

ASA Resource Ideas for Domain 1

Domain 1 - Sociological Perspective and Methods of Inquiry



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Presenter - Hayley Lotspeich, Wheaton North High School, Wheaton, IL
Hayley.Lotspeich@cusd200.org

Research Methods Mad Libs



Abstract:

Introducing sociological research methods in an entry-level course with a mix of sociology majors and non-majors can be challenging. This activity engages students at each stage of the research process, providing an interactive alternative to traditional approaches and allowing students from various disciplinary backgrounds to collaborate in the production of knowledge. This class activity uses a "Mad Libs" format to cast students in the roles of sociological researchers. Students learn to identify independent and dependent variables, operationalize concepts, check for reliability and validity, formulate and justify hypotheses, select appropriate research methods, simulate literature review and data collection, analyze and share results, and reflect on the research process.

Details:

Resource Type(s): Class Activity

Author(s): Jess Butler

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Subject Area: Introduction to Sociology/Social Problems

Class Level: Any

Class Size: Any

Usage Notes:

This activity is useful both for introducing research methods concepts (i.e. variables, hypotheses, types of data collection, etc.) and for assessing students' understanding of how to do sociological research. In an introductory-level course, I conduct this activity on the first day of a two-class research methods unit, after introducing key...

Learning Goals and Assessments:

Goal 1:

Identify specific sociological research techniques.

Assessment 1:

Students discuss the results of their simulated research project with the rest of the class, reflecting on what they learned about sociological research methods during the activity.

Goal 2:

Understand the connections between sociological research questions and the appropriate methodological approaches for gathering data to answer those questions.

Assessment 2:

Students complete a written reflection about the activity. (Sample questions provided in activity guidelines.)

Goal 3:

Apply knowledge of the basic elements of sociological research to two or more variables and design a "mock" sociological study.

Assessment 3:

Students answer a set of multiple choice questions about the activity. (Sample questions provided in activity guidelines.)

Research Methods Mad Libs

Jess Butler, Ph.D.

Butler University

Department of Sociology and Criminology

4600 Sunset Avenue

Indianapolis, IN 46220

jbutler3@butler.edu

Course(s): Introduction to Sociology, Sociological Research Methods

Abstract

Introducing sociological research methods in an entry-level course with a mix of sociology majors and non-majors can be challenging. This activity engages students at each stage of the research process, providing an interactive alternative to traditional approaches and allowing students from various disciplinary backgrounds to collaborate in the production of knowledge. This class activity uses a "Mad Libs" format to cast students in the roles of sociological researchers. Students learn to identify independent and dependent variables, operationalize concepts, check for reliability and validity, formulate and justify hypotheses, select appropriate research methods, simulate literature review and data collection, analyze and share results, and reflect on the research process.

Goals

1. Identify specific sociological research techniques.
2. Understand the connections between sociological research questions and the appropriate methodological approaches for gathering data to answer those questions.
3. Apply knowledge of the basic elements of sociological research to two or more variables and design a "mock" sociological study.

Teaching Objectives

1. Introduce sociological research methods.
2. Examine the techniques and requirements involved in sociological research.
3. Demonstrate the applicability of sociological research to students' everyday lives.

Anticipated Learning Outcomes

1. This exercise introduces students to a range of sociological research methods. Students learn to identify independent and dependent variables, operationalize concepts, check for reliability and validity, formulate and justify hypotheses, select appropriate research methods, simulate data collection, analyze and share results, and reflect on the research process.

Materials Needed

- ☐ Three containers (plastic bags, bowls, hats, jars)
- ☐ Scissors
- ☐ List of independent variables, printed or handwritten
- ☐ List of dependent variables, printed or handwritten
- ☐ List of sociological research methods, printed or handwritten
- ☐ List of instructional steps, either printed, on PowerPoint, or written on board
- ☐ Dalton Conley, "How Sociologists Do Research" (video clip accessible via YouTube: <https://youtu.be/CFINTHbOjFs>)

Estimated Time

Approximately 45 minutes (can be adjusted to 30 minutes or up to 90 minutes)

Preparation (For Instructor)

Before class, the instructor will cut up the list of variables and research methods, placing the independent variables in one container, the dependent variables in a second container, and the research methods in a third container.

Timing

In a typical introductory sociology class, I usually spend two to three 75-minute class periods on sociological research methods. This activity is useful both for introducing research methods concepts (i.e. independent and dependent variables, hypotheses, sample size, types of data collection, etc.) and for assessing students' understanding of how to do sociological research. I usually conduct this activity on the first day of the unit, after introducing key concepts that will be used in the exercise. When supplementing a brief lecture, this activity fills a 75-minute class period, but it can also be altered for a 50- or 90-minute class.

The Concepts

Before beginning this activity, I give a brief lecture that explains and provides examples for the following concepts:

- ☐ reliability
- ☐ validity
- ☐ peer review

I then introduce the steps of the sociological research process, providing examples for each:

- ☐ selecting a topic
- ☐ defining the problem
- ☐ reviewing the literature

- ☐ formulating a hypothesis
- ☐ choosing a research method
- ☐ collecting data
- ☐ analyzing the results
- ☐ sharing the results

The Research Methods

I then introduce the research methods, providing examples for each:

- ☐ quantitative survey
- ☐ qualitative interview
- ☐ secondary analysis
- ☐ documents / archives
- ☐ unobtrusive measures
- ☐ participant observation

Because this activity is intended to be an introduction to sociological research methods, I limit my discussion to these steps and methods. To implement this activity in an upper-level or research methods class, the list may be amended to include additional concepts, steps, or methods such as coding, inductive vs. deductive methods, moderating vs. mediating variables, and research ethics.

The Variables

Almost any variable found in social life can be used for this activity. However, because students randomly choose their independent and dependent variables, there are some potential pitfalls to avoid when developing a list of variables to include in this exercise. It is important to consider all possible combinations of variables, especially if this activity is near the beginning of an introductory course and you have students who presumably know little about sociology and causality. For instance, if a group chooses "gender" as their independent variable and "intelligence" as their dependent variable, the instructor may find herself warding off hypotheses about the "innate" intellectual superiority of men—a worthy conversation in a sociology course, but one that may prove distracting from the learning objectives for this particular activity, and that risks reifying the very stereotypes sociology attempts to deconstruct.

With this in mind, I recommend offering "odd" or less obviously correlated variables that are not easily conceptualized as causal, yet remain easily recognizable to students. It's fun to play around with the variables to see which ones work for your students; they may even give you ideas for future semesters. The unknown (and often funny) factor also gives this activity its name: "Research Methods Mad Libs."

You should have as many pairs of variables as there are groups. I generally have 25-30 students in an introductory course, which results in 8 groups of 3 or 4 students each, so I use 8 pairs of variables. I have each group conceptualize a different pair of variables (i.e. no "repeat" variables), but you may choose to give some groups the same variable as a way to see what kinds of conceptual differences emerge.

These are the independent variables I use:

- ☐ three-syllable first names
- ☐ eye color
- ☐ hair color
- ☐ birth place
- ☐ birth order
- ☐ number of siblings
- ☐ astrological sign
- ☐ height

These are the dependent variables I use:

- ☐ favorite superhero
- ☐ favorite sports team
- ☐ favorite cereal
- ☐ favorite music genre
- ☐ hours of Netflix watched per day
- ☐ number of children
- ☐ college major

Procedure (For Students)

After explaining the concepts and viewing Dalton Conley's short YouTube clip, "How Sociologists Do Research," I sort students into groups of 3 or 4. Each group receives a handout with step-by-step instructions. I tell students that we will go through each step together, and ask them not to skip steps or work ahead. Each group then selects one piece of paper from each of the 3 containers, so that each group has one independent variable, one dependent variable, and one research method.

After each group chooses their variables, I allot several minutes for students to consider how their 2 variables may be related ("Step One" on the handout). We then proceed to the subsequent questions and steps.

The Questions and Steps

As noted above, I give each group a handout listing ten "steps" of sociological research that serves as an activity roadmap. If printing is limited at your institution, you may opt to put these steps in a PowerPoint or write them on the board. The questions align with the

concepts and methods covered prior to the exercise, and I briefly review each step before students begin the activity. At this point I again remind students not to work ahead, as they often need a bit of guidance to deepen their thinking about each step.

Step One: Select a Topic

Choose one independent variable and one dependent variable from the containers.

Step Two: Define the Problem

What do you want to know about the relationship between these two variables? For example, does one make the other increase or decrease, or more or less likely?

Some groups readily come up with ideas at this step; others need more assistance. I encourage students to be creative, as some of the relationships between the variables may seem nonsensical at first. I walk around the room and discuss potential ideas with each group. In larger groups where it may not be possible to check in with each group individually, you may ask students to check in with each other, or utilize teaching assistants if you have them.

Step Three: Check for Validity and Reliability

How will you define your variables? Be specific!

Students' initial definitions are often not specific or thorough enough; for instance, they may neglect to consider people with no siblings when conceptualizing the "birth order" variable, or assume that all hair color is natural when conceptualizing the "hair color" variable. Here, it is helpful to refer to Conley's video and to remind students to be as specific and thorough as possible before moving forward.

Step Four: Review the Literature

Ask at least three other classmates (not in your group) what they think about your proposed topic. Write down their responses and share them with your group.

Obviously, this is not the same as a conventional literature review, but this simulated version presents a good opportunity to ask students to reflect on how taken-for-granted opinions about a topic differ from peer-reviewed research.

I allow extra time for this step, as it requires students to get up and move around the room.

Step Five: Formulate a Hypothesis

What do you expect to find, based on what you already know and what "the literature" (your classmates) suggested? Be sure to predict a relationship between variables, and say why you think it will happen this way.

At this step, I find it helpful to use the common "if, then, because" formulation. For example, "If one has green eyes, then they are more likely to be a Boston Celtics fan, because the Celtics uniforms are green." Again, I encourage students to be creative (and not necessarily realistic) about their hypotheses, and to consider a number of different potential relationships between variables.

Step Six: Choose a Research Method

Select one sociological research method from the container. Write down the benefits and drawbacks of this method for your topic. Discuss how you would use this method to collect data. Then, choose one additional research method from the list provided and repeat these two steps.

When left to choose a method on their own, students tend to gravitate toward quantitative surveys. Selecting a method at random encourages them to think about less well-known methods; the two-method approach also helps illustrate the benefits and challenges of mixed methodologies. Asking students to consider methods that might not obviously correlate with their topic, for instance using archival documents for a study on facial hair and birth order, adds another element of fun and creativity to this activity.

Step Seven: Collect Your Data

Ask at least three classmates (not in your group, and not the same people you spoke to in Step Four) questions that help "test" your hypothesis. Write down their responses and share them with your group.

As with Step Four, there are clear differences between this "faux" data collection and "real" sociological research. This is a good opportunity to ask students to reflect on bias within their sample (e.g., sample size, random vs. targeted sampling, researcher positionality, etc.).

I allow extra time for this step, as it requires students to get up and move around the room.

Step Eight: Analyze Your Results

With your group, apply the "data" you've gathered about your hypothesis. Does your hypothesis hold up, or do you need to reject or revise?

Here, I walk around and help any groups who are struggling and answer any questions. I also usually ask a few questions that challenge students to think about alternative interpretations of their "data."

Step Nine: Share Your Results

Tell us what you found!

At this step, I ask each group to share the thinking behind their simulated research project with the rest of the class. This is one place where you can stretch the activity, for instance by asking other students if they would conceptualize the variables differently or to consider different correlations, and so on.

Step Ten: Reflect on Your Research

If you could do this experiment in "real life," what would you do differently? What did you learn about sociological research from doing this activity?

Again, you can stretch out this step if you like, but if you're short on time, this is a good opportunity to ask students to write a one-minute reflection paper that you can use as a starting point for the next class period.

Conclusion

On the PowerPoint, I provide the following three "takeaway points":

- ☐ There isn't always one "right" way to do sociological research, but some methods are more appropriate for a research question than others.
- ☐ What we find always depends on how we conceptualize and operationalize our variables, and what questions we ask in the first place.
- ☐ Sociological research is always messy, and usually fun!

The instructor may end the activity by asking students to share and reflect on their research, or provide a question for a one-minute reflection paper, such as:

- ☐ How is sociological research different from using common sense?
- ☐ What are three requirements for doing sociological research?
- ☐ What are the benefits and challenges of one of the sociological research methods you used in this activity?

At the beginning of the next class meeting, I ask students to discuss their reflection papers as a group.

Interpretation

One problem I have experienced in teaching methods is that it's one thing to tell students how to do sociological research—everything seems neat and straightforward and easy—but once students actually try to *do* research, they realize how difficult and messy it can be, how many steps are involved, and how much problem-solving and creativity is required. This activity helps bridge the gap between telling and doing in a way that is appropriate for an entry-level course.

Potential Pitfalls

As discussed above, the biggest potential pitfall is the combination of variables. And, as with any activity where students are working in groups and moving around the room, it's important to keep track of time and ensure that students are staying on task. I find that walking around the room is enough to maintain focus, but in larger classes you may want to have students write down each step and turn it in for credit at the end of class.

Another potential pitfall is students working ahead and speeding through the exercise without "getting into it." This is one big reason why checking in with students at each step, and pushing them to think about less obvious conceptualizations, questions, methods, and conclusions, is helpful.

Finally, as with all group work, there is the possibility of one student doing the work for the whole group. I find that assigning groups randomly, rather than allowing students to self-select, is usually enough to prevent this problem.

Assessment

Sample test questions for an exam or quiz following this activity:

1. Which of the following is not a method for conducting sociological research?

- a. common sense**
- b. qualitative interviews
- c. participant observation
- d. secondary analysis

2. Olivia wants to find out why emergency room doctors smoke more cigarettes than emergency room nurses. So far, she has selected her topic, defined the problem, formulated a hypothesis, reviewed the literature, and collected all of her data. What step does Olivia still need to do?

- a. give the doctors in the E.R. a survey

b. analyze her results

- c. watch reruns of "Grey's Anatomy"
- d. smoke a cigarette with an E.R. nurse

3. When a sociological researcher predicts a relationship between variables, this is called:

- a. collecting data
- b. defining the problem

c. formulating a hypothesis

- d. choosing a research model

4. Quinn is doing sociological research to find out whether or not watching T.V. is bad for kids. Which of the following terms does Quinn need to define more clearly?

- a. kids
- b. T.V.
- c. bad
- d. all of the above**

References Conley, Dalton. 2013. "How Sociologists Do Research." Retrieved May 25, 2016. <https://youtu.be/CFINTHbOjFs>