University of Toronto Faculty of Social Work



Winter 2008 Course Coordinator: Aron Shlonsky

Instructors: Tahany Gadalla Barbara Fallon Esme Fuller-Thomson Aron Shlonsky

Direct url for the course on Blackboard is: <u>http://portal.utoronto.ca</u>

Research for Evidence Based Social Work Practice SWK 4510H

Overview

Evidence Based Social Work Practice (EBSWP) is a systematic approach to making decisions that emphasizes (1) formulating answerable questions, (2) locating, critically appraising and interpreting the relevant research evidence, (3) applying best available evidence in consultation with clients, and (4) evaluating the intervention. Using a problem-based learning model, students evaluate and interpret the best available evidence relating to a number of social work policy and practice questions. Supported by a series of research methods tutorials, students develop an understanding of some of basic quantitative and qualitative research designs and methods appropriate for answering policy and practice questions. In appraising the evidence and crafting solutions to questions, students will examine the data from a scientific viewpoint and will also consider the extent to which the research findings can be applied to diverse populations.

Rationale and Significance

Evidence based practice has been defined as:

"The conscientious, explicit and judicious use of current best evidence in making decisions regarding the welfare of those in need of social services." (Sackett et al., 1996, p. 71)

Evidence based practice has become prominent in the field of social work with the rapid expansion of available research knowledge relevant to social service interventions and ways to access this knowledge. The international movement towards evidence based social work follows a similar movement in medicine which began in the 1970s when clinical medicine became concerned that much of its practice was conducted without knowledge of the latest and best research evidence. It is important to note, what is new about EBSWP is not the *idea* of evaluating practice, but the systematic way in which evidence is gathered, the seriousness with

which research quality is now being pursued, and the way in which research evidence is translated into service delivery.

The fundamental purpose of this course is to involve students *in* evidence based practice rather then merely to teach them *about* it. Classes will focus on the process of posing questions and then identifying, critically appraising, interpreting and applying evidence in order to help guide social work policy and practice. Using this model, students will evaluate and interpret the best evidence available for answering practice and policy questions. This model supports the FSWs mission to emphasize the integration of research and practice and aims to facilitate the transition from student to practitioner/policy-maker by engaging students in the day-to-day challenges of decision-making and responding to problems.

Educational Philosophy

This course adopts a problem-based learning approach. Problem-based learning centers on the discussion and learning that emanates from a practical problem. It encourages independent learning and provides practice in tackling puzzling situations. It is a way of learning that encourages a deeper understanding of the material than is possible through rote learning. The small-group setting used in problem-based learning also encourages an inquisitive and detailed look at all of the issues, concepts and principles contained within a problem. The time spent outside the group setting facilitates the development of skills such as literature retrieval, critical appraisal of available information and input from peers and specialists. *Importantly, problembased learning encourages students to become more involved in, and responsible for, their own learning*.

Goals

The goals for students in this course are to:

- Learn about evidence-based practice and develop skills to generate informed strategies for dealing with social work practice and policy questions,
- Develop teamwork skills in the resolution of these questions,
- Promote an interest in and respect for research evidence and to provide an alternative to 'authority based' practice, and
- Develop understanding of the appropriate research methods required for evaluating and interpreting the available evidence.

Student Learning Outcomes

Upon completion of this course, students will be better equipped to:

- Apply research evidence to social work practice and policy questions,
- Formulate clearly stated, answerable questions,
- Locate research evidence to answer these questions by searching the literature through appropriate databases,
- Critically appraise quantitative research designs and methods for answering different types of practice and policy questions,
- Integrate findings from systematic reviews and meta analyses,
- Interpret the evidence, including its clinical and policy significance and generate evidence based solutions to social work problems,
- Consider how to apply such evidence

• Consider how to evaluate the outcomes of whatever action is taken.

Learning Environment

We have a responsibility, as professional social workers, to treat one another with respect, even if we do not agree with another's viewpoint. But respect does not mean agreement. It must be recognized that having core values challenged, even respectfully, may be an unsettling experience, but it is an integral part of learning. Therefore, we must challenge the ideas people present, rather than attack the person who presents the ideas. In all discussions, mutual respect and consideration for each other and our right to express ideas are paramount and are essential for fostering a safe and stimulating classroom environment. However, we must ensure, not assume, that respect for one another exists within the Faculty of Social Work. Furthermore, it is important for all of us to safely incorporate diversity, in its many aspects, within the course work and class discussions. If students feel unsafe or disrespected, please make it known to the instructor so that a healthy, vibrant learning environment can be maintained.

Expectations of Students

Students are expected to be familiar with all University and Faculty of Social Work policies concerning academic performance (e.g., academic misconduct, late submission of assignments, etc.) and academic integrity. Please refer to the MSW Student Handbook <u>http://www.socialwork.utoronto.ca/mswprogram/handbook/index.html</u> or the University's Code on Behaviour and Academic Matters <u>http://www.utoronto.ca/govenel/pap/policies/behaveac.pdf</u> for detailed information regarding academic policies and integrity.

Students in graduate studies are expected to commit to the highest standards of integrity, and to understand the importance of protecting and acknowledging intellectual property. It is assumed that they bring to their graduate studies a clear understanding of how to cite references appropriately, thereby avoiding plagiarism. The student's thinking must be understood as distinct from the sources upon which the student is referring. Two excellent documents entitled How Not to Plagiarize <u>http://www.utoronto.ca/writing/plagsep.html</u> and the Code on Behaviour and Academic Matters are available for you to review on the FSW website *or* at <u>http://www.sgs.utoronto.ca</u>.

Organization of Course

Classes will be three hours long with a 10-minute break. Class will provide a brief overview of quantitative and qualitative research methods but the main focus will be on the application of these methods in the context of evidence-based social work practice. The small group setting will include a combination of group exercises as well as consultation for students' practicum-based projects. Group exercises will follow structured questions focusing on evaluating and interpreting evidence from the assigned readings, incorporating evidence into decision-making and linking to implications for policy and practice.

In order to successfully complete this course, all students are expected to have a foundational understanding of social science research methods. The weekly lectures are designed to review methods relevant to the research being evaluated in the small group setting.

Course Schedule

Week	Topic and Activities	Readings
WEEK 1	LECTURE:	• Rubin & Babbie, Chapter 1 (5 th ed), Chapter 1 & 2 (6 th ed.)
Tues. Jan. 8	Introduction to evidence based practice	Gambrill, Evidence based practice
	LEARNING ACTIVITIES:	• McNeill, Evidence-based practice in an age of relativism
	Class introductions, overview and course organization	
WEEK 2	LECTURE:	 Gibbs, Evidence-based practice for the helping professions
Tues. Jan. 15	Asking answerable questions	
	LEARNING ACTIVITIES:	
	EBSWP example	
WEEK 3	LECTURE:	• An introduction to searching electronic databases (U Waterloo)
Tues. Jan. 22	Locating research literature	 Introduction to database search skills (U Glasgow)
	LEARNING ACTIVITIES:	• The Cochrane Collaboration (homepage & manual)
	Locating research literature demonstration	• The Campbell Collaboration (homepage & guidelines)
	This class will be held in a OISE computer lab $(3^{RD} floor)$	
	<i>OISE, Room 320, labs 4 and 5)</i>	
WEEK 4	LECTURE:	• Rubin & Babbie, Chapter 6 & 7 (5 th ed.), Chapter 8 (6 th ed.)
Tues. Jan. 29	Measurement	
	LEARNING ACTIVITIES:	
	Application & critique	
WEEK 5	LECTURE:	• Rubin & Babbie, Chapter 10 (5 th ed.), Chapter 10 (6 th ed.)
Tues. Feb. 5	Experimental design	
	LEARNING ACTIVITIES:	
	Application & critique	
WEEK 6	LECTURE:	• Rubin & Babbie, Chapter 11 (5 th ed), Chapter 11 (6 th ed.)
Tues. Feb 12	Quasi-experimental design	
	LEARNING ACTIVITIES:	
	Application & critique	
	Draft EBSWP Project Paper Due	
READING	No class	
WEEK		
Tues. Feb 19		

WEEK 7	LECTURE:	• Rubin & Babbie, Chapter 8 (5 th ed.), Chapter 5 (6 th ed.)
Tues. Feb 26	Sampling for quantitative and qualitative studies	
	LEARNING ACTIVITIES:	
	Application & critique	
WEEK 8	LECTURE:	Critical Review Form – Qualitative Studies
Tues. Mar. 4	Qualitative data collection and data analysis	 Guidelines for Critical Review Form – Qualitative Studies
	LEARNING ACTIVITIES:	• Please have read Ted McNeill's Fathers' Experience of
	TBA	Parenting a Child With Juvenile Rheumatoid Arthritis
	Exercise # 1 - Experimental Design Due	
WEEK 9	LECTURE:	• Rubin & Babbie, Chapter 9 (5 th ed.), Chapter 15 (6 th ed.)
Tues. Mar. 11	Survey design	
	LEARNING ACTIVITIES:	
	Application & critique	
WEEK 10	LECTURE:	• Rubin & Babbie, Chapter 18 & 19 (5 th ed.), Chapter 20 (6 th ed.)
Tues. Mar. 18	Descriptive statistics	• Rubin & Babble, Chapter 18 & 17 (5 \cdot Cu.), Chapter 20 (6 \cdot Cu.)
Tues. Mar. 10	LEARNING ACTIVITIES:	
	TBA	
	Exercise #2– Qualitative Research Critical Review Due	
WEEK 11	LECTURE:	• Rubin & Babbie, Chapter 20 & 21 (5 th ed.), Chapter 21 & 22
Tues. Mar. 25	Inferential statistics - effect sizes, number needed to treat,	$(6^{\text{th}} \text{ ed.})$
1405.10141.20	power and meta-analyses	• Supplemental hand-outs on statistical power and effect size
	LEARNING ACTIVITIES:	
	TBA	
WEEK 12	LECTURE:	• Rubin & Babbie, Chapter 12 (5 th & 6 th ed.)
Tues. April 1	Applying evidence and evaluating effectiveness	
	LEARNING ACTIVITIES:	
	Working through an EBSWP example	
WEEK 13	NO LECTURE	
April 8	LEARNING ACTIVITIES:	
	One-on-one consultation on students' projects	
	EBSWP Project Paper Due by 5p.m. April 15, 2008	

Assignments

Assignment Overview

Exercises (30%)
 Two exercises, worth 15% each
 Exercise #1 – Experimental Design
 Due at the beginning of your class on March 4, 2008
 Exercise #2 – Qualitative Research Critical Review
 Due at the beginning of your class on March 18, 2007

2. Draft EBSWP Project Paper - Practice Question, Search Strategy and Article Selection (15%)

The purpose of submitting a draft of the first sections of the research summary is to provide students with preliminary feedback on their EBSWP assignment. Grading will be based on the following requirements: formulation of practice question, description of the search strategy, and selection of the four 'best' articles that will be critically appraised in the EBSWP assignment. Please also include working bibliography, printed search history from the databases and selected abstracts of rejected articles with your rationale for inclusion and exclusion of articles. **Due at the beginning of your class on February 12, 2008**

3. EBSWP Project Paper (55%)

Using a practice or policy question relevant to their practicum, each student will complete an EBSWP review that includes the following: providing a detailed case study, providing a concise, but solid, literature review of the area, formulating the question, systematically searching published research relevant to the practice question, evaluating relevant studies, interpreting evidence, applying the evidence to the question, and developing an implementation and evaluation plan for a particular client or community. As well, the paper should be written using APA format, with an APA bibliography for all references including the selected studies. **Due before 5 pm on April 15, 2008**

All assignments handed in after the due date will be penalized by 4% per day. Any request for an extension must be made in writing before the assignment's due date and must be accompanied by the appropriate documentation.

Please see appended 'Detailed Description of Assignments'.

Required Readings

Course Text (you can select either edition):

Rubin, A. & Babbie, E. (2008). *Research Methods for Social Work*, 6th edition. Belmont CA: Wadsworth/Thompson Learning.

Rubin, A. & Babbie, E. (2005). *Research Methods for Social Work*, 5th edition. Belmont, CA: Wadsworth/Thompson Learning.

Articles (restricted links are posted on the course website)

Gambrill, E. (1999). Evidence-based practice: An alternative to authority-based practice. *Families in Society*, *80*(4), pp. 341-351.

Gibbs, L. E. (2003). *Evidence-based practice for the helping professions: A practical guide with integrated multimedia*. (Adaptation from Chapter 3). Pacific Grove, CA: Brooks/Cole-Thomson Learning.

McNeill, T. (2004). Fathers' Experience of Parenting a Child With Juvenile Rheumatoid Arthritis. *Qualitative Health Research, Vol. 14* (4), pp. 526-545.

McNeill, T. (2006). Evidence-based practice in an age of relativism: Toward a model for practice." *Social Work, 51*(2), pp. 147-157.

Websites (links are also posted on course website)

Introduction to searching electronic data bases http://library.uwaterloo.ca/~dhmorton/ht16/introsrch_all.html

Introduction to database search skills http://www.lib.gla.ac.uk/Docs/Guides/searching.html

The Cochrane Collaboration for evidence based medicine Homepage <u>http://www.cochrane.org/index0.htm</u> Manual <u>http://www.cochrane.org/admin/manual.htm</u>

The Campbell Collaboration for evidence based community services Homepage <u>http://www.campbellcollaboration.org/</u> Guidelines <u>http://www.campbellcollaboration.org/Fraguidelines.html</u>

Critical Review Form – Qualitative Studies Form <u>http://www-fhs.mcmaster.ca/rehab/ebp/pdf/qualreview.pdf</u> Guidelines <u>http://www-fhs.mcmaster.ca/rehab/ebp/pdf/qualguidelines.pdf</u>

And any additional readings as assigned by the instructor

Supplementary Readings

The following supplementary readings are suggested.

Barber, J. G. (1996). Science and social work: Are they compatible? *Research on Social Work Practice*, *6*, 379-388.

Becker, H. S. (2002). Visual evidence: A seventh man, the specified generalization, and the work of the reader. *Visual Studies*, *17*(1), 3-11.

Becker, R. M. (1995). The decision matrix on trial: The OJ Simpson analogy. In *Social Research Methods* [On-line]. Available: http://www.socialresearchmethods.net/OJtrial/ojhome.htm

Bloom, M., Fischer, J. & Orme, J. (2003). *Evaluating practice: Guidelines for the accountable professional*. Boston: Allyn and Bacon.

Corcoran, K. & Fischer, J. (2000). *Measures for clinical practice: A sourcebook* (Vols. 1-2). New York: The Free Press.

Gambrill, E. (2001). Social work: An authority-based profession. *Research on Social Work Practice*, 11, 166-175.

Gibbs, L. E. (2003). *Evidence-based practice for the helping professions*. PacificGrove, CA: Brooks/Cole-Thomson.

Gibbs, L. E., & Gambrill, E. (2002). Evidence-based practice: Counterarguments to objections. *Research on Social Work Practice*, *12*, 452-476.

Gray, J. A. M. (2001). The origins of evidence-based practice. In A. Edwards, & G. Elwyn (Eds.), *Evidence-Informed Client Choice* (pp. 19-33). New York: Oxford University Press.

Greenhalgh, T. (1997). How to read a paper: The medline database. *British Medical Journal*, 615, 180-183.

Hamill, R., Nisbett, R. E., & Wilson, T. D. (1980). Insensitivity to sample bias: Generalizing from atypical cases. *Journal of Personality and Social Psychology*, *39*, 578-589.

Neuman, W. L., & Krueger, L. W. (2003). Social work research methods: Qualitative and quantitative applications. Boston: Allyn and Bacon.

Oxman, A. D., & Guyatt, G. H. (1993). The science of reviewing research. In K. S. Warren, & F. Mosteller (Eds.). *Doing more good than harm: The Evaluation of health care interventions* (pp. 125-133). New York: New York Academy of Sciences.

Reid, W. J. (1997). Evaluating the dodo's verdict: Do all interventions have equivalent outcomes? *Social Work Research*, 21, 5-16.

Reid, W. J. (2001). The role of science in social work: The perennial debate. *Journal of Social Work*, *1*, 273-293.

Rosen, A. (1994). Knowledge use in direct practice. Social Service Review, 68, 561-577.

Sackett, D. L., Straus, S. E., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (2000). *Evidence-based medicine: How to practice and teach EBM* (2nd ed.). Edinburgh: Churchill Livingston.

Sheldon, B. (2001). The validity of evidence based practice in social work: A reply to Stephen Webb. *British Journal of Social Work, 31*, 801-809.

Thompson, P. (2000). *Evidence: The voice of the past* (3rd ed.). Oxford: Oxford University Press.

Trochim, W. M. *The Research methods knowledge base*, 2nd Edition. [On-line]. Available: <u>http://trochim.human.cornell.edu/kb/index.htm</u> (note section on statistical power)

Westerfelt, A., & Dietz, T. J. (1997). *Planning and conducting agency-based research:* A workbook for social work students in field placements. New York: Longman.

Appendix: Detailed Description of Assignments

Exercise #1 - Experimental Design

Develop your own *viable* experimental or quasi-experimental study to evaluate the effectiveness of an intervention. Your study design should include a PICO question that is related to the PICO question you choose for your final assignment.

Prepare a three-page answer to the following questions:

- 1. What is the PICO effectiveness question that you will address in your study?
- 2. Which experimental or quasi-experimental research design is best suited to answer your question? *Specify* the particular experimental or quasi-experimental design that you would use and include a diagram (see Rubin & Babbie) to illustrate this design.
- 3. Who will your research participants be? How will you recruit them? From where? *Identify* criteria for inclusion and exclusion from your study. What population can your study findings be generalized to?
- 4. *Describe* two threats to internal validity in your study and explain how your design controls for them. *Describe* two threats to internal validity that your design does not control for and explain how you would minimize their potential impact on your study.

<u>Note</u>: Your answer should be typed, double-spaced, in a 12 point Times New Roman font, with 1 inch margins.

If you have questions about this exercise, please contact your instructor.

Due at the beginning of your class on March 4, 2008 (Exercise worth 15%)

All exercises handed in after the due date will be penalized by 4% per day. Any request for an extension must be made in writing before the exercise's due date and must be accompanied by the appropriate documentation.

Exercise #2– Qualitative Research Critical Review

Complete the following:

1. *Apply* the Saini (2006) Qualitative Rigor Criteria Short Form to the following qualitative study:

Watson, K.C., Kieckhefer, G. M., & Olshanky, E. (2006). Striving for Therapeutic Relationships: Parent-Provider Communication in the Development Treatment Setting. *Qualitative Health Research, Vol 16* (5), 647-663.

2. Be sure to *comment* on at least three ways you could make this study more culturally appropriate if the parents were immigrants from mainland China (See Rubin & Babbie, Chapter 16). Maximum length: 1 page.

<u>Note</u>: Indicate the related article page number for each identified answer, as well identify on the article itself, where you found the answer to each question. Please fill out the form legibly and in sentence format. If you decide to type your answers, please keep responses within 3 pages, double-spaced, in a 12 point Times New Roman font, with 1 inch margins.

If you have questions about this exercise, please contact your instructor.

Due at the beginning of your class on March 18, 2007 (Exercise worth 15%)

All exercises handed in after the due date will be penalized by 4% per day. Any request for an extension must be made in writing before the exercise's due date and must be accompanied by the appropriate documentation.

Draft of Final Project: EBSWP Project Paper

The purpose of submitting a draft of the first sections of the research summary is to provide students with preliminary feedback on their EBSWP assignment.

Prepare a four-page answer to the following questions:

- Present a detailed case study (1 to 1.5 pages)
- Identify and describe how you formulated your practice question (PICO question).
- Describe your search strategy (i.e. inclusion/exclusion criteria, databases searched, key words used, and number of citations found).
- Describe how you selected your four 'best' articles that will be critically appraised in the EBSWP assignment. What is your rationale for your selection? Try to select 4 experimental or quasi-experimental designs (versus meta-analyses, qualitative or survey designs). Provide a summary of the number of articles rejected and reasons for rejection.

Please also include the following components:

- Working bibliography
- Printed search history from your databases
- Selected abstracts of rejected articles

<u>Note</u>: Answers must be presented in sentence format. Your answer should be typed, doublespaced, in a 12 point Times New Roman font, with 1 inch margins. Please append your four articles to your exercise. Your articles will be returned to you with the marked draft assignment.

If you have questions about this assignment, please contact your instructor.

Due at the beginning of your class on February 12, 2008 (Assignment worth 15%)

All assignments handed in after the due date will be penalized by 4% per day. Any request for an extension must be made in writing before the assignment's due date and must be accompanied by the appropriate documentation.

Final Assignment: EBSWP Project Paper

Part A: Problem Formulation (400-500 words, 10%)

Introduce the Practice Problem

- Provide a description of a practice or policy problem you confronted in your practicum. Describe your client/client group. Describe your client's problem. Describe your role in intervening in this client's problem (i.e. within context of practice).
- Provide relevant background for your client/client group (e.g. age, gender, cultural and socio-economic background, etc.).
- Provide relevant background for your client/client group's problem (e.g. a *brief* introduction to ADD with references).

Identify your 'PICO Question'

- Choose *one* PICO question. Ensure it is an 'effectiveness question'.
- Identify the *four* key elements of your question according to 'Gibbs' Schema'. Use a 'Question Classification Table'. Ensure that you make the link between your question and your case objective.
- *Briefly* describe the most appropriate research design to answer your question.

Part B: Search Strategy (250 – 500 words, 10%)

Describe your Search Strategy

- Identify the inclusion and exclusion criteria
- How did you identify your literature? Which databases did you select? Why? How many citations did you retrieve? Justify your search strategy (e.g. Why did you use the MOLE 'random*'?).
- Include as an appendix a table showing your precise search strategy including the order of the 'MOLES' search terms.
- Append your 4 articles.

Part C: Review Tables (1 page per study, 30%)

The Review Table

- Choose the *best four* articles you found and complete data extraction of relevant information of the four best articles in a table format (please see sample table below)
- This section should be logically organized, appropriate length, and concise. In addition, terms/short-forms should be understandable.
- Each table should include the following information:
 - ID, Purpose/research question/intervention, Method, Sample/sampling frame, Measures, Results, Effect sizes, Methodological strengths and weaknesses, QSRF scores

Study	Intervention	Research	Measure(s)	Results	Strengths
Citation		Design			&
&		&			Weaknesses
Research		Sample			
Question		_			
Study 1				-include	-include
•••				ES1/NNT	QSRF
Study 4					score

Part D: Critical Appraisal (800-1000 words, 30%)

Critical Appraisal

- Complete the QSRF for each of the four best articles to appraise the evidence.
- Compare and contrast the most important methodological strengths of 4 studies and how these impact your confidence in the conclusions of the different studies
- Compare and contrast the most important methodological weaknesses of the 4 studies
- Judgment re: potential for bias & direction of impact
- Be sure to comment on these strengths and weakness in the context of relative effect sizes and/or NNT
- Relate appraisal to the research question & implications for practice
- Taking account of your effect sizes and methodological limitations, tell your reader what you can confidently conclude on the basis of this evidence.

Part E: Implementation & Evaluation Plan (500 – 750 words, 15%)

- What will you do with this information? What is your clinical judgment? Why? How will you involve your client in your action plan?
- Please note: This is the point where the issue of client diversity becomes crucial. Bear in mind that your client is almost certain to be different from the individuals in the studies you reviewed. How is your client different? What is the possible relevance of this difference in your case?
- Even if you decide the intervention in your PICO is not effective, please tell us how you would evaluate any intervention with your client.
- How will you know if you have succeeded (i.e., what is your outcome measure?) Which single system design will you use? How will you put this in place?
- Provide a *one-paragraph* summary of your case and recommendation(s) for intervention.

<u>References</u> (5%)

• Provide an APA formatted reference list for all references and selected articles.

<u>Note</u>: Answers must be presented in sentence format. Your answer should be typed, double-spaced, in a 12 point Times New Roman font, with 1 inch margins.

If you have questions about this assignment, please contact your instructor.

Due before 5 pm on April 15, 2008 (Assignment worth 55%)

All assignments handed in after the due date will be penalized by 4% per day. Any request for an extension must be made in writing before the assignment's due date and must be accompanied by the appropriate documentation.