RESEARCH METHODS

IN-CLASS ACTIVITIES WORKBOOK

Social Work Research Methods I

An Introduction to Research Proposal Writing

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WELCOME TO SOCIAL WORK RESEARCH I

I have designed an Activities Workbook to allow easier assignment flow. This semester we will be going over how to formulate your Research Proposal. You have two options, you can print and bring this activities book with you to class or, you can download the activities under each lecture on blackboard

Part of your grade will be based on all in-class assignments requirements completed. Please trust that I will guide you through this process. However, it will be extremely important that you READ each assignment THOROUGHLY when provided, for each lesson.

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Week 1: APA Writing Exercise

Instructions: For each of the statements below, indicate in which section of the paper they should appear (Introduction, Literature Review, Hypothesis, Method, Results, Discussion, and References).

- 1. The mean age of participants was 19.4 years.
- 2. Because previous research suggests that minimization pragmatically implies an offer of leniency (Kassin & McNall), we predicted that the two techniques would have the same effect in the interrogation room, namely, to increase the likelihood of both true and false confessions.
- 3. Approximately 5 min later, the experimenter, blind to the participant's guilt or innocence, reentered the testing room for interrogation.
- 4. Our results indicated that minimization, a common and legal interrogation technique, provided an effective means of obtaining true confessions; however, this technique also put innocent participants at risk for false confessions.
- 5. Many legal scholars and researchers consider confession evidence to be the most potent form of evidence that exists, and research indicates that a confession is a very damning piece of evidence (Kassin &Neumann, 1997).
- A significant main effect was found for guilt versus innocence, x (1, N = 296) 5 88.84, p<.001,d5 1.31, such that guilty persons were 3.53 times more likely to confess (71.6%) than innocent persons (20.3%).
- Researchers have categorized the interrogation methods promoted by interrogation manuals into two general types, namely, maximization and minimization (Kassin & McNall, 1991)
- 8. The novel experimental paradigm introduced in the present study appears to have successfully transposed into the laboratory several real-world interrogation elements, including use of an intentional "crime" that could involve rather serious consequences (i.e., when cheating is considered in the context of a university setting).
- 9. In the minimization condition, the interrogator was instructed to lessen the seriousness of the offense by making statements that expressed sympathy and concern, offered face saving excuses (e.g., "I'm sure you didn't realize what a big deal it was"), and suggested to participants that it was in their interest to cooperate by

signing the statement. In the no minimization condition, no such statements were made.

- 10. Three hundred thirty undergraduates (70% female) from a large Southeastern university received credit in a psychology course in exchange for their participation
- 11. A female confederate posing as another participant arrived at the lab at the same time as the actual participant, and the pair was greeted by one of six male experimenters.
- 12. Moreover, we encourage police investigators to carefully consider the use of interrogation techniques that imply or directly promise leniency, as they appear to reduce the diagnostic value of an elicited confession.
- 13. Redlich, A.D., & Goodman, G.S. (2003). Taking responsibility for an act not committed: The influence of age and suggestibility. *Law and Human Behavior, 27,* 141-156.
- 14. Statistical tests of these ratings indicated that they were not significantly influenced by the participant's guilt/innocence, ts (81) < 1.71,ps > .09; the use of minimization, ts(Sl)\.21,ps > .20; the offer of a deal, ps(81) < 1.36, ps > .18; or the participant's decision to confess, ts(81) < 1.49, ps > .14.
- 15. The experimenter then explained the true purpose of the experiment and the manipulations. He further explained that there was no angry professor and no pending negative consequence.
- 16. It is important, however, to have an appreciation for the limitations of the paradigm. Because suspects in the real world are accused of criminal, acts that are more severe both in nature and in consequence than the act featured in this paradigm, one could imagine that the confession rates overall would be lower in the real world than in the laboratory.
- 17. Although the absolute confession rates may differ and further research may be warranted, we believe that the underlying interrogative and psychological processes that occur in the laboratory similarly occur in the real world.
- 18. A 2 (guilt vs. innocence) x 2 (minimization vs. no minimization) x 2 (deal vs. no deal) analysis of variance was conducted on participants' ratings of pressure to confess.
- 19. It is interesting to note that although the use of the minimization and deal techniques clearly influenced the behavior of both guilty and innocent participants, they may have been unaware of this influence.

Week 2: Ethical Issues and IRB

IRB - EXERCISE

RESEARCH METHODS I Institutional Review Board Exercise

Exempt From Review

Research may be exempt from review when human participants conform to one of the categories from section <u>46.101(b) of 45 CFR 46</u>. Research may qualify for Exempt status if it involves very minimal or no risk. Projects will not be given Exempt status if they include any degree of deception, involve more than very minimal risk to participants, involve sensitive information, or include protected classes or vulnerable populations. Please note that researchers must always engage in practices that ensure privacy and that minimize the risks to participants, regardless of the level of review. All of the rights and protections afforded to human subjects in research are required in Exempt status cases. If you believe that your proposed research qualifies for Exempt status, submit a Request for Exemption.

Expedited Review

Expedited review involves a review of a proposal by a subset of the IRB that includes the Chair and at least one other board member. Expedited review does not mean a quick review; the IRB determined whether a project requires expedited or full review. A proposal that does not fulfill the criteria for Exempt status may undergo an Expedited review if it involves no more than minimal risk to the participants and meets other standards, such as not including protected classes or vulnerable populations, and not using intentional deception. Expedited review may also be used when minor changes are proposed to an approved research project during the period for which approval is authorized.

Full Review

Any proposed research not qualifying for Exempt status or Expedited review requires a Full Review, in which a majority of IRB members review and vote on the proposal. These typically involve projects that place human subjects at more than minimal risk, or that involve sensitive topics or vulnerable populations such as prisoners, terminally ill patients, children, veterans, or cognitively impaired persons.

Week 2a: Ethical Issues and IRB Review Steps

FIRST STEP

Today, each of you has been assigned to be a member of the Research Methods II Institutional Review Board panel. As a judge on the IRB, your responsibilities include carefully reviewing the submitted proposals and determining whether or not these potential studies violate any ethical standards.

Based on the information given to you regarding these studies, you are to make a decision to either: **1) grant approval, 2) reject the proposal, or 3) provide the researcher the opportunity to revise the study and re-submit**. However, you must provide the researcher with a thorough explanation justifying your final judgment. In the instances that revisions are required in order to approve the research proposal, you must specifically identify which elements need to be modified and the reasoning behind this decision.

NEXT STEP

Due to an influx of applications submitted to the Research Committee, the Administrative Assistant accidently jumbled up all of the proposals, thereby, making your job a little harder than usual. In addition to deciding if the 5 IRB proposals below should be approved or not, you must now determine the appropriate review board: **1**) **Full Review**, **2**) **Expedited**, **or 3**) **Exempt.**

When deciding the type of application or appropriate review board, make sure you refer to your notes and lectures (since this is usually the secretary's responsibility).

Finally, you have to describe why this type of review is necessary, and identify the components of the study that led you to this verdict.

It looks like it is going to be a busy day in the office since **each group** must complete **all 5 cases** and be prepared to present their judgments/arguments to another panel (while someone hires a new secretary!!).

Week 2b: Ethical Issues and IRB Case Studies

CASE 1

A researcher wants to administer a new drug hypothesized to affect aggressive behavior. He chooses prison inmates to be his participants, reasoning that aggression is more common in prisons. In order to persuade prisoners to participate, he promises them favorable letters to their parole boards; these letters might well facilitate earlier release.

□ Approved	□ Rejected	Revise
Explain decision:		
□ Full Review	□ Expedited	🗖 Exempt
Explain decision:		

CASE 2

A team of researchers is interested in studying helping behavior. They stage a scene in a subway in which a confederate falls off his seat and bleeds from the mouth. The dependent variable is how quickly bystanders help the "victim." The bystanders are never told that they were part of an experiment.

□ Approved	□ Rejected	□ Revise
Explain decision:		
□ Full Review	□ Expedited	🗖 Exempt
Explain decision:		

CASE 3

The current study examined the relationship between task performance and defensiveness. Prior to participation, participants were informed of the requirements and purpose of the experiment to the extent possible. Additionally, they were also told that they could withdraw from the experiment at any time without prejudice. Some participants were given false feedback on a test of intellectual ability and were told that their scores were well above average; other participants were told that their performance was well below average. After the false feedback, participants completed measures of defensiveness, so that researchers could determine if failure makes people more defensive. After collecting the measures, the experimenter thanked participants for their efforts, and promised a detailed report of the results.

□ Approved	□ Rejected	Revise
Explain decision:		
Full Review	Expedited	🗖 Exempt
Explain decision:		

CASE #4

Researchers would like to explore the relationship between pornography exposure and adult sexual offending. Participants included two randomly selected samples: incarcerated sex offenders and non-sex offenders (with no previous sexually related convictions). Participants were informed of the purpose of the study, that it was voluntary and they could withdraw at any time without penalty, and that they would not be provided with any direct benefits for their involvement. Participants were required to sign informed consents and received debriefing at the end of the study. Each sample was given a self-report questionnaire regarding their exposure to explicit pornography including, the age at which they were first exposed, frequency of exposure during three defined time periods, and the content of the pornography they viewed. Participants were thanked for their assistance and given a debriefing form.

 \square Approved

□ Rejected

□ Revise

Explain decision:

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□ Full Review

D Expedited

Exempt

Explain decision:

CASE #5 A group of researchers are interested in exploring the differences across various ethnicities regarding the interaction between mothers and their children. Each researcher is assigned a specific ethnicity, and required to observe the manner in which a mother and child interacts. In order to prevent confounding, all of the researchers must observe and record this interaction within a restaurant setting. Participants are expected to be unaware that they are being observed and are not informed of their involvement in the study.

□ Approved	□ Rejected	Revise
Explain decision:		
□ Full Review	Expedited	🗖 Exempt
Explain decision:		

Week 3: Preparing for your Research Proposal – Problem Statement Formulation

ACTIVITY: RESEARCH PROPOSAL EXERCISE

START WITH A GOOD PROBLEM

Goal: To shape an idea for a research project into a clear draft thesis paragraph from which to develop a research proposal.

Overview: Before approaching the writing process for a grant proposal, prepare a clear thesis for a research project to begin with and elaborate from. The actual process of writing this down explicitly is a good way to develop a kernel idea into a clear expression of research, well ahead of any effort at securing funding. This activity aims to take apart the various steps of the process of transforming an idea into a clearly written (fundable) thesis, beginning with a good problem, translating it into a question, turning that into a research purpose statement, and shaping it as a hypothesis, whether formally scientific or qualitative in nature. Finally, these expressions should be placed into an existing research context in such a way as to demonstrate the contribution of the proposed research to the current state of knowledge. Modeling this function by revising an existing example paragraph, sentence by sentence, is a good way to practice how to effectively communicate a thesis.

Readings/Advance Preparation: the goal of this activity is to assist you with with an idea in mind for research they wish to develop into a proposal.

By now, you should have read the article:

Pryce, L., Tweed, A., Hilton, A., & Priest, H. M. (2017). Tolerating Uncertainty: Perceptions of the Future for Ageing Parent Carers and Their Adult Children with Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities*, *30*(1), 84–96. https://doi.org/10.1111/jar.12221

Procedures: Exercise A (45 minutes)

- 1. **Identity goal for this session:** By the end of this exercise you should have a set of clear expressions of your research that you can build upon for developing a thesis statement for a proposal. (2 minutes).
- 2. Now, begin with 3 minutes of quiet reflection, and focus on your research idea. After a few moments into the reflection, try to visualize yourself conducting the research and to imagine the kinds of problems that the research would help to solve.
- 3. Now group into pairs. Briefly explain to each other what their general research idea is (3 minutes).

- 4. Write a title or a list of key words for that topic in general (that is, avoid jargon) terms in less than seven words (2 minutes):
- 5. Now describe the apparent puzzle, contradiction, *problem** or unresolved issue around that topic by filling in the following sentence (5 minutes):
- 6. The main problem this research seeks to address is ...

*Example: *Problem—"the experience we have when an unsatisfactory situation is encountered" (Locke, Spirduso, and Silverman 2000)*

- 7. Continue within your group and read each other's problem statement. After reading, your colleague problem statement, indicate what you understood to be the unsatisfactory situation the research would encounter (i.e., problem) (5 minutes).
- 8. Now, look at your own problem statement, and rephrase it into one to three *questions**, creating a sentence that begins with a question word (5 minutes):

Who	?
What	?
Where	?
When	?
Why	?
How	?
To what extent	?
What is the relationship between	?
Which is the (quickest/shortest/optimal/etc.) way to	?
What would happen if	?
What is the perspective of	?

Example: *Question—"a statement of what you wish to know about some unsatisfactory situation" (Locke, Spirduso, and Silverman 2000)

9. Each participant should then develop a *purpose** statement that describes the intention to answer the question or questions in part (7) by filling in the following sentence (5 minutes):

The purpose of this research is to (examine/study/understand/determine/answer/ etc.)

Example: *Purpose—"the explicit intention of the investigator to accumulate data in such a way as to answer the research question posed as the focus for the study." (Locke, Spirduso, and Silverman 2000)

- 10. Now, read each other's questions and purpose statements. After reading each other's statement, indicate to each other what you understood to be the explicit intention of the research in your own words (i.e., purpose) (3 minutes).
- 11. Now, construct one or more *hypotheses** that operationalize this purpose and help answer or approach one of the questions (5 minutes). This does not have to be formally scientific and quantitative or statistically testable. It can also be adapted for qualitative and interpretive research. The main idea is to express some statement around which reviewers can understand how you will know what results or outcomes arose from your research activities.

To practice expressing this idea, fill in the following blanks:

_____will be positively related to______. _____will be negatively related to______. ____will not be related to______.

*Hypothesis—" an affirmation about the nature of some situation in the world. . . a statement to be confirmed or denied in terms of the evidence." (Locke, Spirduso, and Silverman 2000)

12. Now, look at each other hypotheses and discuss how the statements relate to the original problem expressed (7 minutes).

Week 4: Conducting a Literature Review: Finding and Using Existing Knowledge

ACTIVITY: THINKING ABOUT RESEARCH

Exercise from McBride, D. (2010). The process of research in psychology. Thousand Oaks, CA: Sage publications.

A summary of a research study is given below. As you read the summary, think about the following questions:

- 1. What type of hypothesis (theory-driven or data-driven) did the authors make?
- 2. Do you think this is a causal or a descriptive hypothesis? How do you know?
- 3. Can you state the authors' research question? From the description of the study, where did the research question seem come from?
- 4. If you were to conduct a literature review for their research question on PsyInfo, how would you proceed? Describe the steps you would take
- 5. Write an Abstract for the study in your own words (250 words)?
- 6. If you were to read an APA-style article describing this study (which you could do by finding the reference below), in which section would you find information about the paragraphs the participants read during the study? In which section would the authors report the statistical test they conducted? In which section would they indicate if their hypothesis was supported?

Vohs, K. D., & Schooler, J. W. (2008). The value of believing in free will: Encouraging a belief in determinism increases cheating. *Psychological Science*, *19*, 49-54.

Purpose of the Study. Vohs and Schooler (2008) were interested in the effects of a belief in determinism (i.e., believing that events in a person's life are not under their control) on moral behaviors. Their interest stemmed from recent findings from neuroscientists that our behaviors may be caused by factors out of our control (e.g., our genes, the functioning of our brain, our environment, etc.). They reported that previous study (Mueller & Dweck, 1998) had found that children exert less effort in a task if they are told that their failure in a difficult task they had previously completed was due to their intelligence level rather than their level of effort. From this finding, Vohs and Schooler reasoned that a belief in determinism argument would result in more cheating behaviors than if this belief was not promoted.

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Method of the study. Thirty college students participated in the study. Participants were randomly assigned to read one of two paragraphs taken from the same book. One of the paragraph suggested that scientists believe that free will is an illusion. The other paragraph discussed consciousness and did not mention the topic of free will. Al participants were then asked to complete a set of math problems, presented one at a time on a computer screen. Participants were asked to complete each problem. They were also told that the computer program had an error such that the answers to some of the problems may appear with the problem and that they should try to solve the problem on their own (they could make the answer disappear by pressing the space bar when the problem appeared). The researchers measured the number of times the participants pressed the space bar as a measure of cheating behavior (more presses means less cheating).

Results of the study. The results indicated that the group that read the determinism paragraph pressed the space bar less often (about 5 times during the study) than the control group (about 10 times during the study) that read the consciousness paragraph. Figure 1 displays the mean space bar presses for each group.



Conclusion of the study. From their results, Vohs and Schooler (2008) concluded that a belief in determinism (i.e., free will is an illusion) causes more immoral behavior (e.g., cheating) to be exhibited by individuals.

Week 5: Conducting a Literature Review cont (lab: TBD)

Lecture 5: Conducting a Literature Review cont (lab: TBD) (pg 16)

- □ Activity: Knowledge testing How to cite in APA
- **Utilizing Citation Managers**
- □ Utilizing Multiple Databases simultaneously

Instructions will be to follow lead on screen

ACTIVITY: Activity: Knowledge testing, How to cite in APA. Utilizing Citation Managers & Utilizing Multiple Databases simultaneously

INSTRUCTIONS WILL BE TO FOLLOW LEAD ON SCREEN (LAB TBD)

Week 6: Methodology & Methods for Acquiring Research Data Sample

ACTIVITY: METHODOLOLOGY EXERCISE BRAINSTORMING INTERERSTING PHENOMENA FOR QUANTITATIVE or QUALITATIVE RESEARCH DATA GATHERING – WRITING YOUR METHODOLOGY SECTION

What is your research question?

Does background noise have an effect on task performance in college students?

What is your conceptual independent variable?

Noise presence

What is your operational independent variable?

With noise or without noise

What is your conceptual dependent variable?

Task Performance

What is (are) your operational dependent variable(s)?

Concentration - Pass or fail

What variables are being manipulated?

Noise

How are you manipulating them?

Giving one group a test while noise is present; giving the other group while noise is absent

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How have they been manipulated before?

Yes

Why are these variables important now?

Because background noise is reported to be one of the most common forms of interference in task performance

What study did you read that told you that this variable is important?

In recent years, exposure to noise has increased in both frequency and duration as a result of new technology (handheld devices) that provide auditory stimulation in the form of speech and music. Previous research indicates the effect of noise is quite broad and range from interference in cognitive processing to having detrimental effects on mental and physical health (Smith, A.P, 1983). In contrast, earlier studies have also found the effects of noise while performing activities such as learning, reading comprehension and intelligence have showed inconclusive results.

How are you measuring these variables? What # or score will you report?

Both groups were given a writing skills test to their knowledge of some basic rules of English grammar, syntax, usage, sentence and paragraph organization, and punctuation. A short summary of each topic was provided with multiple choice answers. For each question the participant had to choose one answer that represents a correction that should be made to the sentence. It was suggested that each student take no more than 15 minutes to answer 10 questions.

How have the variables been measured before (i.e., scales, self-report measures, Likert-type scale items)?

Scales

What studies did you **read** that measured these variables this way?

Empirical Research has used the measures that revealed the outcome of these variables. The Effects of Noise on Intellectual Performance - (Weinstein, Neil D., 1974)

What new information did those studies provide? What were the results of their study?

There were no significant changes produced by noise on any of the four comprehension tests.



What is the target population? Will your results be generalizable to this target population?

The subject in this experiment were college student from an introductory psychology class who participated to fulfill a course requirement.

Yes, my result will be generalizable to this population.

Who will be in your sample?

A total of 100 students (25 from each college) were chosen to participate in the study

Where will the experiment take place?

For the experiment, the groups were placed in two different labs (that were padded with insulation to block out external noise) and were located across the hall from each other in one of the colleges.

How long will participants be participating?

All participants will be participating for one hour.

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How will you compensate participants?

All students who agreed to participate in the experiment where told that they would be given free movie tickets (to see a movie of their choice) and a free soda.

What new information will your expected results yield?

After the completion of the experiment it was determined that exposure to background noise has a significant effect in test scores for those who took the test with noise than those who took the test without noise. Such that, individuals who took the test without noise have higher scores than those who took the test with noise.

How does this new information relate to the conceptual independent and conceptual dependent variables listed above?

It states that in the presence of noise there was a distraction in concentration during test which reduced the scores.

How will this new information help solve the problem that you are studying?

These results demonstrate student's weakness to disruption from background noise, even when they are not attending to the noise. This experiment also has a clear implications that there should be a quiet environment for students because noise causes a distraction which result in poor concentration and performance.

Week 6: Methodology & Methods for Acquiring Research Data DIY Exercise

ACTIVITY: METHODOLOLOGY EXERCISE

BRAINSTORMING INTERERSTING PHENOMENA FOR QUANTITATIVE or QUALITATIVE RESEARCH DATA GATHERING – WRITING YOUR METHODOLOGY SECTION Now, Your TURN

What is your research question?

What is your conceptual independent variable?

What is your operational independent variable?

What is your conceptual dependent variable?

What is (are) your operational dependent variable(s)?

What variables are being manipulated?

How are you manipulating them?

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How have they been manipulated before?

Why are these variables important now?

What study did you read that told you that this variable is important?

How are you measuring these variables? What # or score will you report?

How have the variables been measured before (i.e., scales, self-report measures, Likert-type scale items)?

What studies did you **read** that measured these variables this way?

What new information did those studies provide? What were the results of their study?

Who will be in your sample?

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Where will the experiment take place?

How long will participants be participating?

How will you compensate participants?

What new information will your expected results yield?

How does this new information relate to the conceptual independent and conceptual dependent variables listed above?

How will this new information help solve the problem that you are studying?

Week 7: Sampling, Sampling Issues, Validity and Threats to Validity in Research

ACTIVITY: THREATS TO VALIDITY EXERCISE

- □ **History**. Any of the many events other than the independent variable that occur between a pre- and post-measurement of the dependent variable.
 - When an event occurs at the same time as the treatment and changes participants behavior
 - ✤ An event that effect everyone
- □ **Maturation**. Any of the many conditions internal to the participant that change as time passes.
 - Participants naturally change over time
- □ **Instrumentation**. Any changes that occur from measuring the dependent variable. Instrument used to measure participant's performance may change over time (observers may become bored or tired)
 - They way that you measure something changes over time
- □ **Statistical regression.** Any change due to the tendency for very high or low scores to move towards the mean when re-tested.
 - Participants sometimes perform very well or very poorly on a measure because of chance factors (e.g. luck). One score isn't necessarily reliable.
 - First test, everyone scores high the second and third test eventually going towards the mean
- □ **Subject Attrition**. When participants are lost from the study (attrition), the group equivalence formed at the start of the study may be destroyed.
- Mortality. Any change due to participant loss from comparison groups.
 Any change due to participants dropping out of the study
- □ **Participant bias**. Any change in performance due to the participants motives or attitudes.
- **Experimenter bias.** Any change in the participant's performance that can be attributed to the experimenter.
- □ **Sequencing.** Any change in the participant's performance that can be attributed to the fact that the participant was in more than one treatment condition (aka order effects).

- □ **Selection**. Any change due to the selection procedure used in placing participants in various groups. Selection may often interact with other threats.
- □ *Selection-maturation interaction.* The participants selected into treatment groups have different maturation rates. Selection interactions also occur with history and instrumentation.
- □ *Differential selection of participants*. Participants in the experimental and control groups have different characteristics that affect the dependent variable differently.
- *Testing*. Taking a pre-test alters the result of the post-test.

EXERCISE

Instructions: Determine which of the seven threats to internal validity may apply to each example below (history, maturation, regression, differential selection, testing, mortality, instrumentation).

- 1. A researcher decides to try a new mathematics curriculum in a nearby elementary school and to compare student achievement in math with that of students in another elementary school using the regular curriculum. The researcher is not aware, however, that the students in the "new curriculum" school have computers to use in their classrooms.
- 2. A researcher wishes to compare two different kinds of textbooks in two high school chemistry classes over a semester. She finds that 20% of one group and 10% of the other group are absent during the administration of unit tests.
- 3. Teachers of an experimental English curriculum as well as teachers of the regular curriculum administer both pre- and posttests to their own students.
- 4. Eight-grade students who volunteer to tutor third-graders in reading show greater improvement in their own reading scores than a comparison group that does not participate in tutoring.
- 5. Those students who score in the bottom 10% academically in a school in an economically depressed area are selected for a special program of enrichment. The program includes special games, extra materials, special "snacks," specially colored

materials to use, and new books. The students score substantially higher on achievement tests 6 months after the program is instituted.

- 6. A researcher designs a study to investigate the effects of simulation games on ethnocentrism. She plans to select two high schools to participate in an experiment. Students in both schools will be given a pretest designed to measure their attitudes toward minority groups. School A will then be given the simulation games during their social studies classes over a three day period while school B sees travel films. Both schools will then be given the same test to see if their attitude toward minority groups has changed. the researcher conducts the study as planned, but a special, unplanned documentary on racial prejudice is shown in school A between the pretest and the posttest.
- 7. A researcher uses pre- and posttests of "anxiety level" to compare students given relaxation training with students in a control group. Lower scores in the experimental group result.
- 8. In a experiment of surveying methods, several people failed to return the control group survey.
- 9. Concerned about pretest sensitization, a researcher constructs a test that is extremely difficult, and that is not content valid, and administers it to both the experimental and control groups. The posttest used to measure gains in achievement is not as difficult, and the experimental group shows a slight larger improvement over the control group.
- 10. A researcher uses the same set of problems to measure change over time in student ability to solve mathematics word problems. The first administration is given at the beginning of a unit of instruction; the second administration is given at the end of the unit of instruction, three weeks later. Improvement scores result.
- 11. The achievement scores of five elementary schools whose teachers use a cooperative learning approach are compared with those of five schools whose teachers do not use this approach. During the course of the study, the faculty of one of the schools where cooperative learning is not used is engaged in a disruptive conflict with the school principal.

- 12. A researcher tests a group of students enrolled in a special class for "students with artistic potential" every year for six years, beginning when they are aged five. She finds that their drawing ability improves markedly over the years.
- 13. The researcher uses a self-made test to compare the experimental and control group.
- 14. In an experimental test of alternative forms of the SAT, a group took the traditional SAT test form which lasted approximately four hours, and then took the shortened version which lasted about one hour immediately afterwards.

Week 8: Methods for Acquiring Research Data II: Utilizing Datasets (CLASS WILL MEET IN LAB)

ACTIVITY: SEARCHING THE GENERAL SOCIAL SURVEY WEBSITE (GSS)

Online Activity

http://gss.norc.org/get-the-data/spss

Week 9: Discussion of Group Project: Development of Group Survey

ACTIVITY: DEVELOPING A SURVEY EXCERCISE

Writing questions for a survey is an art form, but you can follow several general rules for a well-written survey.

The first thing you should do when formulating a survey is to make questions that use plain and simple words. Please refrain from using words that have double meanings because they can be misunderstood. Watch out for 'double-barreled questions" as this kind of question can make a respondent agree on one part and may disagree on the other. For instance, the question is: "Do you plan to take a vacation next year and go on a Caribbean cruise?" The respondent can say yes to taking a vacation but probably not to go on a Caribbean cruise. What will happen? You will be given an answer that is not valid.

Questions should be relevant to the population being studied.

Short items are best. People don't like long surveys. They stop taking a survey that is too long. This is known as survey fatigue.

Question Rules

- 1. Remember your purpose to test a hypothesis.
- 2. If in doubt, throw it out
- 3. Keep your questions simple
- 4. Avoid vague issues/ concepts
- 5. If a question can be misinterpreted, it will be
- 6. Include only one topic per question (avoid "double-barreled" questions)
- 7. Avoid leading questions
- 8. Consider alternate ways to ask sensitive questions
- 9. Make sure the respondent has enough information

For this in-class assignment, you will develop your preliminary questions for your survey. In addition to your questions (VARIABLES), everyone will also ask for the following *demographic* information such as the following. Here is an example:

Sex

• What is your sex? Male Female, other

Age

• How old are you? Years

Marital status

• Are you: Married/Civil Union, Living together as an unmarried couple, Divorced, Widowed, Separated, Single/Never been married

Employment status

• Are you currently: Employed for wages, Self-employed, Out of work for more than 1 year, Out of work for less than 1 year, A homemaker, A student, Retired, Unable to work

Education

What is the highest degree you have completed? Less than High School, High School Diploma or GED, Some college or technical school, Associate's Degree, Bachelor's Degree, Graduate Degree.

(Since you are all in graduate school – you may want to ask what Concentration are you in)

What is your race/ethnicity (select all that apply)?

1 Black/ African American 2 Asian/ Pacific Islander

3 Non-Hispanic White/ Anglo 4 Hispanic/ Latino

5 Near East Asian/ Arab-American 6 Native American/ American Indian

7 Other _____

THE WEEK AFTER NEXT, YOU WILL CONTINUE THE REMAINING PORTION OF YOUR SURVEY

https://ssc300.wordpress.com/module-5-data-collection/surveys/exercise-13-%E2%80%93-designing-a-survey/

Each group member will upload the document in the ASSIGNMENTS Folder on Blackboard: *ASSIGNMENT 4a: Survey_Demographics Section (Due October (TBD) @ 12:00pm Noon)*

For this assignment you will indicate the following in your document

- Your Group Name
- Your Question
- Your Hypothesis
- Demographics

SEE SAMPLE ON BLACKBOARD

Week 11: Discussion: Results, Limitations & Implications to Social Work Practice

ACTIVITY: WRITING YOUR DISCUSSION SECTION ACTIVITY

To ensure that the discussion is organized appropriately and contains all essential information, the following structure is recommended for your paper:

1. Discussion Section: begin the discussion with an opening paragraph summarizing the purpose and main approach of the study (so do the following):

- a) 1 sentence reiterating the purpose of the study.
- b) 1 sentence stating the main approach.

c) 2-3 sentences summarizing the main findings.

d) 1 sentence stating the main conclusions.

Note: summarize the main findings in relation to the published literature. Take care to ensure that:

- The literature is of high quality (top tier journals/English publications).
- The information presented is specific.
- ALL information obtained from outside sources is cited appropriately and consistently.
- Accurate conclusions are drawn.
- 2. Limitations Section: discuss the study limitations and areas of future research:

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a) Exposing the limitations of the study creates potential avenues of future work. Thus, areas of future research should be highlighted here. So, now I want you to address 2
 - 4 weaknesses of your study. Such limitations can be presented in a favorable light if they can be justified or rationalized

3. Conclusion: Implications to Social Work Practice and Future Directives

Now this part requires a separate subheading for this section. Take care to read the requirements carefully. Now do the following:

a) Provide 1 to 2 sentences summarizing the main findings of the study.

b) 1 sentence describing the main conclusion(s).

c) 1 sentence describing the potential implications to social work practice.

Note: take care not to overstate the findings or draw conclusions that the data has not shown.

Week 12: Introduction to the Null Hypothesis: Preparing for Data Analysis_ Review for Spring Semester I

ACTIVITY: IDENTIFYING THE NULL/ALTERNATE HYPOTHESIS WRITING EXERCISE

Rule of Thumb: Remember!

• Null hypothesis (H₀)

- The null hypothesis (H_o) states that in the general population there is no change, no difference, or no relationship.
 - Typically, the researcher wants to reject the null hypothesis

• <u>Alternative hypothesis (Ha</u>)

- The alternative states that in the general population there is a change, a difference or a relationship.
 - Like a prosecutor, the researcher attempts to provide data supporting this hypothesis
- **p symbol**: pvalue (use in percentages)
- *µ* **symbol**: average population mean (use whenever you see the term "mean")
- = **symbol:** equal to (absolute)
- *≠* **symbol:** not equal to
- $\geq \leq$ **symbol**: Less than or equal to or greater than or equal to

Some of the following statements refer to the null hypothesis, some to the alternate hypothesis.

- a. The mean number of years Americans work before retiring is 34. (H₀) $\mu = 34$; (H_a): $\mu \neq 34$
- b. At most 60% of Americans vote in presidential elections. (H_0): $p \le 0.60$; (H_a): p > 0.60
- c. The mean starting salary for San Jose State University graduates is at least \$100,000 per year.
 (H₀): μ ≥ 100,000; (H₂): μ <100,000
- d. Twenty-nine percent of high school seniors get drunk each month. (H₀): p = 0.29; (H_a): $p \neq 0.29$

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Now, state the null hypothesis, **(H**₀**)** and the alternative hypothesis. **(H**_a**)**, in terms of the appropriate parameter (μ orp). Take your time, and read thoroughly.

- e. Fewer than 5% of adults ride the bus to work in Los Angeles.
- f. The mean number of cars a person owns in her lifetime is not more than ten.
- g. About half of Americans prefer to live away from cities, given the choice.
- h. Europeans have a mean paid vacation each year of six weeks.
- i. The chance of developing breast cancer is under 11% for women.
- j. Private universities' mean tuition cost is more than \$20,000 per year.

Over the past few decades, public health officials have examined the link between weight concerns and teen girls' smoking. Researchers surveyed a group of 273 randomly selected teen girls living in Massachusetts (between 12 and 15 years old). After four years the girls were surveyed again. Sixty-three said they smoked to stay thin. Is there good evidence that more than thirty percent of the teen girls smoke to stay thin? The alternative hypothesis is:

- a. p<0.30
- b. p≤0.30
- c. p≥0.30
- d. p>0.30

A statistics instructor believes that fewer than 20% of Evergreen Valley College (EVC) students attended the opening night midnight showing of the latest Harry Potter movie. She surveys 84 of her students and finds that 11 attended the midnight showing. An appropriate alternative hypothesis is:

- a. p=0.20
- b. p>0.20
- c. p<0.20
- d. p≤0.20

Lecture 13: Overview of SPSS – Statistical Analysis_ Review of Spring Semester II

ACTIVITY: INTERPRETING SPSS DATA

Students will be taught (visually) how to interpret data, and determine whether to retain or reject the Null Hypothesis **Lecture 14-15: Student Presentations**

ACTIVITY: PRESENTATION OF RESEARCH PROPOSALS

HAVE A WONDERFUL BREAK!

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WEEK 10 MANDATORY CITI TRAINING:



COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)

Instructions for CITI Training

(MANDATORY). Students must complete the Behavioral Social Service Module. Instructions are located on the CUNY Website under CITI Training <u>http://www2.cuny.edu/research/research-compliance/training-education/citi-training/</u>

You are required to complete three modules of the CITI Research Ethics Training. The training may be completed in multiple sessions.

Go to https://www.citiprogram.org/ and click the Register button.

- 1. Step 1:
 - a. Under Select Your Organization Affiliation, enter CITY UNIVERSITY
 - b. AGREE to the Terms of Service and that you are an affiliate of CUNY University
 - c. click Continue to Create Your CITI Program User Name/Password.
- 2. Step 2: Enter the fields for Personal Information and click Continue to Step 3.
- 3. Step 3: Continue the registration process
- 4. Step 4: Continue the registration process
- 5. Step 5: enter "No" for "Are you interested in the option of receiving Continuing Education Unit (CEU) credit for completed CITI Program courses?"
- 6. Step 6: Fill in the personal information
 - a. For Department: put "Graduate School of Social Service"
 - b. For Role: click:
 - i. Student Researcher Graduate Level: for MSW and PhD students
 - ii. Student Researcher Undergraduate: for BASW students.
 - c. Office Phone is a required field. Enter your home/cell number.
 - d. At the bottom under "Which course do you plan to take?" click Basic Human Subject—Social and Behavioral Focus.
- 7. Step 7:
 - a. Question 1 select "Students conducting no more than minimal risk research."
 - b. Skip Questions 2–4.
 - c. Question 5 select "No."
 - d. Skip Question 6.
 - e. Question 7 select "Not at this time."
 - f. Skip Question 8.
 - g. Click the Important Notice and then the Complete Registration button.
- 8. After you click Finalize Registration you will see a screen that says "Your registration has been completed successfully."
 - a. Click the CUNY button.

b. Click Undergraduate Students.

- 9. You will see a screen that says "Undergraduate Students—Basic Course" with three required modules:
 - a. Belmont Report and Its Principles
 - b. Students in Research
 - c. City University of New York

10. Note: You do not have to complete the courses listed under "Supplemental Modules." 11. When you have completed the training:

- a. Email the certificate of completion to yourself
- b. Then upload it onto blackboard in the specified location