Project Title (Ethics Form #1): Students’ Experiences Learning Statistics

Project Summary (Ethics Form #10): In the Fall of 2012 students enrolled in two sections of PSYC 2210 will have the opportunity to partake in research that seeks to determine the influence that office hour attendance can have on students’ statistics anxiety and their learning. As part of the requirement for this course students attend one twenty minute meeting with the professor prior to a test. Students who volunteer for the study will allow the professor to collect their grades as data, as well as a learning plan and learning reflection they complete after attending the meeting. Additionally, students can volunteer to be interviewed once the course has been completed to discuss their learning experiences in the course.

Research Question (Ethics Form #2-1): Do students learn more in a psychology statistics course after meeting individually with an instructor and creating a study plan?

Study Methodology (Methodology Document): Attached

Data Gathering Approach (Methodology Document): Attached

Data Analysis Approach (Methodology Document): Attached

Consent Considerations (Ethics Form #3 & 4 & 5): Students in the classroom will be given information and consent forms. After describing the study the instructor will leave. A separate faculty member will collect consent forms from the students to ensure the instructor is unaware of who is and who is not participating in the study.

Students will be told that the instructor will be completely unaware of who is and who is not participating in the study. An assistant for the project will be responsible for coding participant data to keep it confidential. It will be emphasized to students that their participation in the study is completely voluntary and that such participation or non-participation will not affect their grade or treatment in the course in any way.

Participants can send an email to the research assistant requesting to be withdrawn from the study. Their data will be deleted from the data file and the copy of their electronic student learning plan will also be deleted. Interview data would similarly be deleted, including the audio file and electronic interview transcript.

As both the instructor of the course and investigator for the project I have an interest in the recruitment of participants to ensure a successful project. As such, it is essential that I remain unaware of the students who agreed to participate and those who did not. This is why a research assistant will be responsible for collecting consent forms and managing the data and data file. The voluntary nature of the project will be emphasized to students and it will be made explicitly clear that participation or non-participation will not affect their experience or grade in the course.

Students who agree to an interview when the course is over will be providing the researcher with 30-60 minutes of their time. Otherwise, both participating and non-participating students will complete the same work and activities in the course.
An informed consent form will be provided to all potential study participants. The informed consent procedure and form will be reviewed orally in class as well.

Interviewed participants will be given a pseudonym and this will be explained to participants.

Participants will not be interviewed until completion of the course. This will ensure the instructor remains unaware of the participation status of students until the course is over. Confidentiality will be maintained with pseudonyms but as the instructor will interview students it will be impossible for the identity of the participant to remain confidential from the principal investigator.

The use of a research assistant to manage all data and consent forms will provide necessary confidentiality between students and the instructor in terms of study participation. Further, students will decide whether to participate or not without the instructor/principal investigator present. These checks will help ensure students do not feel coerced to participate.

Audience and Impact (Ethics Form #6 & 8): Conducting this study will help me determine if learning check-ins benefit my students. If they do, I would be inclined to continue using learning check-ins for future courses. This study will also provide me with feedback from my students concerning the challenges they face and this will be valuable information in terms of how I structure the course. I will also be able to share the results of this study with other faculty members at MRU and also to the global SoTL community. Statistics is a core requirement for many majors within the social sciences and pedagogical techniques that can help students overcome statistics anxiety and improve their learning are valuable and others would be interested in such information. Ultimately, providing students with a sound basis in statistics will produce a scientifically literate society able to grapple more readily with the complex problems of the 21st century.

Findings from this study will potentially be disseminated as follows:
through the SoTL Research in Progress Presentation Series
at the SoTL conference in Banff during Fall 2013
at the Society for Personality and Social Psychology Teaching Preconference in January 2014
A manuscript based on the results of the study will be submitted to Teaching of Psychology

Resources and/or Literature Review (Minimum Ten):


Disciplinary, Pedagogical, and Other Keywords (Minimum Ten): one to one instruction, statistics anxiety, study plan, office hours, tutorials, engagement, personalized learning plan, teaching statistics, self assessment, mentorship

Questions, Concerns, Stuff:
1. I structured the procedure of the study so that I would be blind to who is participating and not participating. This works well up until when I want to record the learning check-ins. Is it necessary for me to not know who is participating?
2. Also, would I interview my students after the course or should someone else?
3. I imagine I will create a separate debriefing form for students who agree to be interviewed, yes?
4. Are students compensated for participation? Would I only provide compensation to students who give up their time to be interviewed? What compensation is appropriate? In previous psychology studies I’ve given out $10 gift cards.

Please include/attach your completed HREB application including methodology document (all in draft form), consent form (in draft form), assignment prompts (if assignments are being used as data), interview guide and questions (if appropriate), and any other documents that will be used to prompt data or provided to students to help inform them about the study.