a literature review applicable to own research.	Displays some ability to conduct a literature review, but does not synthesize findings.	Conducts a thorough literature review and synthesizes findings.	Conducts a thorough literature review, synthesizes findings, and can relate this to their own research.
4B-1: Identify ethical concerns in research.	Does not demonstrate ability to identify ethical concerns in research.	Demonstrates some ability to identify ethical concerns in research.	Demonstrates the ability to identify ethical concerns in research.	Demonstrates the ability to Identify ethical concerns in research to significantly improve research.
4B-2: Conducts research in a culturally competent way that is ant-racist and anti-oppressive.	Does not demonstrate ability to conduct research in a culturally competent way that is ant-racist and anti-oppressive.	Displays some ability to conduct research in a culturally competent way that is ant-racist and anti-oppressive by acknowledging its importance.	Conducts research in a culturally competent way that is ant-racist and anti-oppressive, which impacts research findings.	Conducts research in a culturally competent way that is ant-racist and anti-oppressive, which synthesizes in findings, and can relate this to their own practice.

The CSWE rubrics scores will NOT apply to your class grade. Individual scores are NOT made public; however, you can view your individual score at the following address: https://yeshiva.tk20.com/campustoolshighered/start.do

I. LEARNING OBJECTIVES:

At the conclusion of this course, students will be able to:

1. Utilize single subject research methods to explore and promote understanding of social work practice.
2. Understand and utilize the language of social work research.
3. Show the relationship between observations, evidence, and inference.
4. Identify and formulate the critical concepts used in problem formulation.
5. Quantify interventions and outcomes.
6. Understand the relationship of single system research designs with classic social work research.
7. Understand and utilize appropriate single subject research designs.
8. Utilize data analysis techniques such as: visual analysis; autocorrelation; regression line, proportional frequency, Statistical Process Control charts(SPC); t-test, and chi-square.
9. Understand and recognize the ethical implications of research.
10. Carry out a literature search using relevant books, journals and such databases as Social Work Research and Abstracts, ProQuest, and PubMed.
11. Apply research concepts by analyzing research studies in social work and related fields.
12. Communicate successfully through written materials, visual presentations and oral presentations the concepts, processes and findings of social work practice research.

II. INSTRUCTIONAL METHODS

Learning will occur through a variety of experiences and methods such as lecture, class discussion, presentations from field experience and use of statistical analysis software.

III. COURSE EXPECTATIONS AND GRADING

Students are required to attend class and arrive on time. Students who miss 2 or more classes can receive a failing grade. Lateness will also be reflected in the final grade.

There are 3 required assignments. The assignments follow the content areas and are designed to reinforce the topic areas covered. **Papers must conform to APA academic**

style when including citations and bibliography. Plagiarism will not be tolerated. Please refer to you student handbook on school policies regarding this matter.

Texts for the Course

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* (2nd ed.). Oxford University Press. ISBN-10: 0195341880 ISBN-13: 978-0195341881 -$65.89

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. **ISBN-10:** 0197582753 **ISBN-13:** 978-0197582756
$ 49.00

Nelson, A. H., Jenkins, D., Zanti, S., Katz, M. F., Berkowitz, E., Burnett, T. C., & Culhane, D. P. (2020). *A toolkit for centering racial equity throughout data integration*. Actionable Intelligence for Social Policy, University of Pennsylvania.
https://www.aecf.org/resources/a-toolkit-for-centering-racial-equity-within-data-integration

Note: All required readings are on-line through electronic reserve (ERES). Your instructor will distribute the password and directions to access these readings.

Assignment 1 – Due Session 3 (Problem Formulation)

Read the required readings and bring in excerpts of process recordings and/or minutes or other documentation during your field work that reflects a client system's behavior you wanted to change, examples: crying, fund raising dollars, marital arguments, number of hours volunteering per week, truancy, attendance at group meeting, screaming, lateness, etc. Make a list of ten aspects of an overall behavior. Examples of depression: crying, sleeplessness, and lack of appetite, use of sad words, lack of humor, hair uncombed.

Assignment 2 – Due Session 8 (Description of Baseline)

Describe your baseline data. Be sure to include each of the following in your analysis:

- Present descriptive statistics for your baseline. Be sure to include the sample size, range of values, mean, standard deviation, and median
- Create a line graph and describe the stability of your data based on visual analysis.
- Create a one and two standard deviation band graph. Do there appear to be outliers in your data?
- Using regression, do you detect a trend in your baseline data? Report your findings.
- Is your baseline data autocorrelated? Report your findings.

Assignment 3 – Due Session 14 (Comparing Baseline to Intervention)

Describe the methods you used to evaluate your practice: what research design did you use? What indicators did you measure and how did you measure them. Be specific and include copies of scales or other instruments you may have used. Define your intervention. Why did you select this? Use scholarly literature to support your decision. Continue by

describing your intervention data. Be sure to include all the elements required for assignment #2. Then, compare your baseline data to your intervention data. Based on whether data trends or has issues of autocorrelation in either phase, choose an appropriate statistical test to conduct your analysis. Be sure to explain the rationale for conducting this test along with your findings.

For the final report weave together into a final document the results of the previous assignments and the data analyses conducted by you in the class labs using *SSDforR.*

FOR ASSIGNMENT 3, INCLUDE THE FOLLOWING:

- Abstract
- Purpose
- Methodology
- Describe your intervention
    - Describe what ethical issues you considered in selecting your intervention
    - What culturally informed, anti-racist and anti-oppressive strategies does the intervention utilize?
- Results (descriptive and inferential statistics)
- Discussions of findings
- Implications for Practice
- Limitations of the study and recommendations for further research
- References

GRADING

20%	Class Participation
15% each	Assignments 1 & 2
50%	Assignment 3

OFFICE OF DISABILITIES SERVICES (ODS) collaborates with students, faculty and staff to provide reasonable accommodations and services to students with disabilities. The purpose of reasonable academic accommodations is to assure that there is equal access to and the opportunity to benefit from your education at Wurzweiler. It is the student's responsibility to identify himself/herself to the Office of Disabilities Services (ODS) and to provide documentation of a disability. http://www.yu.edu/Student-Life/Resources-and-Services/Disability-Services/

E-RESERVES

Access full text copies of most of the "on reserve" articles for a course from your home computer. You will need Adobe Acrobat to use this service. Your professor will provide you with a password. The link for e-reserves is http://yulib002.mc.yu.edu:2262/er.php. Most of the articles mentioned in the curriculum are available on electronic reserve (E-reserves). You can access the full text articles from your home or from a university computer at no charge.

ACCESSING E-RESERVES

FROM CANVAS

1. Go to your class Canvas page.
2. Click the link "Library Resources & E-Reserves" (no password required)

FROM CAMPUS

1. If you wish to access e-reserves from the library home page (library.yu.edu),

2. Use “wurzweiler” all lower case, as the password.
3. If you have problems accessing e-reserves, email: Stephanie Gross, Electronic Reserves Librarian: gross@yu.edu or ereserves@yu.edu.

FROM OFF-CAMPUS

1. Go to the library’s online resources page: http://www.yu.edu/libraries/online_resources.asp
2. Click on E-RES; you will be prompted for your Off Campus Access Service login and password.
3. Use “wurzweiler” all lower case, as the password for all courses in all social work programs.
4. If you have problems accessing e-reserves, email: Stephanie Gross, Electronic Reserves Librarian: gross@yu.edu or ereserves@yu.edu.

USING E-RESERVES

1. Click on “Search E-RES” or on “Course Index,” and search by instructor's name, department, course name, course number, document title, or document author.
2. Click on the link to your course.
3. When the article text or book record appears on the screen, you can print, email, or save it to disk. To view documents that are in PDF format, the computer you are using must have Adobe Acrobat Reader software. You can download it FREE at www.adobe.com/products/acrobat/readstep2.html

PLAGIARISM

All written work submitted by students is to be their own. Ideas and concepts that are the work of others must be cited with proper attribution. The use of the written works of others that is submitted as one's own constitutes ***plagiarism*** and is a violation of academic standards. The School will not condone ***plagiarism*** in any form and will impose sanctions to acts of ***plagiarism***. A student who presents someone else's work as his or her own work is stealing from the authors or persons who did the original thinking and writing. ***Plagiarism*** occurs when a student directly copies another's work without citation; when a student paraphrases major aspects of another's work without citation; and when a student combines the work of different authors into a new statement without reference to those authors. It is also ***plagiarism*** to use the ideas and/or work of another student and present them as your own. It is **NOT** ***plagiarism*** to formulate your own presentation of an idea or concept as a reaction to someone else's work; however, the work to which you are reacting should be discussed and appropriately cited. If it is determined that a student has plagiarized any part of any assignment in a course, the student automatically **FAIL** the course. The student also will be placed on Academic Probation and will be referred to the Associate Dean for any additional disciplinary action which may include expulsion. A student may not submit the same paper or an assignment from another class for credit. If students or faculty are concerned that written work is indeed plagiarized, they can use the following “plagiarism checker” websites, easily accessible, and generally free on Google:
www.grammarly.com/plagiarism_checker
www.dustball.com/cs/plagiarism.checker
www.plagtracker.com
www.plagium.com/
www.plagscan.com/seesources/
www.duplichecker.com/

As a Wurzweiler student, maintaining good standing in the program is dependent on developing and maintaining high standards of ethical and professional behavior. Students are required to adhere to the Code of Ethics promulgated by the National Association of Social Workers (NASW).

HIPAA

In line with HIPAA regulations concerning protected health information, it is important that you understand that any case information you present in class or coursework will need to be de-identified. What this means is that any information that would allow another to identify the person must be changed or eliminated. This includes obvious identifiers such as names and birth dates but may also contain other information that is so unique to the person that it will allow for identification, including diagnosis, race/ethnicity or gender. If diagnosis, race/ethnicity or gender is directly related to the case presentation, it can be included if it will not allow for identification.

FERPA & OTHER UNIVERSITY POLICIES

- Wurzweiler's policies and procedures are in compliance with FERPA regulations. Information about FERPA regulations can be found here.
- Drug-Free University Policy can be found here.
- Policy Statement on Non-Discrimination, Anti-Harassment, and Complaint procedures can be found here.
- The University's Computer Guidelines can be found here.

COURSE OUTLINE

SESSION 1 - INTEGRATING EVALUATION AND PRACTICE
Learning Objectives Covered: 1, 11

Learning Themes

A. What are the basic characteristics of single-system designs

B. Connections of evaluation and practice. Comparison of classic research and single system design research

Required Readings

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. (Introductory Chapter)

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* . (2nd ed.). Oxford University Press. (Chapters 1 and 2)

Nugent, W.R. (1991). An experimental and qualitative analysis of a cognitive-behavioral intervention for anger. *Social work research & abstracts, 27*(3), 3-8.

Substance Abuse and Mental Health Services Administration (SAMHSA): *Adapting Evidence-Based*

Practices for Under-Resourced Populations. SAMHSA Publication No. PEP22-06-02-004. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2022.
https://www.dropbox.com/s/efn9dtlljiu0cow/Adapting%20Evidence-Based%20Practices%20for%20Under-Resourced%20Populations.pdf?dl=0

Suggested Readings

Byiers, B. J., Reichle, J., & Symons, F. J. (2012). Single-Subject Experimental Design for Evidence-Based Practice. *American Journal of Speech-Language Pathology*, *21*(4), 397–414.

Perdices, M., & Tate, R. L. (2009). Single-subject designs as a tool for evidence-based clinical practice: Are they unrecognised and undervalued? *Neuropsychological Rehabilitation*, *19*(6), 904–927.

Portney, L. G., & Watkins, M. P. (2008). *Foundations of Clinical Research: Applications to Practice* (3rd ed.). NJ: Prentice Hall.

Schlosser, R., & Wendt, O. (2008). Systematic reviews and meta-analyses of single-subject experimental designs (SSEDs). National Center for the Dissemination of Disability Research.

Smith, J. D. (2012). Single-case experimental designs: A systematic review of published research and current standards. *Psychological Methods*.

Thyer, B. A., & Myers, L. L. (2011). The quest for evidence-based practice: A view from the United States. *Journal of Social Work*, *11*(1), 8–25.

Thyer, B. A., & Myers, L. L. (2007). *A social worker's guide to evaluating practice outcomes*. Alexandria, VA: CSWE Press.

SESSIONS 2 & 3 - RESEARCH ETHICS
Learning Objectives Covered: 9

Learning Themes

A. Basic ethical principles

B. Culturally informed, anti-racist, and anti-oppressive strategies that address inherent biases in research methods to advance the purposes of social work.

C. Review of Cultural Humility

D. Protecting the rights of research participants

E. Our obligation to evaluate our practice

Required Readings:

Foronda, C. (2020). A theory of cultural humility. *Journal of Transcultural Nursing*, *31*(1), 7-12. https://journals.sagepub.com/doi/pdf/10.1177/1043659619875184

Gottlieb, M. (2021). The case for a cultural humility framework in social work practice. *Journal of Ethnic Cultural Diversity in Social Work*, *30*(6), 463-481.

Damian, A. J., & Gonzalez, M. (2020). Dismantling racism in research. *The Lancet*, *396*(10246), 237.

Daftary, A. (2020). Critical race theory: An effective framework for social work research. *Journal of Ethnic & Cultural Diversity in Social Work*, *29*(6), 439-454.

Kaushik, Vibha, and Christine A. Walsh. "Pragmatism as a research paradigm and its implications for social work research." *Social sciences* 8.9 (2019): 255.

Clauss-Ehlers, C. S., Chiriboga, D. A., Hunter, S. J., Roysircar, G., & Tummala-Narra, P. (2019). APA Multicultural Guidelines executive summary: Ecological approach to context, identity, and intersectionality. *American Psychologist*, *74*(2), 232.

Bourabain, D., & Verhaeghe, P. P. (2021). The conceptualization of everyday racism in research on the mental and physical health of ethnic and racial groups: a systematic review. *Journal of racial and ethnic health disparities*, *8*(3), 648-660.

Rippey-Massat C., & Lundy M. (1997). Empowering research participants. *AFFILIA Journal of Women and Social Work*, *12*(1), 33-56.

Videos:

Cultural Humility Review
https://www.dropbox.com/s/u47g39yziefkad1/Cultural%20Humility%20Review.mp4?dl=0

Suggested Readings

Brown, K. S., Kijakazi, K., Runes, C., & Turner, M. A. (2019). Confronting structural racism in research and policy analysis. *Washington, DC: Urban Institute*.

Ford, C. L., & Airhihenbuwa, C. O. (2010). Critical race theory, race equity, and public health: toward antiracism praxis. *American journal of public health*, *100*(S1), S30-S35.

Nelsen J. C. (1994). Ethics, gender and ethnicity in single-case research evaluation. *Journal of Social Service Research*, *18*(3/4), 139-52.

SESSIONS 4-6 - CONCEPTUALIZING AND MEASURING TARGET OBJECTIVES AND GOALS
Learning Objectives Covered: 2, 3, 4

Learning Themes

A. Defining practice concepts so they can be used to organize, classify, sort, and measure the observables in practice.

B. Basics of conceptualizing and measurement.

C. Asking the question: Can everything be measured?

D. Key characteristics of all measures

E. Levels of measurement

F. Introduction from general problems to specific targets of interventions

G. Guidelines from moving from vague to specific

Required Readings:

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. (Getting your Data into *SSD for R)*

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* . (2nd ed.). Oxford University Press. (Chapters 3 & 5).

Suggested Readings:

Orme, J. G., & Combs-Orme, T. (2011). *Outcome-informed evidence-based practice*. New York: Pearson.

SESSION 7 – USING ONLINE DATABASES
Learning Objectives Covered: 2, 3, 4, 10

Learning Themes

A. Developing a Measurement Plan

B. Review of the alternative measurement plans

C. Behavioral observations obtrusive and nonobtrusive

D. Individualized rating scales

E. Standardized rating scales

F. Standardized questionnaires

G. Logs

H. Selecting a measure.

Required Readings:

Bloom, Fischer & Orme. Chapter 5, Chapter 6, Chapter 7, Chapter 8, Chapter 9, Chapter 10.

Suggested Readings:

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* (2nd ed.). New York: Oxford University Press. (Chapters 2, 4 & 5)

Orme, J. G., & Combs-Orme, T. (2011). *Outcome-informed evidence-based practice*. New York: Pearson.

Practices for Under-Resourced Populations. SAMHSA Publication No. PEP22-06-02-004. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2022. https://www.dropbox.com/s/efn9dtlljiu0cow/Adapting%20Evidence-Based%20Practices%20for%20Under-Resourced%20Populations.pdf?dl=0 Chapter 3: Guidelines for Adapting Evidence-Based Practices,

SESSION 8 - CONCEPTUALIZING AND OPERATIONALIZING THE INDEPENDENT VARIABLE(S)
Learning Objectives: 2, 3, 4, 5, & 10

Learning Themes

A. Utilize understanding of measurement to conceptualize and operationalize variables.

Required Readings:

Practice texts; articles obtained during review of the literature

A. Independent variable

B. Treatment method(s) used

Magaña Sandy, & Hicks Steve School of Social Work University of Texas at Austin Culturally Tailoring Interventions for Social Work Research and Practice. https://www.cswe.org/CSWE/media/Diversity-Center/How-to-do-Cultural-Tailoring-PPT.pdf

Magaña, S., Lopez, K., Salkas, K., Iland, E., Morales, M. A., Garcia Torres, M., ... & Machalicek, W.
(2020). A randomized waitlist-control group study of a culturally tailored parent education
intervention for Latino parents of children with ASD. *Journal of Autism and Developmental Disorders*, *50*, 250-262.

SESSION 9 - SINGLE SYSTEM DESIGNS - CAUSAL RELATIONSHIPS IN PRACTICE
Learning Objective: 7

Learning Themes

A. Basics of identifying and understanding causal relationships within social work practice.

B. Understanding alternative explanations for relationships.

Required Readings:

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* . (2nd ed.). Oxford University Press. Chapters 12, (Chapters 6-11).

Auerbach, C., Schudrich, W. Z., Lawrence, C. K., Claiborne, N., & McGowan, B. G. (2013). Predicting turnover: Validating the Intent to Leave Child Welfare Scale. *Research on Social Work Practice*.

Barrera M Jr, Castro FG, Strycker LA, Toobert DJ. Cultural adaptations of behavioral health interventions: a progress report. J Consult Clin Psychol. 2013 Apr;81(2):196-205. doi: 10.1037/a0027085. Epub 2012 Jan 30. PMID: 22289132; PMCID: PMC3965302.

https://www.cswe.org/CSWE/media/Diversity-Center/How-to-do-Cultural-Tailoring-PPT.pdf

Suggested Readings:

Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2010). Single-case designs technical documentation. *What Works Clearinghouse*. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf.

Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-case intervention research design standards. *Remedial and Special Education*, *34*(1), 26–38.

Yoshioka M. R. (1999). The use of developmental research methods to design culturally competent interventions. *Journal of Multicultural Social Work, 7*(3/4), 113-128.

Bloom, Fischer, & Orme. Chapters 16-17.

SESSION 10 - VISUAL DATA ANALYSIS
Learning Objective: 8

Required Readings:

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. (Analyzing Baseline Phase Data)

Auerbach, C., & Schudrich, W. Z. (2013). SSD for R: A comprehensive statistical package to analyze single-system data. *Research on Social Work Practice*, *23*(3), 346–353.

Bloom, Fischer, & Orme. Chapters 19-20.

SESSION 11 - DESCRIPTIVE STATISTICS
Learning Objective: 8

Learning Themes

A. Use of descriptive statistics to inform and assist in decision making and practice evaluation.

Required Readings:

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. (Comparing Baseline and Intervention Phases: Visualizing Your Findings and Descriptive Statistics)

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* . (2nd ed.). Oxford University Press. (Chapters 12 & 13).

SESSIONS 12-13 - TESTS OF STATISTICAL SIGNIFICANCE FOR SINGLE-SYSTEM DESIGN
Learning Objective 8

Learning Themes

A. Use of inferential statistics to inform and assist in decision making and practice evaluation.

Required Readings:

Auerbach, C. & Zeitlin, W. (2021). *SSD for R: An R Package for Analyzing Single-System Data (* 2nd ed.). New York: Oxford University Press. (Statistical Tests of Type I Error)

Bloom, Fischer, & Orme. Chapter 22.

Suggested Readings:

Abbott-Shim, P., & Worthington, P. (2012). Why traditional statistical process control charts for attribute data should be viewed alongside an XMR-chart. *BMJ Quality & Safety*.

Auerbach, C., & Schudrich, W. Z. (2013). SSD for R: A comprehensive statistical package to analyze single-system data. *Research on Social Work Practice*, *23*(3), 346–353.

Borckardt, J. J., Nash, M. R., Hardesty, S., Herbert, J., Cooney, H., & Pelic, C. (2006). How Unusual Are the "Unusual Events" Detected by Control Chart Techniques in Healthcare Settings? *Journal for Healthcare Quality*, *28*(4), 4–9.

Orme, J. G., & Cox, M. E. (2001). Analyzing single-subject design data using statistical process control charts. *Social Work Research*, *25*(2), 115–127.

Swoboda, C. M., Kratochwill, T. R., & Levin, J. R. (2010). Conservative dual-criterion method for single-case research: A guide for visual analysis of AB, ABAB, and multiple-baseline designs. *Wisconsin Center for Education Research Working Paper No. 2010-13*. Retrieved from http://www.item.wceruw.org/publications/workingPapers/Working_Paper_No_2010_13.pdf.

SESSION 14 - COMMUNICATION OF RESEARCH CONCEPTS, AND FINDINGS

Learning Objectives 7, 12

Required Readings:

Auerbach, C. & Zeitlin, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data*. New York: Oxford University Press. (Building Support for Practice Research)

Kirk S. A., & Berger R. M. (1993) Improving research writing. *Social Work Research & Abstracts*, *29*(4), 3-4.

Suggested Reading:

Christie, D., & Menter, I. (2009). Research capacity building in teacher education: Scottish collaborative approaches. *Journal of Education for Teaching*, *35*(4), 337–354.

Epstein, I., & Blumenfield, S. (2012). *Clinical data-mining in practice-based research: Social work in hospital settings*. Routledge.

McCrystal, P., & Wilson, G. (2009). Research training and professional social work education: Developing research-minded practice. *Social Work Education*, *28*(8), 856–872.

Preskill, H., & Boyle, S. (2008). A multidisciplinary model of evaluation capacity building. *American Journal of Evaluation*, *29*(4), 443–459.

REFERENCES

Abbott-Shim, P., & Worthington, P. (2012). Why traditional statistical process control charts for attribute data should be viewed alongside an XMR-chart. *BMJ Quality & Safety*. doi:10.1136/bmjqs-2012-001324

Arnold, M. E. (2006). Developing Evaluation Capacity in Extension 4-H Field Faculty A Framework for Success. *American Journal of Evaluation*, *27*(2), 257–269.

Auerbach, C., & Schudrich, W. Z. (2013). SSD for R: A comprehensive statistical package to analyze single-system data. *Research on Social Work Practice*, *23*(3), 346–353. doi:10.1177/1049731513477213

Auerbach, C., & Zeitlin Schudrich, W. (2021). SSD for R (Version 15.23). Vienna, Austria: R Foundation for Statistical Computing. Retrieved from http://www.R-project.org/.

Baizerman, M., Compton, D. W., & Hueftle Stockdill, S. (2002). New directions for ECB. In *The art, craft, and science of evaluation capacity building* (Vol. 2002, pp. 109–120).

Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/ev.45/abstract

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *4*, 561–571.

Beckerman, A., Auerbach, C., LaPorte, H., & Johnson, P . (1998). Single case study: Workshop and Consultation. *Proceedings of the international social work conference* (pp. 139-143). Florence, Italy: New York University, Ehrenkranz School of Social Work.

Beddoe, L. (2011). Investing in the future: Social workers talk about research. *British Journal of Social Work*, *41*(3), 557–575.

Benneyan, J. C., Lloyd, R. C., & Plsek, P. E. (2003). Statistical process control as a tool for research and healthcare improvement. *Quality and Safety in Health Care*, *12*(6), 458–464. doi:10.1136/qhc.12.6.458

Berger, R. (2010). EBP Practitioners in search of evidence. *Journal of Social Work*, *10*(2), 175–191.

Bloom, M., Fischer, J., & Orme, J. G. (2009). *Evaluating practice: Guidelines for the accountable professional* (6th ed.). New York: Pearson.

Borckardt, J. J. (2008). *User's guide: Simulation Modeling Analysis: Time series analysis program for short time series data streams: Version 8.3.3.* Author.

Brossart, D. F., Parker, R. I., & Castillo, L. G. (2011). Robust regression for single-case data analysis: How can it help? *Behavior Research Methods*, *43*(3), 710–719. doi:10.3758/s13428-011-0079-7

Buck, J. A. (2011). The looming expansion and transformation of public substance abuse treatment under the Affordable Care Act. *Health Affairs*, *30*(8), 1402–1410.

Carman, J. G., & Fredericks, K. A. (2010). Evaluation Capacity and Nonprofit Organizations Is the Glass Half-Empty or Half-Full? *American Journal of Evaluation*, *31*(1), 84–104.

Chambless, D. L., Baker, M. J., Baucom, D. H., Beutler, L. E., Calhoun, K. S., Crits-Christoph, P., … Haaga, D. A. (1998). Update on empirically validated therapies, II. *Clinical Psychologist*, *51*(1), 3–16.

Choi, M., & Ruona, W. E. (2011). Individual readiness for organizational change and its implications for human resource and organization development. *Human Resource Development Review*, *10*(1), 46–73.

Christie, D., & Menter, I. (2009). Research capacity building in teacher education: Scottish collaborative approaches. *Journal of Education for Teaching*, *35*(4), 337–354.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Cole, R. D. (2002). *An examination of Washington, D.C.'s Juvenile Curfew Act of 1995: A single-system approach*. Doctoral Dissertation, Baltimore, MD.

Conboy, A., Auerbach, C., Beckerman, A., Schnall, D., & LaPorte, H. H. (2000). MSW student satisfaction with using single-system-design computer software to evaluate social work practice. *Research on Social Work Practice*, *10*(1), 127–138.

Council on Social Work Education (CSWE). (2008). *Educational policy and accreditation standards*. Alexandria, VA: Author.

Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, *94*(3), 654–677.

Epstein, I., & Blumenfield, S. (2012). *Clinical data-mining in practice-based research: Social work in hospital settings*. Routledge.

Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, *40*(5), 532–538.

Fisher, W. W., Kelley, M. E., & Lomas, J. E. (2003). Visual aids and structured criteria for improving visual inspection and interpretation of single-case designs. *Journal of Applied Behavior Analysis*, *36*(3), 387–406.

Fouché, C., & Lunt, N. (2010). Nested mentoring relationships reflections on a practice project for mentoring research capacity amongst social work practitioners. *Journal of Social Work*, *10*(4), 391–406.

Free Software Foundation, Inc. (2012). *RStudio*. Boston, MA: Author.

Gast, D. L., & Ledford, J. (2010). *Single-subject research in behavioral sciences*. New York: Routledge.

Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Thousand Oaks, CA: SAGE Publications, Inc.

Higgins, J. P. T., & Green, S. (Eds.). (2011). *Cochrane handbook for systematic reviews of interventions* (Version 5.1.0.). The Cochrane Collaboration. Retrieved from http://www.cochrane-handbook.org/

Huitema, B. E., & McKean, J. W. (1994). Two reduced-bias autocorrelation estimators: rF1 and rF2. *Perceptual and Motor Skills*, *78*(1), 323–330.

Janosky, J. E., Leininger, S. L., Hoerger, M. P., & Libkuman, T. M. (2009). *Single subject designs in biomedicine* (2009th ed.). New York: Springer.

Jindani, S. G., & Newman, C. P. (2006). Producing your own evidence for evidence-based practice. *Journal of Evidence-Based Social Work*, *3*(3-4), 115–125.

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings* (2nd ed.). New York: Oxford University Press.

Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-case intervention research design standards.

Remedial and Special Education, *34*(1), 26–38. doi:10.1177/0741932512452794

Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2010). Single-case designs technical documentation. *What Works Clearinghouse*. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf.

Krishef, C. H. (1991). *Fundamental approaches to single subject design and analysis*. Krieger Publishing Company Malabar, FL. Retrieved from http://www.getcited.org/pub/102864933

Kromrey, J. D., & Foster-Johnson, L. (1996). Determining the efficacy of intervention: The use of effect sizes for data analysis in single-subject research. *The Journal of Experimental Education*, *65*(1), 73–93.

Lenz, A. S. (2012). Calculating effect size in single-case research: A comparison of nonoverlap methods. *Measurement and Evaluation in Counseling and Development*, *46*(1), 64–73. doi:10.1177/0748175612456401

Logan, L. R., Hickman, R. R., Harris, S. R., & Heriza, C. B. (2008). Single-subject research design: Recommendations for levels of evidence and quality rating. *Developmental Medicine & Child Neurology*, *50*(2), 99–103.

Lucksted, A., McFarlane, W., Downing, D., & Dixon, L. (2012). Recent developments in family psychoeducation as an evidence-based practice. *Journal of marital and family therapy*, *38*(1), 101–121.

Lunt, N., Fouché, C., & Yates, D. (2008). *Growing research in practice (GRIP): An innovative partnership model*. Wellington, New Zealand: The Families Commission.

Ma, H.-H. (2009). The Effectiveness of Intervention on the Behavior of Individuals With Autism A Meta-Analysis Using Percentage of Data Points Exceeding the Median of Baseline Phase (PEM). *Behavior modification*, *33*(3), 339–359.

Macgowan, M. J. (2008). *A Guide to Evidence-Based Group Work*. Oxford University Press, USA.

Macgowan, M. J. (2012). A Standards-based Inventory of Foundation Competencies in Social Work with Groups. *Research on Social Work Practice*, *22*(5), 578–589. doi:10.1177/1049731512443288

Matyas, T., & Greenwood, K. (1990). Visual analysis of single-case time series: Effects of variability, serial dependence, and magnitude of intervention effects. *Journal Applied Behaviroal Analaysis*, *23*(3), 341–351.

McCrystal, P., & Wilson, G. (2009). Research training and professional social work education: Developing research-minded practice. *Social Work Education*, *28*(8), 856–872.

Mechanic, D. (2012). Seizing opportunities under the Affordable Care Act for transforming the mental and behavioral health system. *Health Affairs*, *31*(2), 376–382.

Mental Health America. (2013). Position statement 12: Evidence-based healthcare.

Retrieved June 16, 2013, from http://www.nmha.org/go/position-statements/12.

Miller, B. (n.d.). *Single-subject researach design (SSRD)*. Vancouver, British Columbia: University of British Columbia School of Rehab Sciences.

Mitra, A. (2008). Control charts for attributes. In *Fundamentals of quality control and improvement* (3rd ed., pp. 369–414). Hoboken, NJ: John Wiley & Sons, Inc.

Mohammed, M. A., & Worthington, P. (2012). Why traditional statistical process control charts for attribute data should be viewed alongside an xmr-chart. *BMJ Quality & Safety*. doi:10.1136/bmjqs-2012-001324

Morgan, D. L. (2008). *Single-Case Research Methods for the Behavioral and Health Sciences*. SAGE.

Nagler, E., Rindskopf, D. M., & Shadish, W. R. (2008). *Analyzing data from small N designs using multi-level models: A procedural handbook*. New York: The Graduate Center, CUNY.

Nathan, P. E., & Gorman, J. M. (Eds.). (2002). *A guide to treatments that work* (2nd ed.). New York: Oxford University Press.

National Association of Social Workers. (2008). *Code of ethics*. Washington, DC: Author.

Nourbakhsh, M. R., & Ottenbacher, K. J. (1994). The statistical analysis of single-subject data: A comparative examination. *Physical Therapy*, *74*(8), 768–776.

Orme, J. G. (1991). Statistical conclusion validity for single-system designs. *Social Service Review*, *65*(3), 468–491. doi:10.2307/30012410

Orme, J. G., & Combs-Orme, T. (2011). *Outcome-informed evidence-based practice*. New York: Pearson.

Orme, J. G., & Cox, M. E. (2001). Analyzing single-subject design data using statistical process control charts. *Social Work Research*, *25*(2), 115–127.

Orme, J., & Powell, J. (2008). Building research capacity in social work: process and issues. *British Journal of Social Work*, *38*(5), 988–1008.

Parker, R.I. (2006). Increased reliability for single-case research results: Is the bootstrap the answer? *Behavior Therapy*, *37*(4), 326–338. doi:10.1016/j.beth.2006.01.007

Parker, Richard I., & Hagan-Burke, S. (2007). Median-Based Overlap Analysis for Single Case Data A Second Study. *Behavior Modification*, *31*(6), 919–936. doi:10.1177/0145445507303452

Parker, Richard I., Hagan-Burke, S., & Vannest, K. (2007). Percentage of All Non-Overlapping Data (PAND) An Alternative to PND. *The Journal of Special Education*, *40*(4), 194–204. doi:10.1177/00224669070400040101

Parker, Richard I., Vannest, K. J., & Brown, L. (2009). The improvement rate difference for single-case research. *Exceptional Children*, *75*(2), 135–150.

Parker, Richard I., Vannest, K. J., & Davis, J. L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behavior Modification*, *35*(4), 303–322.

Patient Protection and Affordable Care Act. , 42 USC (2010). Retrieved from http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf

Polit, D. F., & Chaboyer, W. (2012). Statistical process control in nursing research. *Research in Nursing & Health*, *35*(1), 82–93. doi:10.1002/nur.20467

Portney, L. G., & Watkins, M. P. (2008). *Foundations of Clinical Research: Applications to Practice* (3rd ed.). NJ: Prentice Hall.

Preskill, H., & Boyle, S. (2008). A multidisciplinary model of evaluation capacity building. *American Journal of Evaluation*, *29*(4), 443–459.

R Core Team. (2013). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from http://www.R-project.org/.

Reineck, L. A., & Kahn, J. M. (2013). Quality Measurement in the Affordable Care Act: A Reaffirmed Commitment to Value in Health Care. *American journal of respiratory and critical care medicine*, *187*(10), 1038–1039.

Rock, B. D., Auerbach, C., Kaminsky, P., & Goldstein, M. (1993). Integration of computer and social work culture: A developmental model. In B. Glastonbury (Ed.), *Human welfare and technology: Papers from the Husita 3 Conference on IT and the quality of life and services*. Maastricht, The Netherlands: Van Gorcum, Assen.

Rock, B. D., & Cooper, M. (2000). Social work in primary care. *Social Work in Health Care*, *31*(1), 1–17.

Schlosser, R., & Wendt, O. (2008). Systematic reviews and meta-analyses of single-subject experimental designs (SSEDs). National Center for the Dissemination of Disability Research.

Schudrich, W. (2012). Implementing a modified version of Parent Management Training (PMT) with an intellectually disabled client in a special education setting. *Journal of Evidence-Based Social Work*, *9*(5), 421–423.

Scruggs, T. E., & Mastropieri, M. A. (1998). Summarizing single-subject research issues and applications. *Behavior Modification*, *22*(3), 221–242. doi:10.1177/01454455980223001

Scruggs, T. E., & Mastropieri, M. A. (2012). PND at 25: Past, Present, and Future Trends in Summarizing Single-Subject Research. *Remedial and Special Education*. doi:10.1177/0741932512440730

Scruggs, T. E., & Mastropieri, M. A. (2013). PND at 25 Past, Present, and Future Trends in Summarizing Single-Subject Research. *Remedial and Special Education*, *34*(1), 9–19. doi:10.1177/0741932512440730

Shaw, I. (2005). Practitioner research: evidence or critique? *British Journal of Social Work*, *35*(8), 1231–1248.

Shaw, I. (2011). *Evaluating in practice* (2nd ed.). Burlington, VT: Ashgate.

Smith, I. R., Garlick, B., Gardner, M. A., Brighouse, R. D., Foster, K. A., & Rivers, J. T. (n.d.). Use of Graphical Statistical Process Control Tools to Monitor and Improve Outcomes in Cardiac Surgery. *Heart, Lung and Circulation*. doi:10.1016/j.hlc.2012.08.060

Smith, J. D. (2012). Single-case experimental designs: A systematic review of published research and current standards. *Psychological Methods*. Retrieved from http://psycnet.apa.org/psycinfo/2012-20361-001/

Stewart, K. K., Carr, J. E., Brandt, C. W., & McHenry, M. M. (2007). An Evaluation of the Conservative Dual-criterion Method for Teaching University Students to Visually Inspect Ab-design Graphs. *Journal of Applied Behavior Analysis*, *40*(4), 713–718. doi:10.1901/jaba.2007.713-718

Swoboda, C. M., Kratochwill, T. R., & Levin, J. R. (2010). Conservative dual-criterion method for single-case research: A guide for visual analysis of AB, ABAB, and multiple-baseline designs. *Wisconsin Center for Education Research Working Paper No. 2010-13*. Retrieved from http://www.item.wceruw.org/publications/workingPapers/Working_Paper_No_2010_13.pdf

Tasdemir, A. (2012). Effect of autocorrelation on the process control charts in monitoring of a coal washing plant. *Physicochemical Problems of Minereral Processing*, *48*(2), 495–512.

The R Project for Statistical Computing. (n.d.). *What is R?* Retrieved from http://www.r-project.org/about.html.

Thombs, B. D., Ziegelstein, R. C., Beck, C. A., & Pilote, L. (2008). A general factor model for the Beck Depression Inventory-II: Validation in a sample of patients hospitalized with acute myocardial infarction. *Journal of Psychosomatic Research*. Retrieved from http://psycnet.apa.org/psycinfo/2008-10640-008

Thyer, B. A., & Myers, L. L. (2011). The quest for evidence-based practice: A view from the United States. *Journal of Social Work*, *11*(1), 8–25.

Vannest, K. J., Davis, J. L., & Parker, R. I. (2013). *A new approach to single case research*. New York: Routledge.

Verzani, J. (2004). *Using R for Introductory Statistics* (1st ed.). Chapman and Hall/CRC.

Volkov, B. B., & King, J. A. (2007). *A checklist for building organizational evaluation capacity*. Retrieved from http://www.wmich.edu/evalctr/archive_checklists/ecb.pdf

Weisberg, S., & Fox, J. (2010). *An R companion to applied regression* (2nd ed.). Thousand Oaks, CA: Sage Publications, Incorporated.

Wendt, O. (2009). Calculating effect sizes for single-subject experimental designs: An overview and comparison. Presented at the The Ninth Annual Campbell Collaboration Colloquium, Oslo, Norway.

Wheeler, D. J. (2004). *Advanced Topics in Statistical Process Control: The Power of Shewhart's Charts* (2nd ed.). Knoxville, Tennessee: SPC Press.

Woodall, W. H. (2006). The use of control charts in health-care and public-health surveillance. *Journal of Quality Technology*, *38*(2), 89–104.