SOCIAL WORK PRACTICE AND EVALUATION RESEARCH
SWK 6401
Spring 2020

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.

COURSE COMPETENCY OUTCOMES:

At the completion of the course, students will be able to:

1. Use practice experience to inform scientific inquiry (CSWE Competency 4A)
2. Use research evidence to inform practice (CSWE Competency 4B)

LEARNING OBJECTIVES:

At the conclusion of this course, students will demonstrate the ability 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.

PLAGIARISM
Students should remember that the School will not condone plagiarism in any form and will sanction 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. Any student who can be shown to have plagiarized any part of any assignment in this course will automatically **FAIL** the course and will be referred to the Associate Dean for disciplinary action that may include expulsion.

HIPAA ALERT
In line with the new HIPAA regulations concerning protected health information, it is important that you understand that any case information you present from your work, will need to be de-identified. What this means is that any information that would allow another to identify the person needs to be changed or eliminated. This includes obvious things like 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.

CONFIDENTIALITY
Given the nature of classroom discussion and the presentation of case materials and at times personal revelation in class, students are reminded that the same commitment to confidentiality with clients extends to classmates. What is shared in class stays in class.

STUDENTS WITH DISABILITIES
Students with disabilities who are enrolled in this course and who will be requesting documented disability-related accommodations are asked to make an appointment with the Office of Disability Services, Rochelle Kohn, Beren Campus, *917-326-4828, rkohn1@yu.edu*, Abby Kelsen, Wilf Campus, *646-685-0118, akelsen@yu.edu*, during the first week of class. After approval for accommodations is granted, please submit

your accommodations letter to Disability Services Office immediately.

E-RES (Electronic Reserve)
Most of the articles mentioned in the curriculum are available on electronic reserve [**E-RES**]. You can access the full text articles from your home or from a university computer at no charge.

How do I Use E-RES?

1.   Go to the library's online resources page: **http://www.yu.edu/libraries/online_resources.asp**

2.   Click on E-RES. If you are off-campus, at this point you will be prompted for your Off Campus Access Service login and password.

3.   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. [all research courses will be listed under **Auerbach**, the sequence chair]

4.   Click on the link to your course.

5.   Enter the password given to you by your instructor.

6.   Locate and click on the item you wish to view. Titles beginning with "A", "An", or "The" are alphabetized under "A" and "T" respectively.

7.   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**

BASIC TEXT

All required and recommended texts are on reserve in the library, and required articles as well as suggested readings can be found on E-RESERVE. The E-RES password will be given to students at the beginning of 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 -$ 100.71

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

COURSE REQUIREMENTS

A. 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.

B. **Assignments**

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.**

Assignment 1 – 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.
Due session 3 - Learning Objectives 3,4

Assignment 2 – 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.

Due Session 8 - Learning objectives 5, 6, 7, 10, 11, 12

Assignment 3 – 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*.
Due Session 14 - Learning objectives 7, 8, 9, 10, 11, 12. (CSWE Competencies 4A, 4B)

FOR ASSIGNMENT 3, INCLUDE THE FOLLOWING:
- Abstract
- Purpose
- Methodology
- Results (descriptive and inferential statistics)

- Discussions of findings
- Implications for Practice
- Limitations of the study and recommendations for further research
- References

C. Grading

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

COURSE OUTLINE

SESSION 1 - INTEGRATING EVALUATION AND PRACTICE

Learning Objective 1, 11

- What are the basic characteristics of single-system designs
- Connections of evaluation and practice. Comparison of classic research and single system design research

Required Readings

Auerbach, C. & Schudrich, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data*. 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.

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.

SESSION 2 - RESEARCH ETHICS

Learning Objective: 9

- Basic ethical principals of research
- Protecting the rights of research participants
- Our obligation to evaluate our practice

Required Readings:

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

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

SESSIONS 3-6 - CONCEPTUALIZING AND MEASURING TARGET AND OBJECTIVES/GOALS

Learning Objectives: 2, 3, 4

- Defining practice concepts so they can be used to organize, classify, sort, and measure the observables in practice.
- Basics of conceptualizing and measurement
- Can everything be measured
- Key characteristics of all measures
- Levels of measurement
- Introduction from general problems to specific targets of interventions
- Guidelines from moving from vague to specific

Required Readings:
Auerbach, C. & Schudrich, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data*. 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: 2, 3, 4, & 10.

- Developing a Measurement Plan
- Review of the alternative measurement plans:
- Behavioral observations obtrusive and nonobstrusive

- Individualized rating scales
- Standardized rating scales
- Standardized questionnaires
- Logs
- Selecting a measure.

Required 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)

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

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

SESSION 8 - CONCEPTUALIZING AND OPERATIONALIZING THE INDEPENDENT VARIABLE(S)

READINGS: Practice texts; articles obtained during review of the literature

Learning Objectives: 2, 3, 4, 5, & 10

- Independent variable
- Treatment method(s) used

SESSION 9 - SINGLE SYSTEM DESIGNS - CAUSAL RELATIONSHIPS IN PRACTICE

Learning Objective: 7

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*.

Suggested Readings:
Bloom, Fischer, & Orme. Chapters 16-17.

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.

SESSION 10 - VISUAL DATA ANALYSIS

Learning Objective: 8

Required Readings:
Auerbach, C. & Schudrich, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data.* 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.
Suggested Readings:

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

SESSION 11 - DESCRIPTIVE STATISTICS

Learning Objective: 8

Required Readings:
Auerbach, C. & Schudrich, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data.* 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

Required Readings:
Auerbach, C. & Schudrich, W. (2014). *SSD for R: An R Package for Analyzing Single-System Data.* New York: Oxford University Press. (Statistical Tests of Type I Error)

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.

Bloom, Fischer, & Orme. Chapter 22.

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. & Schudrich, 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. (2013). SSD for R (Version 1.1). 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.

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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

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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.

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