Course Description: This advanced course in research design and methodology covers experimental, quasi-experimental, single-N, outcome, process, discovery, and qualitative research designs and methodologies as applied to psychology and psychotherapy. Philosophical, ethical, and multicultural issues in research will also be studied.

Instructor: Timothy B. Smith
Office Hours: Tues. and Thurs. 4-5:00pm (or by appointment) in 269 MCKB
Phone: 422-1311   Email: tbs@byu.edu

Required Readings


Structure for Class Meetings

Classes will address some of the more complex issues associated with research in counseling psychology (e.g., process research, cultural biases in research). I encourage interaction and critical thinking. Class time will consist of several different activities. We will discuss textbook and supplemental readings, and I will serve as a research consultant to help students better understand concepts in the readings. We will critically review empirical studies on counseling and psychotherapy. We will take turns sharing and critiquing research ideas, research questions, and design and methodology strategies. Finally, we will practice the methods learned – and seek out additional information online and from others, including experts in the field.
Course Objectives
The central purpose of this course is for students to gain and demonstrate knowledge about research design and methodology as it pertains to Counseling Psychology.

1. The student should be able to discuss epistemological problems in research on humans.

2. The student will define a research problem based on a thorough review of literature and will write a literature review using rigorous research synthesis methods.

3. The student will be able to describe (a) the process used in conducting a meta-analysis and (b) the pros and cons of using meta-analysis and other literature review techniques.

4. The student will be able to conduct a doctoral level seminar on a research topic.

5. The student will be able to recognize the uses, strengths, and limitations of qualitative vs. quantitative methods and also discuss differences between qualitative methods.

6. The student will critique research articles re: threats to external and internal validity.

7. In the area of experimental design, the student should be able to:
   a) state testable hypotheses,
   b) specify target/accessible populations, random sampling, and random assignment,
   c) discuss internal and external validity and the threats of each,
   d) discuss the appropriateness of research designs for handling threats & confounds,
   e) evaluate extant research and develop his or her own research plans.

8. In the area of assessment of research variables, the student should be able to:
   a) describe the relevance of test reliability and validity to research validity, and
   b) evaluate appropriate assessment of independent and dependent variables.

9. In the area of statistical interpretation, the student should be able to:
   a) show understanding of the relationships between correlational and “difference testing” statistics;
   b) match statistical analyses to hypotheses or questions;
   c) understand effect sizes and their use and interpretation;
   d) discuss findings in terms of statistical and practical significance, and conclusions justified by inferential statistics and justified by rigor in research design.

10. Detail multicultural considerations in contemporary research and demonstrate appropriate cross-cultural research procedures.

11. Identify and follow appropriate ethical guidelines and standards for research and related professional activities.
General Learning Assignments

You will learn a broad range of research theories and methods in this course, becoming skilled in identification of their appropriate uses (and misuses). The aim is to become a skilled scientist practitioner of psychology.

Completing Required Readings (19% toward final grade)

I expect students to complete all assigned readings before class so that they will be fully prepared to consult with me and their classmates about the most challenging concepts during our class meetings. Please generate at least 2-3 questions that you can ask during class based on your readings, and the instructor will also ask questions about the readings of every student during the first segment of every class. Please keep a log of when you complete your readings, which you will turn in at the end of the semester.

Class Participation (10% toward final grade)

Class participation consists of attendance, preparing three content segments (questions or PowerPoint) to share with the class based on assigned readings, sharing resources identified during the personalized project, and substantive contributions to class discussions. Attendance at class is required unless legitimate circumstances prevent it. Out of courtesy, please let me know if circumstances prevent you from attending class. When class is held online, please refrain from browsing other screens and give your full attention to us. When class is held in person, please use laptops or other devices only for class purposes.

Exam (15% toward final grade)

There will be a take-home, open book final exam. The exam will consist of brief essay questions about content covered in the class, including the philosophy of science, research paradigms, research methods, and an article critique.

Personalized Learning Assignments

To best facilitate learning in this class, you will design most of your own learning activities. I recommend three approaches to designing those experiences: (1) Identify gaps in your own knowledge. Review major research concepts (e.g., table of contents of books on research methodology), and if our class instruction does not provide sufficient depth for you to feel confident in using/evaluating certain concepts, seek out additional information online or from experts. (2) Consider ways to improve your doctoral dissertation research. What are potential threats to internal/external validity? What did authors in the most highly-cited publications in your topic area do to make their manuscripts stand out from all the rest? How can your work better inform or meet the needs of people who could benefit from the information you seek? Etc. (3) How can research benefit your practice as a psychologist? For instance, if you will conduct formal assessments, what can you learn now from systematically evaluating the forensic psychology literature? What assumptions do practitioners make that may not be grounded in data? What gaps of knowledge need to filled with respect to client retention? Etc.
The insights you gain from reflecting (above) will help you design your learning experiences during the following required activities:

**Article Critiques (6% toward final grade, 2% per article)**

Each student will critique three research articles of their own choosing. Specifically, we will (1) read and methodologically critique studies (outside of class) using a template that I provide, (2) sign up to present the critiques on different days across the semester, (3) turn in the evaluation template to me before the class session in which you will present, and (4) present in class the article and highlight some of your evaluations in less than five minutes.

**Practice of Research Methods (15% toward final grade, 5% each activity)**

On three occasions you will have the opportunity to practice a particular research method described in class. These could include: meta-analysis coding, research interviews, participative observation, qualitative content analyses, clinical case monitoring, social experimentation (group project), survey development, etc. Share brief oral reports of the experiences with the class.

**Multicultural Contextualization Project (5% toward final grade)**

To learn how human diversity and systemic bias intersect with social science research, students will design and conduct a project on a topic that they select (e.g., action research to benefit marginalized individuals, best practices when working with historically oppressed groups, evaluation of the extent to which researchers return benefits to communities involved in prior research). The project should demonstrate the ability to analyze/evaluate multicultural contexts from multiple perspectives. Projects could involve research syntheses (e.g., coding extant publications), brief interviews with scholars or librarians (e.g., to learn about resources or solutions), or any other viable method for data collection (yes, this project must be based on data :). Present your findings in class.

**Research Resources Log (5% toward final grade)**

Many resources for conducting high-quality research have become available in recent years. Identify resources (e.g., videos, software, websites) relevant to your current or future work. Share those with the class on at least two occasions. Keep an ongoing log of the resources that you identify and turn that log in at the end of the semester. It is recommended that you continue to use that log across your career to systematically file resources that you encounter – thus enabling you to use those resources at a moment’s notice and to share those resources with others.

**Spiritual Resources for Learning (5% toward final grade)**

In addition to following best practices in research methodology, our seeking for truth can benefit from personal revelation, centered mindfulness, and reflection. We are engaged in life-long learning “by study and also by faith” D&C 88:118.

This semester, I invite you to complete a personal project that you develop (based on your own beliefs) to strengthen your abilities to act in faith while also utilizing optimal research
methods. This project could involve such approaches as: (1) identifying and working on your ability to remain at peace during difficult projects, (2) improving your humility and thirst for knowledge by seeking feedback continually and reflexively asking for Divine assistance, (3) write a gratitude journal or a study journal that enables you to see Divinity and new knowledge in daily events, (4) actively seek answers to your personal spiritual questions from inspired sources, (5) actively take notes at the weekly campus devotionals and implement the impressions you received. Reflect on what would be most meaningful to you, then make a specific plan – and follow it across the semester.

Please either (A) report verbally in class about your experiences or (B) submit a brief summary to the instructor via Learning Suite, omitting any personal details that would be uncomfortable to share.

Literature Review (20% toward final grade)

By the end of the course, you will complete a synthesis of a body of research, based on methodology described in the course. This is to be a high-quality paper, reflecting serious scholarship. It is recommended that you use this opportunity to develop the literature review for your dissertation. Meet frequently with your dissertation chair throughout the semester. If you have already completed your dissertation literature review, then you may review the literature for another content area (and if you desire, the course instructor can provide suggestions for publishing your paper).
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<th>DATE</th>
<th>READING/DISCUSSION TOPICS</th>
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<td>9/1</td>
<td>Introduction; Semester Projects; Ways of Knowing</td>
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<td>9/8</td>
<td>Determinism &amp; Reductionism; Science and Human Behavior; Methodological Pluralism</td>
<td>Holden &amp; Lynch; Slife &amp; Gantt; Wampold &amp; Imel 1</td>
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<td><strong>EXAMINING RESEARCH LITERATURE</strong></td>
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<td>9/15</td>
<td>Quantitative &amp; Qualitative Research Methodology overview; Evaluating Research Literature</td>
<td>Wampold &amp; Imel 2, 3</td>
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<td>9/22</td>
<td>Applied Psychotherapy Research, Part 1; Deadline for selecting a semester project topic</td>
<td>Norcross &amp; Lambert 1,3 (Google books) + 1 article</td>
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<td>9/29</td>
<td>Field work outside of class</td>
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<td>10/6</td>
<td>Meta-analysis</td>
<td>Kazdin 20, Wampold 4</td>
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<td>10/13</td>
<td>Applied Psychotherapy Research, Part 2; Preliminary Literature Bibliography due</td>
<td>Norcross &amp; Wampold Wampold &amp; Imel 5</td>
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<td><strong>RESEARCH DESIGN, METHODS, AND PARADIGMS</strong></td>
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<td>10/20</td>
<td>Internal and External Validity; Sources of Artifact and Bias; Multicultural Guidelines</td>
<td>Kazdin 5 Wampold &amp; Imel 6, 7</td>
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<td>10/27</td>
<td>Research Designs; Control &amp; Comparison Groups; Assessing the Impact of Experimental</td>
<td>Wampold &amp; Imel 8, 9</td>
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<td>Manipulations</td>
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<td>11/3</td>
<td>Statistical methods, Interpretation of data; Qualitative analyses; Article reviews occur</td>
<td>Kazdin 17, 33</td>
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<td>11/10</td>
<td>Scale Construction and Issues of Validity; Replication; Case Studies</td>
<td>Kazdin 12, 14, 36</td>
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<td>11/17</td>
<td>Clinical Outcome Research; Clinical Process Research; Evidence Based Practice; Feedback-</td>
<td>APA; Barkham 6, 1*,2* Prescott 2, 3 &amp; 16</td>
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<td>Informed Treatment</td>
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<td>11/24</td>
<td>Thanksgiving holiday</td>
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<td>12/1</td>
<td>Feedback-Informed Treatment part 2; Multicultural considerations in research; Advanced</td>
<td>Kazdin 24 &amp; 28 Denzin &amp; Lincoln chapter</td>
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<td>Qualitative Research Methods</td>
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<td>**Draft of literature review written to be on track; Article reviews should be completed</td>
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<td>12/8</td>
<td>Ethical Issues and Guidelines for Research; Multicultural Ethics; Institutional Review</td>
<td>Kazdin 31, 32 BYU IRB forms</td>
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<td>Boards and Institutional Issues in Research; Publication Guidelines; Becoming a Scientist-</td>
<td>APA Manual 7th ed.</td>
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<td>12/15</td>
<td><strong>LITERATURE REVIEW and FINAL EXAM are DUE (5:00 p.m via email)</strong></td>
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**University Policies**

**Honor Code**

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of the Honor Code may result in a failing grade in the course and additional disciplinary action by the university. It is the university's expectation that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

**Inappropriate Use of Course Materials**

All course materials (e.g., outlines, handouts, syllabi, exams, quizzes, PowerPoint presentations, lectures, audio and video recordings, etc.) are proprietary. Students are prohibited from posting or selling any such course materials without the express written permission of the professor teaching this course.

**Sexual Misconduct**

BYU seeks to maintain a safe and respectful environment. As per Title IX of the Education Amendments of 1972, the university prohibits sex discrimination against any participant in its education programs or activities. Title IX also prohibits sexual harassment, including sexual violence-committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by the university.

University policy requires any university employee in a teaching, managerial, or supervisory role to report incidents of sexual misconduct that come to their attention through various forms including face-to-face conversation, a written class assignment or paper, class discussion, email, text, or social media post. If you encounter sexual misconduct, please contact the Title IX Coordinator at t9coordinator@byu.edu or 801-422-2130 or Ethics Point at https://titleix.byu.edu/report-concern or 1-888-238-1062 (24-hours). Additional information about Title IX and resources available to you can be found at http://titleix.byu.edu.

**Student Disability**

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability, which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.
Devotional Attendance

Brigham Young University's devotional and forum assemblies are an important part of your BYU experience. President Cecil O. Samuelson said, "We have special and enlightening series of devotional and forum assemblies...that will complement, supplement, and enrich what will also be a very productive period in your classrooms, laboratories, and libraries. We look forward to being with you each Tuesday...and hope that you will regularly attend and bring your friends and associates with you...A large part of what constitutes the unique 'BYU experience' is found in these gatherings where the Spirit has been invited and where we have the opportunity to discuss and consider things of ultimate worth and importance that are not afforded to the academic community on almost any other campus" (from the address "The Legacy of Learning", 30 August, 2005). Your attendance at each forum and devotional is strongly encouraged.

Mental Health Concerns

Mental health concerns and stressful life events can affect students’ academic performance and quality of life. BYU Counseling and Psychological Services (CAPS, 1500 WSC, 801-422-3035, caps.byu.edu) provides individual, couples, and group counseling, as well as stress management services. These services are confidential and are provided by the university at no cost for full-time students. For general information please visit https://caps.byu.edu (https://caps.byu.edu); for more immediate concerns please visit http://help.byu.edu (http://help.byu.edu).

Respectful Environment

"Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional. I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another." President Cecil O. Samuelson, Annual University Conference, August 24, 2010