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Consultation Policy: Office hours are Monday and Tuesday from 2 to 5 PM, but I will meet with you any time that I am free. You can make an appointment by e-mail. I can answer relatively simple questions via e-mail and I try to respond quickly. Please contact me about any question or concern that you have.

Course Description: This course focuses on three critical characteristics of social research instrumentation: reliability, validity and precision.

Course Goals: The goals of this course are to improve your ability to assess, apply and create science based research findings in your professional and personal life.

Course Objectives: After completing this course, you will be able to:

- Assess the degree to which research findings are based on valid, reliable, and sufficiently precise research instruments
- Judge when instrumentation is sufficiently robust to justify applying research findings in your professional work
- Select appropriate instruments for data collection, based on a thorough understanding of the nature of the data that each instrument generates
- Create your own social research instruments for research and evaluation

Approach and Expectations

My assessment of your performance in this course will rely heavily on how well you can apply the concepts we examine in class activities and on your assignments. I expect you to develop and demonstrate analytical and critical thinking skills. Both are central to science and are prerequisites for using science to develop new knowledge and to apply effectively the knowledge generated by science. In practical terms, this means that I am **NOT** looking for rote answers to the questions I ask. Rather, I want to see that you can apply the concepts that we discuss to analyze and evaluate the instruments in research studies and to develop your own instrumentation for research or for evaluation.

I also base my evaluation of your performance on the degree to which you provide evidence that you have taken responsibility for your own learning experience and that you are actively seeking out all of the resources possible to make the learning experience as profound and meaningful as possible. I use a combination of assigned readings, self-directed exploration of the literature and classroom activities to try to create an environment in which you can gain the critical skills and knowledge you need. Taking advantage of these opportunities is your responsibility. I expect you to provide evidence in the form of citations in assignments and class participation that you have used the resources, including the texts, my lecture material, our class activities, and materials that you find for yourself, to maximize your learning experience.

Textbook Information

Bryman, Alan. (2001). *Social Research Methods, Fourth Ed.* Oxford University Press, London.

The Bryman book is basic and you should consider it a starting point for learning about specific research instruments and methods. You will need greater knowledge of specific instruments, especially those you plan to use in your own research, than that provided in Bryman. There is one fundamental flaw in this book, in my opinion. It divides research methods into quantitative and qualitative. This is confusing because there are, for example, two chapters about interviews – one that treats the interview as a “quantitative method” and one that treat it as a “qualitative method.” However, this text is inexpensive (relatively) and I try to keep course costs down for students. I therefore use it, even though I find it very flawed in this regard. Treat the textbook as an initial introduction to each of the research methods that we will discuss. Unless you have a question about something in the textbook, we will not discuss the material covered in the text in class. You should cite and reference Bryman in your assignments when you do call upon the text as a source of information.

Other Materials

I will provide you with assigned readings from other sources than the textbook. Most of the additional required readings for the course consist of research journal articles. Some are chapters of books of mine that I have placed on e-reserve. If you do not know how to get materials from e-reserve, consult the UF libraries website for instructions. I also provide a list of suggested readings for most topics. These will be useful in completing the assignments and it is appropriate to use, cite and reference these readings in your assignments. However, I do want you to demonstrate that your exploration of the relevant research methods literature extends beyond the required materials.

Note that one of the assessment criteria for your performance on most assignments is that you provide evidence that you made extensive use of the research methods literature in developing your responses to my questions. You MUST extend the literature you use beyond required materials. You do not need to spend hours looking for materials. I provide a long list of additional resources at the website for almost every topic in this class. Use those materials. If you find your own materials, that is excellent. In fact, you get extra credit for doing so if you share those materials with the rest of us through Canvas. There is a form for doing this. It’s short, quick, and easy to do.

Where to Find Reference Materials about Your Research Topic

I give you many references about research methods. You will also need to find materials about specific topics. Use this information to make your search for those materials efficient and effective.

Most disciplines support several journals. You need to learn to use **research journals**. Many journals report research, but there are important differences between them in terms of the audience for which they are intended. A research journal means just what it says. The primary audience for the material is other researchers and advanced professionals. These are the journals that you will have to use throughout your graduate experience, and your employer after graduation will expect you to know these journals in your area of expertise and use them regularly. Relying on popular web sites is **not acceptable** in graduate school or in the professional work world. Even among research journals, the scholarly value of the material they contain varies. High caliber research journals are internationally recognized. They are always thoroughly peer reviewed. They report original research findings. In fact, most have a policy that they will not publish information that has been previously published somewhere else. They provide an in-depth description of the research design and methodology, including in-depth data analysis, and discuss the findings of the research in detail, usually including the theoretical

contribution of the work. Both non-profit (professional societies mostly) and for-profit presses publish very good research journals. Most professional societies and for-profit publishers also produce journals for practitioners. They, too, are normally peer reviewed, but they are usually less scholarly than the high caliber research journals. They often focus on the recommendations that grow out of research, but do not provide a detailed description of how the research was conducted and the contribution of the research to new knowledge and theory. Other journals are aimed at a general public audience and you should not rely on these publications.

How can you identify a research journal? First, you can always consult with me or other faculty members in your area of interest to identify appropriate journals. However, you need to develop the ability to judge the quality of journals yourself. There are several characteristics that distinguish between different kinds of journals. First, in high caliber research journals, the majority of the articles will report original research results. Opinion pieces, review and the like will be of minor importance in the overall content of any given issue. Second, the articles will be for a sophisticated reader. You can see this by the use of technical terms, for example. Perhaps most telling, research reports in these journals carefully explain, in a detailed way, how the research was conducted. They let you know exactly what steps the researcher took to collect data. They include a very meticulous analysis of the results. Again, they explain exactly how the research analyzed the data. Third, the research reports focus on the research and what was learned -- **not** on recommendations for how to apply or use the findings. Finally, the description of the journal (somewhere near the very front) will give clear clues. Look for words like scholarly, the highest standards, and international interest. In my discipline, geography, the Association of American Geographers (AAG) publishes two journals. The first, the *Annals of the American Association of Geographers*, is a research journal. Here is how the AAG describes it:

“The Annals of the Association of American Geographers publishes original, timely, and innovative articles that advance knowledge in all facets of the discipline. Papers accepted for publication must meet the highest standards of scholarship, address significant research problems and issues, interest the broad readership of the journal, and be attuned to the sensibilities of a diverse scholarly audience.”

Lower caliber journals, on the other hand, do not aim their material at such a sophisticated audience. The audience might be the family practice doctor rather than the doctor at Shands; the school camp counselor rather than the professional whose work focuses on interventions for problematic adolescent behaviors; the field staff member in a community-based organization rather than the professional who develops, implements and evaluates programs for the organizations. Articles in the lower caliber journals often provide only a very brief description of how the research was conducted. The section about data analysis is usually not very lengthy or well developed and the results themselves are often reported in a summarized form. Often, there is little or no discussion of how the data were analyzed. These journals focus on recommendations for applying research findings, not on the research itself. They do not provide enough information for you to make an adequate evaluation of the degree to which their findings are justified or the degree to which they can be applied outside the context in which the study was conducted. *The Professional Geographer* is a fairly “low caliber” journal. Here is what AAG says: “[*The Professional Geographer*] publishes short articles on academic or applied geography, emphasizing empirical studies and methodologies, as well as book reviews. These features may range in content and approach from rigorously analytic to broadly philosophical or prescriptive.” *National Geographic* is an example of a general interest journal in geography. Its audience is the general public, not professionals.

Grading Philosophy and Policy

I award grades not to punish poor performance, but rather to help you understand and master the material we are covering. My goal is for every student to earn an A in this course. I expect to see increased comprehension and dominance of the concepts and ideas that we discuss during the course. Expectations grow as the semester progresses and what was an acceptable or adequate response on an early assignment will most likely not be acceptable on a later assignment. I will expect to see increasing sophistication in your answers.

Most of us learn more effectively when we can discuss our ideas with others. I encourage you to engage in collaborative learning. We will have two assignments where you work in groups. However, I encourage you to work together as much as possible. Share your ideas and discuss the assignments with some of your colleagues. I want to see the product of your individual work, but I want you to maximize your learning experience by collaborating in the learning experience with others. Sharing materials about research methods is one good way to learn collaboratively. Sharing is NOT cheating or being lazy in my courses.

Late Submission Policy

The assignments in this course are sequential. You therefore need to complete assignments in a timely manner. I will not accept assignments submitted after the due date and I will award zero (0) points for the assignment. All due dates are given at the class web site. Submit all assignments at e-learning.

General Types of Grading Criteria

I list the specific criteria that I will use to grade each assignment at the end of the assignment.

Consult those criteria and ***respond to the questions in the assignment based on the specific criteria for each assignment.*** The following general criteria are important components of my assessment in most assignments.

Ability to apply the concepts learned in class. I expect you to apply the concepts that we learn about in class. You must demonstrate that you understand the key concepts and that you can apply what you have learned to your own work. Concentrate on explaining how you are applying the concepts, not on repeating phrases from our discussions or from the literature. I know you can repeat what you read and hear and simple repetition will not earn points. I assess your ability to apply what you know.

Clear explanations of the decisions you make as you develop research instruments in your own words. I ask a number of specific questions in each assignment. I have tried to make these as clear as possible and to give you guidance about how to answer each question. Be specific and make sure that you answer each question completely. Focus on providing **a thorough justification or explanation for each answer**. I am more interested in how you arrived at a conclusion than in whether I agree with your conclusion or not. Use your own words. Again, I know you can repeat what you read or hear in class. Using your own words to answer questions helps me assess your mastery of the material we cover.

Evidence that you are searching out and reading additional materials about social research methods and instruments, beyond the assigned readings. The assigned readings are a place to **start** your exploration of a subject. I expect you to seek out and read additional material about research methods and instruments. Cite these materials in your assignments, explain **how** you used them, and include them in the references. For example, when we discuss interviews, you should find published information about how to use and develop reliable, valid interview schedules. Focus on the uses and ways to improve the validity and reliability of the instrument. ***I do not consider my "cheat sheets" or***

the text book in my assessment of your use of literature in the assignments. E.g., even if you cite Bryman and Swisher over and over, you will receive 0 points for the assessment criteria about using the research methods literature.

Distribution of Grade

Component	Points
Class Preparation and Participation	75
Small Group Project: Index	200
Group Project Peer Assessment	50
Partner Project: Interview Protocol	200
Individual Semester Project (Part 1 constructs 50 points; Part 2 instrument 250 points; Part 3 IRB protocol 75 points)	375
Review of Research Methods Articles (two occasions)	100
Total	1000

Grading Scale

A	95 – 100%	A-	90-94%	B-	80-82%		
B+	87-89%	B	83-86%	C-	70-72%		
C+	77-79%	C	73-76%	D-	60-62%	E	<60%
D+	67-69%	D	63-66%				

Schedule of Topics

Session	Date	Topic
1	Jan. 9	Foundations of Social Research
2	Jan. 16	Class does not meet (Martin Luther King Day) but Ethics Training Results are due by Friday
3	Jan. 23	Measurement in Social Research
4	Jan. 30	Operationalizing Constructs
5	Feb. 6	Questionnaires, Indices & Scales
6	Feb. 13	Class Work on Index
7	Feb. 20	Interviews
8	Feb. 27	Focus Groups
9	Mar. 6	Spring Break
10	Mar. 13	Test of Interview Protocol in Class
11	Mar. 20	Various Nifty & Helpful Techniques
12	Mar. 27	Tests
13	Apr. 3	Observations & Trace Measures
14	Apr. 10	Participatory and Action Research: Pros & Cons
15	Apr. 17	Archival & Secondary Data & Analytic Techniques
16	Apr. 24	Closure – Presentation of Project & Course Recommendations

Class Preparation & Participation (75 points)

Objective: Help ensure that the time we spend together in the classroom will allow you to extend your mastery of the material covered and practice your ability to apply the concepts to the evaluation and/or development of research instruments.

I assess this portion of your grade based on the degree to which you play a leadership role in class activities and can respond to questions and comments in our discussions. You need to adopt a proactive approach to class preparation and participation. I expect you to be adequately prepared to participate fully in all class activities and to answer questions in class. My comments in class and class activities assume that you already covered and understand the material in the assigned readings. Class activities and discussions will build upon and extend your competence in each topical area, not cover the basics. Therefore, adequate class preparation is a key to your success in this course. We will not normally discuss the material from Bryman in class. We will sometimes discuss a specific required reading, but since these are preparatory materials, I will assume that you have read the material and understand it. If something is not clear, please ask a question. If it is unclear to you, it probably is unclear to others as well. I do NOT award class participation and preparation grades simply based on attendance. The quality of your preparation and participation are the basis for my grading. See the document “Class Participation and Preparation Assessment Criteria” at the course website.

I also encourage students to **share materials about research methods** that you find on your own and I do award **extra** points for doing so. To share something you find useful, complete the document “Sharing Materials” available at the course website. The summary of what you found interesting in the article should be no more than one page. There is a discussion board at the CANVAS (e-learning) website for this class called Sharing Materials where you can submit the form. Title the document **YourLastName_TopicOfArticle (e.g., Swisher_Weighting Items)**.

Review of Research Methods Articles (100)

Objective: Facilitate your exploration of the research methods literature

I understand that your time to spend reading material for this course is limited and that this can limit your ability to explore the research methods literature. The annotations shared among all class members will constitute a reference library that will make your exploration of the literature much more efficient. I will assign one reading for you to review and present. The annotations will provide summaries of some important aspects of methodology, often aspects that apply generally to all instruments or sometimes that deal with issues that are particularly important for a specific method of data collection. I strongly encourage you to explore the research methods literature in more detail, focusing on the instruments of most interest to you. Please note that your ability to demonstrate that you have explored the literature (beyond required readings) and used it in completing your group and individual projects is an important component in my assessment of your performance. Sharing these materials that you find on your own with your colleagues through a research methods review is an excellent demonstration of your exploration of the literature. While only the one assigned review is required, I strongly encourage you to submit reviews when you find helpful material. The list of additional resources each week is a good starting place for your exploration. Make sure you read the research reviews as they come to you. Otherwise, you cannot use them effectively. **The articles annotated in the research reviews meet the requirement to use research methods literature in the assignments.**

Your objective is to provide your colleagues with a clear, concise description of the major points that you derive from the article **about research methods**. Most of the articles at the course website deal with a specific data collection method or tool. I have selected the articles because they provide insights about things like novel uses of the data collection method, ways of combining methods to enhance the overall reliability, precision and validity of the data collection process, or perhaps comparisons of the kind of data produced by different data collection methods. **If an article deals with a specific study (example of the use) of a method, focus on what you learned about the research method, not the**

results of the study itself. For example, one article is a study that reports how data about dietary habits were collected, using two methods of data collection, a questionnaire and observation. We are not interested in the results of the study with regard to the respondents' dietary habits. We want to focus on what we can learn about the strengths and weaknesses of the two methods of data collection. See the "Research Methods Review Example" at the website.

Submit the review as a Word document under the discussion topic "Research Report Reviews" on Canvas. Use your last name, the last name of the first author of the article, and the word "review" to name the document you submit (e.g., Swisher DelPilar Review). The **maximum length** for the review is two pages. You will make a 10 minute presentation about your article in class. **Summarize and explain the relevant ideas or concepts that you gained from the article, making sure to emphasize how your colleagues can use these ideas in the small group and semester projects.** I will **NOT** return comments to you about the Research Methods Reviews.

The Research Method Review has five required components.

1. **Your name**
2. **Full citation** for the article in APA style
3. **Key words.** Give your own key words based on the key ideas in the article from the perspective of research methods. The author's key words probably focus on the topic of the study rather than the methodological issues. We want the latter.
4. **Key Points from the Article.** List the three to five main ideas, concepts or conclusions in the article. State and explain the key points about research methodology that you gleaned from the article – what you learned about research methods from reading this article. This can be brief, but be specific and **explain** the points. This is not a list of topics, but rather a succinct explanation of what you learned. See the "Example of Research Methods Review."
5. **Relationship to Assigned Readings.** Provide an explanation of how the material or concepts covered in the article builds upon, contrasts with and/or extends the material covered in the assigned readings.

Criteria (Written Report & Class Presentation)	Possible Points	Your Points
APA style, followed instructions	20	
Listed and explained the key conclusions or concepts in the article from a research methods perspective	40	
Compared and contrasted the key conclusions or concepts in the article to those in Bryman, Adcock & Collier, and other assigned readings	25	
Makes it clear how the article expands upon, contrasts with, or extends concepts about research methods beyond what we cover in the assigned readings	15	
Total	100	

Small Group Project – Index (200 Points)

Objectives: After completing these assignments you will know how to:

1. Develop robust theoretical definitions of constructs
2. Identify variables that researchers have used to represent theoretical constructs
3. Identify items that others have used in their research.

4. Apply concepts of content, discriminate and convergent validity to develop and select items to use in your research
5. Use cognitive techniques to evaluate the reliability and validity of the sets of potential items you have selected and/or developed and to eliminate or alter items that are not useful
6. Use various techniques to convert ordinal responses to individual items to summative interval scores for variables
7. Use various techniques to improve the reliability, validity, and discriminatory power of measures

Answer the questions listed below in a **single space Word document**. Number your responses – sometimes I cannot tell which question you are answering. Title the file with the last names of all team members and the word index like this Swisher_Jones_Allen_Index. Please list the names of all group members on the first page of the document. When you submit your assignment, attach a copy of the instrument at each stage – five documents labelled as: (1) original draft, (2) after expert review, (3) after cognitive test, (4) after tests for reliability and validity, and (5) after tests for discriminatory power. These can be pdf documents.

I have identified one or two concepts or constructs for you to operationalize, and given you a place to start the literature search. This will economize your time and effort. You should not need to extend the literature search much, if at all.

You will work with two or three of your peers to develop and validate the indicators for an index. You will have at least one index for each construct assigned to you. I recommend that you “break it down” into dimensions and have a separate index for each dimension. This will make your discussion at the end (most of the points on this assignment) **much, much easier**. You will **NOT** collect any data, but you must develop and **test** your instruments.

To keep this assignment simple, I require that all of your items use a scalar response format.

Your items can either be in the form of statements or questions. For example, you might ask people to indicate how often they do something with response categories of never, rarely, sometimes, often and always. You could also ask them how important something is to them with response categories of not important at all, of little importance, somewhat important, and very important. You could also ask them to indicate how much they agree with a statement with response categories of disagree completely, disagree, neither agree nor disagree, agree, agree completely. **Beware using the Likert-type approach. Do NOT use this approach unless you are actually measuring items that are not amenable to more straightforward, less time consuming response formats.** See me if you do not understand the appropriate use of this response format – it is WAY overused. You may find some items in the literature that you think you can use if you change them to a scalar response format. For example, the literature might have an item that uses a ranking response format: “Rank the following five reasons for going to graduate school in terms of their importance, where 1 is the most important reason and 5 is the least important reason.” You could easily change this to a scalar response format by simply asking people to indicate how important each reason is and providing four or five scalar responses.

The index is a self-completion instrument. Clear instructions for users are critical. Make sure you test the instructions, too. I also want you to gain expertise in developing items yourself. Therefore, **it is a requirement that you develop at least 75% of the items yourself.**

Your responses to the questions should focus on how you applied the concepts we discuss in class. Please do not just tell me what you did, but also **why you did it. Use, cite and reference the research methods literature in your responses in all assignments – 40 of 200 possible points.** Draw

heavily on the reviews that you and your colleagues have submitted. This is a major component in my grading criteria.

Questions 1-7 are the “what we did and why we did it” questions. Do not spend too much time on these – either in the processes themselves or in answering these questions. This is more “what you did” than a demonstration of mastery of concepts. **So don’t get bogged down. Get this done in a couple of days and move on to the actual testing process. Most of your grade is based on your responses to Q8-11.**

- 1. Definition of key terms. Complete this response before you try to start with the rest of this assignment.** Discuss the meaning of (1) context, (2) reliability, (3) content validity, (4) congruent validity, (5) discriminate validity and (6) discriminatory power in your group. Develop a definition of each of these terms that all of you agree to. I want you to think hard about them and make sure you understand these critical concepts in methodology. **State these definitions in your own words.** Do NOT copy and paste from my cheat sheet or other readings.
- 2. Identify the different theoretical definitions of the constructs for your project that you find in the literature.** Use, cite and reference at least five sources of information such as research reports, research reviews, and theoretical discussions, including any of the materials I provided that you use (they count). At least two of the five must be research reports. Make a table showing the different definitions you find and the source of each one. Table 1 below provides examples of theoretical definitions.

Table 1: Example of Definitions in the Theory of Planned Behavior

Summative Constructs	Dimensions or Components often Treated as Separate Constructs	Definition
Attitude toward behavior		Overall evaluation of the behavior
	Behavioral belief	Belief that behavioral performance is associated with certain attributes or outcomes
	Evaluation	Value attached to a behavioral outcome or attribute
Subjective norm		Belief about whether most people approve or disapprove of the behavior
	Normative belief	Belief about whether each referent approves or disapproves of the behavior
	Motivation to comply	Motivation to do what each referent thinks
Perceived behavioral control		Overall measure of perceived control over the behavior
	Control Beliefs	Perceived likelihood of occurrence of each facilitating or constraining condition
	Perceived Power	Perceived effect of each condition in making behavioral performance difficult or easy
Behavioral intention		Perceived likelihood of performing the behavior

3. **State the detailed definition of the theoretical constructs that you will operationalize in your own words. Include the dimensions of the construct unless it is a unidimensional (one dimension) construct.** I am not especially concerned about which definition you select. I want to see that you can use the research literature to develop a robust definition of the construct. Explain the factors you considered in developing your definition. For example, you may find that six authors indicate that there are five components (or dimensions) in the construct, while two authors indicate that there are seven components or dimensions. Which ones will you include in your definition? Why?
4. **For each construct you will operationalize, list and give examples of variables that others have used to capture the meaning of the construct (use a table if you want – this is basically a list).** Remember to be careful about how people are using terms like variable or item and whether they are distinguishing between indicators (variables) and items – many may not. Consult, cite and reference at least five refereed reports in this process (including the ones I provided). You may need to consult more than five reports. You can cite the same reports used in your development of a definition of the theoretical constructs if you used them to answer this question, too. This is a critical step in the process of operationalization. Do not cut your literature review too short – but I know you're probably not very interested in the topic so don't try to become expert. It's a practice run on creating an instrument. That's what I evaluate – not whether you became expert in the subject matter or theory.
5. **Make a table listing the variables or indicators that you plan to use for your study. Remember to break the constructs into dimensions when justified – this will give you some redundant measures that you can later use as evidence (or not) of convergent validity. It will save you grief to be more specific here.** Indicate for each whether you got it from the literature (retained or modified) or you developed it yourself (original). Don't be too anxious to get to a short list of variables or indicators, but remember that graduate students are a pretty specific population. Lots of things that worked in other contexts may not be useful here. **Redundancy** is valuable at this point. If an indicator or variable is critical to your research, **use multiple measures**. There are two reasons for this. The first is that one measure, despite all your effort to validate, may fail. I have seen this happen many times. Second, convergent and discriminate validation are extremely important. Redundancy allows you to use these forms of validation with your own data. While you may be able to compare your results to results reported in the literature, the best way to use this critical form of validation is to use it on a single data set. You cannot do that if you have single measures of key variables.
6. **Create a comprehensive list of potential items for each variable identified in your response to Q5.** Most of these (75%) should be items you create. If possible, without a long literature search, find examples of individual items that others have used in their research. Put an (A) by them so that I will know they are adopted or adapted. Most authors do not publish their items, but you may get lucky. Even if you do find some, authors can be very "sloppy". They may treat items as "variables," fail to do any testing, etc. Nonetheless, it's good to get some ideas. If you do not find things that look useful, just say so. Don't spend too much time on looking for "good items" in the literature. **Redundancy is essential.** You will eliminate many of the items on this list in the validation process. I've seen many students in this class start with lists of 8 or 10 items for a variable and end up with two or three that "worked." For each variable, you want to have probably 5 or 6 items when all is done – so start with many more than that.
7. **Describe how you will combine the responses to different items to create a single score for each variable in your index.** Think about ways of making your measurements as reliable, valid and precise as possible. For example, you might decide that using a weighting procedure for the

items on the index would increase precision. You might decide that a mean score rather than a cumulative raw score would be a more reliable way to combine individual responses into a score. Justify your decisions. Use, cite and reference the research methods literature in your response

Your next tasks in this assignment are to perform two tests of the **draft instruments**. However, to avoid confusion and provide you with as clear-cut a task as possible, I will require that you complete two procedures.

Your first testing procedure will be to use expert panel review. Get at least one of your colleagues in this class to look at your instrument serving as an **expert in research methods**. Normally, you would probably have more than one expert reviewer and you would probably have a mix of people expert in methods versus expert in the topic. But time is scarce in this class. So we are using one expert reviewer and the expertise is methodological, not content.

Your second testing procedure is cognitive testing. Your objective at this step in testing is to ensure that **your instructions and the items in the index** convey what you want to the people who will complete your instrument and make sure it “makes sense” to them. Again, call upon two or three of your colleagues for this process. That can be people in this class or other graduate students. The critical trait is that they are grad students! You are **not** concerned with the responses to the items at this point. You are concerned with improving reliability and validity of the instrument. Include the instructions in the instrument.

8. **For each test, provide the following information.** In all cases, be brief about “what you did” and spend your time demonstrating that you were able to apply the concepts we have discussed in this class. I don’t expect you to come out of this exercise with a “perfect instrument.” I do want to know whether you are gaining mastery of the concepts and techniques we are discussing. Use, cite and reference the research methods literature in all responses.
 - a. **Describe and justify the specific techniques (like think aloud) that you used.**
 - b. **Explain the changes you made as a result of the test.** I do not want a “question by question” explanation, but rather a discussion of the major weaknesses you discovered (like lack of applicability in the context, or ambiguity in the meaning of the items). I do want to know how many items you started with, how many you eliminated (you should be reducing redundancy in items now), and how many you altered.
 - c. **If this were your own research and not just an exercise, would you continue testing (more than one expert, more than two or three students)?** Explain your reasoning.

The second procedure you will use is a test of the revised index with a broader set of testers – **in this case your colleagues in this class**. I realize that some instruments require a large number of testers and that some techniques for analyzing responses require a fairly large number of testers. For example, you would probably need 40 or 50 testers for a good test using item-total correlation. However, I know that your time in this course is limited. My concern is that you know what procedures to use and how to use them. We are therefore going to use way too few testers. That is OK for this assignment – it will save you time and effort. Just be aware that in your own work, you would probably need at least 20 testers, more in some cases.

9. **Use appropriate quantitative and qualitative techniques to test for reliability and validity of the items.** Use, cite and reference the research methods literature in your response.

- a. **Explain your choices.** You can use the techniques in my cheat sheet. These are simple procedures, easy to interpret and available on SPSS in the computer labs on campus. However, there are other tests you can use and you should feel free to do so.
- b. **Explain how you interpreted and used the results of the test.** What did the tests reveal? What changes to your instrument did you make based on the tests? Again, I do not want a “question by question” response. I want to know how you used these techniques to make decisions about reliability and validity. Be specific and demonstrate that you understand the key concepts and that you know how to take steps to enhance reliability and validity.

10. **You must also use some test of discriminatory power.**

- a. **Explain your choices.** I suggest the Mann Whitney U test using the quartile comparison discussed in class. However, there are other options and you are free to use them. Describe and justify the procedures that you used.
- b. **Explain how you interpreted and used the results of the test.** What did the tests reveal? What changes to your instrument did you make based on the tests? Again, I do not want a “question by question” response. I want to know how you used these techniques to make decisions about reliability and validity. Be specific and demonstrate that you understand the key concepts and that you know how to take steps to enhance reliability and validity.

11. What did you learn about developing research instruments from this assignment? **Focus on what you learned that you will apply in the future to your own work.** Please discuss this **as a group.** Provide a reflective answer that shows how your understanding of the key concepts of (1) context, (2) reliability, (3) content validity, (4) congruent validity, (5) discriminate validity and (6) discriminatory power changed (or not) as a result of this exercise. I am especially interested in your understanding of **how these concepts overlap and are mutually dependent** or perhaps contradict each other. I do not want a rote “concept by concept” list and especially not one that largely repeats what is in my cheat sheets and the required readings. Do not just make a list of what to do and what not to do. This is your chance to show the sophistication of your thinking folks!
(Note: 40 of 200 points)

Assessment Criteria Index	Possible Points	Your Points
Used APA style; followed all instructions Provided complete, specific answers to all questions in your own words Responses were specific to your instruments, not simply generic statements about the development of research instruments in general	30	
Constructs, Variables Differences (if there are any) in theoretical definitions are stated unambiguously Definitions select to use in this project reflect ability to assess the different perspectives in the literature in the context of the specific study (graduate students) Clearly states the theoretical definitions selected for use in study Was able to distinguish between construct, dimensions of constructs, and variables Could identify multiple variables to represent a construct or dimension of a construct when appropriate	30	
Creating Item Bank	30	

<p>Was able to apply basic tenets of item development (wording, not double barreled, etc.) in creating a bank of items for testing</p> <p>Explained and justified your decisions regarding issues like item order, use of reverse scored items, response categories, weighting, and other considerations</p> <p>Applied the key concepts pertaining to reliability, validity, discriminatory power, and context in your decisions about how to identify potential items</p> <p>Knew how to create appropriate summative scores</p>		
<p>Testing</p> <p>Could differentiate between the objectives of expert panel versus cognitive testing and used appropriate techniques in each procedure</p> <p>Was able to use the information gained to improve the content validity of the instrument and could explain the decision-making process</p> <p>Used appropriate procedures to conduct final tests of items</p> <p>Demonstrated mastery of key concepts pertaining to reliability, validity, discriminatory power, context, and the meaning of scores and their interpretation in decisions about how to eliminate and/or modify items</p>	30	
<p>Lessons Learned</p> <p>Was able to move beyond describing the steps taken in this exercise to discuss key lessons learned that you can <i>apply in the future to your own research</i></p> <p>Answer to Q11 was holistic and reflected consideration and synthesis of the specific conclusions stated in previous responses</p> <p>Response demonstrated sophisticated understanding of the concepts of rigor and responsibility in research</p>	40	
<p>Research Methods Literature</p> <p>Consulted, cited and referenced the research methods literature in developing responses.</p> <p>Used materials that are relevant to developing multi-item measures such as indices, scales, tests, and questionnaires – was not just a “shopping list” of general materials</p> <p>Used materials that build upon, extend, or contrast to the concepts that we have discussed in this class.</p> <p>Used materials other than Bryman and my “cheat sheets,” such as other required readings, additional materials listed at the web site, materials that your colleagues share with the class, and materials that you find yourself.</p> <p>Explained how each reference was used specifically – e.g., what did you “get out of” the material that you applied to respond to the assignment</p>	40	
Total	200	

Partners Project: Individual Semi-Structured Interview Protocol (200 points)

Objectives: After completing this assignment, you will know how to:

- Use interviews and related research methods (like focus groups or group interviews) to gain insights into complex thought processes and concepts of respondents;
- Assess the value of using interviews and related methods in combination with other instruments like indices or scales to gain a more complete understanding of a phenomenon (e.g., apply a mixed methods approach to research);
- Apply key principles of research methodology relating to validity, reliability and discriminatory power to the development of protocols for interviews and similar instruments; and
- Apply recommended practices to enhance respondent participation and power in the interview process

Select any partner for this project. The partner can be someone on your team for the previous assignment or any other member of your class. Your task is to develop and conduct one test of the protocol for an individual semi-structured interview. You will use the same theoretical constructs that you used for one of the two partners index (or both if you were on the same team for that project). You will create and cognitively test an interview protocol.

A strength of the interview is that it allows us to gain an in-depth understanding of the respondents' logic, ideas, and thought processes. One way to think about this is that people check boxes when they respond to the items in an index. An interview allows you to understand **why** they chose to check some boxes and not others. However, this in-depth understanding comes at the cost of breadth. **Your interview should not take more than 45 minutes to complete.** You may not be able to include every topic you would like to cover in the index. You will have to prioritize. Draw on what you learned from the test of the index to inform your decisions about the topics to include in the interview protocol. The point of the interview is to deepen and build upon the information that an instrument like the index provides, not replicate the same information. For example, if you found confusing patterns of responses for a variable in the index, use the interview to try to understand why these patterns emerged.

Documents to Submit

Submit the original and revised versions of the guide as Word documents. Use these titles.
YourLastName_Partner'sLastName_OriginalGuide.
YourLastName_Partner'sLastName_RevisedGuide.

Also submit your answers to the questions in this assignment. This should be a single spaced Word document. Use the title YourLastName_Partner'sLastName_Interview

Interview protocol or guide

The interview protocol includes three components: (1) the objectives for each topic or variable included in the interview, (2) the specific items (questions) and space (including some boxes that the interviewer can use) for the interviewer to take notes, and (3) instructions that help the interviewer manage the interview process.

List the objectives for each topic you will include in the interview. The objective should clearly state what it is you want to know about or understand. You do not read this to the respondent. It is there to help you transition from topic to topic and to keep you focused on what you must get from the interview.

Being able to glance at the objective when you feel the interview has started to “go astray” helps you get back on track.

For each objective and associated topic, make a list of **potential questions** that you will ask. Leave plenty of room for the interviewer to take notes. Include the range of types of questions so that you can steer and direct the conversation. **Use a variety of types of questions.** Refer to the Stewart, Shamdasani & Rook reference (Stewart, D.W., Shamdasani, P.N. & Rook, D.W. 2007 *Focus groups. Theory and practice*. Sage Publications, London. Pp. 69-86). Even better perhaps is the Krueger & Casey piece – also on e-reserve, but be careful, there are two different Krueger items on reserve (Krueger, R.A. & Casey, M.A. *Focus Groups*, Fifth Edition. Pp. 39-76, "Developing a Questioning Route." Sage, Thousand Oaks, CA). For example, if you want to understand how strongly people hold their ideas about a specific idea, you will need to use confirmatory questions. If you are trying to get people to “think through” a topic, you may need to have a number of questions that cover different components of a more complex idea or issue, with a final question that calls for an overall conclusion from the participant. On the contrary, if you are trying to get someone to think about a number of ideas, to get the greatest possible range of ideas, you may want to include follow-up questions or activities that are disconfirming. **Clearly indicate the type of each question in the facilitator’s guide.** This helps the facilitator use the questions appropriately and helps me assess what you are trying to accomplish and assess your understanding of how to use the various types of questions. Remember that topic and item order are critical in interviews. The Krueger reference cited above has an excellent discussion about developing a questioning route. It’s not just “topic by topic.” I have had experiences where I got some information about one topic, moved to another topic, and then returned with closure questions for the first topic. Getting the order right is one of the most difficult aspects of creating an interview protocol.

Write instructions for the interviewer, even when you are the interviewer. Interviews are hard to keep on track. The better your instructions to yourself, the better the interview. The guide should provide the interviewer with a “game plan” that includes planned interventions (like how to move from topic to topic and how much time to spend on each topic) as well as “back up plans” when the process slows or goes off track.

Cognitive test of protocol

After you have a draft protocol, each partner will conduct one cognitive test of the protocol. You will have time to do this during class and your testers will be other students in the class. Remember that the cognitive test not just a “walk through” the interview. Each of you completes **one test**. You will make changes to your protocol and guide based on the information you get during these tests. The two of you need to meet and create a single set of changes. I do NOT want changes from each of you – make joint decisions.

Explanation and Justification of Procedures

You will find a list of questions below that you need to answer. The objective is for you to explain the steps that you took in developing the guides that you submit and justify your decisions. This document is far more important than the guide itself. This is your opportunity to demonstrate that you understand the principles of developing research instruments in general, and a semi-structured interview in particular, and that you know how to use a mixed methods approach to enhance the depth and quality of research findings. You do NOT need to address the role of context in your decision-making since you already discussed that in the small group project. DO provide a thorough explanation and assessment of your decisions from the perspectives of improving reliability, validity and discriminatory power of your total “research project” – the index and the interview. Be explicit and specific about how each of these

critical components of instrument design played into your decisions. Focus on explaining and justifying your decisions. Do not repeat generalities about instrument development. Address issues and decisions relevant to your study and the specific instrument (semi-structured interview). Use, cite and reference the research methods literature as you answer these questions. Make sure to include methodological literature specific to interviews.

1. Explain the procedures you used to develop the initial interview guide. Specifically explain how considerations of reliability, validity and discriminatory power influenced your decisions about the following:
 - a. The objectives and associated topics to include, remembering that you are building on what your index would generate, not just repeating it
 - b. The processes that you used to develop questions (where you got the ideas for the questions and why the different “mix” of types of questions for different topics)
 - c. How you set the order for the topics and for the specific items

2. Explain the procedures you used for cognitive testing, how you used them and why you selected the specific procedures. Justify your choice of approach to cognitive testing.

3. Describe the changes you made to your interview protocol after cognitive testing. You do not need to explain every change because I have the protocol before and after cognitive testing. Rather, identify the general problems with your protocol and guide that emerged. Explain how the problems identified could negatively affect reliability, validity and discriminatory power for you total project (index plus interview). Then explain the nature of the changes that you made to address the problems. Explain your reasoning in terms of improving validity, reliability and discriminatory power. **Make sure you discuss convergent validity here.**

4. Discuss and summarize what you learned about developing interview guides and protocols in this assignment.
 - a. What did you learn about the challenges of addressing (1) context, (2) reliability, (3) content validity, (4) congruent validity, (5) discriminate validity and (6) discriminatory power in interviews, focus groups, and other kinds of instruments that depend on open response answers from respondents?
 - b. What did you learn that you will apply in your own research?

5. Discuss and summarize what you learned about the use of mixed methods.
 - a. Compare and contrast the nature of the information that you would acquire from the index with the information you would get from a semi-structured interview in a research project.
 - b. Explain how you would use information (data) from the interview **combined with the information from the index** to help reliability, validity and discriminatory power.
 - c. What did you learn that you think you can apply in your own research in the future?

Assessment Criteria Interview / Mixed Methods	Possible Points	Your Points
Used APA style; followed all instructions Provided complete, specific answers to all questions in your own words Responses were specific to your instruments, not simply generic statements about the development of research instruments in general	30	
Creating the Guide	30	

<p>Used the information gained in Assignment 1 to prioritize decisions about which constructs (or dimensions of constructs) and topics to cover Clearly stated achievable objectives for each topical area</p> <p>Topics and objectives were appropriate for an interview –difficult to explore in questions employing closed response formats, for example Was able to apply basic principles of question development (wording, not double barreled, etc.) in creating a proposed interview protocol</p> <p>Applied the key concepts pertaining to reliability, validity, discriminatory power, and context in decisions about how to identify potential items</p>		
<p>Testing</p> <p>Used appropriate techniques for cognitive testing with interviews and justified the choices that were made and the approaches taken</p> <p>Was able to match weaknesses observer in the interview guide during cognitive testing with appropriate changes in the guide and protocol</p> <p>Could explain the decision-making process with regard to which problems to address and how to address them – drew on the specific strengths of interviews</p> <p>Demonstrated mastery of key concepts pertaining to reliability, validity, discriminatory power, and convergent validity</p>	30	
<p>Lessons Learned about Interviews</p> <p>Demonstrated a good grasp of the principles of developing interview guides and protocols</p> <p>Drew conclusions about how to improve the development of interview protocols in the future</p> <p>Was able to move beyond describing the steps taken in this exercise to discuss key lessons learned that you can apply to developing interviews for your own research</p>	30	
<p>Lessons Learned about Mixed Methods</p> <p>Indicated how the combined information from the index and the interview would improve overall validity, reliability and discriminatory power in a study using these two methods (mixed methods)</p> <p>Demonstrated an understanding of the strengths of each of the two forms of data collection and was able to incorporate the strengths of both</p> <p>Indicated an ability to use mixed methods to address divergent and convergent validity of measurements</p> <p>Drew specific lessons about the use of mixed methods to guide your own research projects (did not just repeat generic ideas about the advantages)</p>	40	
<p>Research Methods Literature</p> <p>Consulted, cited and referenced the research methods literature in developing responses.</p> <p>Used materials that are relevant to developing multi-item measures such as indices, scales, tests, and questionnaires – was not just a “shopping list” of general materials</p> <p>Used materials that build upon, extend, or contrast to the concepts that we have discussed in this class.</p> <p>Used materials other than Bryman and my “cheat sheets,” such as other required readings, additional materials listed at the web site, materials that your colleagues share with the class, and materials that you find yourself.</p> <p>Explained how each reference was used specifically – e.g., what did you “get out of” the material that you applied to respond to the assignment</p>	40	

Total	200	
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Individual Semester Project Part 1

You will create at least one instrument and protocol for data collection. You may use any method of data collection that you want. You must operationalize at least one theoretical construct and may operationalize more than one. You should select a topic of interest to you **and** a theoretical framework that is appropriate for your topic and of interest to you. **You CANNOT use the Theory of Planned Behavior.**

Objectives: After completing this assignment, you will know how to:

1. Identify a mid-range theory to serve as a basis for your research
2. Assess how other researchers have used the theory and the constructs they have explored in their research
3. Assess how other researchers have defined these constructs
4. Develop robust definitions of constructs in the theory of interest

You need to work with a mid-range theory for your project. The website for FYC 6330 (Theories of Community Development) will provide a good place to start. First, it provides links to many on-line resources. For example, the Stanford Encyclopedia of Philosophy will let you search for terms like “social class” or “self-completion.” **Please** use this, not “Wikipedia” and such. Other links, like The SocioWeb, give you places to learn about many theories. Second, if you look at the table at the course website, you will see that the major social theoretical perspectives, like conflict theory or constructivism, are listed. If you use those links, you will find many articles in which the theories indicated are used in research and practice. This is an excellent place to start your search.

Do **not** pick a topic (like child abuse or community-based conservation). Theories help us understand and explain classes or types of behavior – like individual decision-making. Social theories are not about topics. They are about classes or kinds of human behaviors and the same theory will provide a basis for understanding a given class of human behavior as it relates to many different settings, topics, or groups of people. For example, the theory of planned behavior can be used to understand individual decision-making about health (to lose weight or not), education (whether to go to college or not), or work behaviors (to change jobs or stay with the one you have). You do want to find theories that others have used to explore the research topic of interest to you. However, do not narrow your search too rapidly. You may find very helpful information that helps you understand the theory and how others have operationalized the constructs in the theory in articles that apply the theory to topics very different than your topic.

Submit as a single-spaced Word document with the title YourLastName_Individual_Part1

1. Briefly (one paragraph) state the problem, issue, need or topic of interest to you.
2. State your research objectives. What do you want to accomplish with this research project?
3. Identify a mid-range theory that other researchers and practitioners have used to address the problem, issue, need or topic of interest to you. Name the theory. Make a diagram showing the components and linkages in the theory like the diagrams linked to the website for our first class meeting. Make a table with **each** of the constructs in the theory listed. Use constructs that are multi-dimensional and define each dimension. That will make the semester project much easier as we will see later in part 2 of the project. Give the definition of each that you will use for your work this semester. State the definitions in your own words. See example in Table 1 below.

Example of Definitions in the Theory of Planned Behavior

Summative Constructs	Dimensions or Components often Treated as Separate Constructs	Definition
Attitude toward behavior		Overall evaluation of the behavior
	Behavioral belief	Belief that behavioral performance is associated with certain attributes or outcomes
	Evaluation	Value attached to a behavioral outcome or attribute
Subjective norm		Belief about whether most people approve or disapprove of the behavior
	Normative belief	Belief about whether each referent approves or disapproves of the behavior
	Motivation to comply	Motivation to do what each referent thinks
Perceived behavioral control		Overall measure of perceived control over the behavior
	Control Beliefs	Perceived likelihood of occurrence of each facilitating or constraining condition
	Perceived Power	Perceived effect of each condition in making behavioral performance difficult or easy
Behavioral intention		Perceived likelihood of performing the behavior

This is a pass-fail assignment. I will approve (or not) your definitions. Once they are approved, you get the full 50 points of credit and can move forward with your independent semester project.

Individual Project Part 2: Development of Instrument (200 points)

Objectives: After completing this assignment, you will know how to:

1. Determine which method(s) of data collection are most appropriate for your research objectives
2. Identify multiple variables to represent constructs or dimensions of constructs – e.g., incorporate multiple measures of constructs within a research instrument
3. Select appropriate techniques to examine the degree to which similar variables provide congruent scores and dissimilar variables provide discriminate scores
4. Determine which of several variables representing a theoretical construct are most likely to provide you with the greatest reliability, validity and discriminatory power in your results and therefore in the conclusions you can draw, incorporating measures that provide evidence of congruence or divergence among scores

This is not a repeat of the small group projects. If you simply “repeat” in a rote fashion what you did in the group projects, you will not do well on this assignment. Those were “simple, practice exercises.” In this assignment, you need to make your own decisions, use more sophisticated approaches, and be creative. Here are the key differences. Focus on these in your work.

1. You must match an appropriate method of data collection to your research objectives and use multiple methods
2. You have to use multiple measures for theoretical constructs (not just one index = one construct)
3. You have to incorporate multiple measures of each construct in your instrument – for example, an index score, a summative question, and a ranking exercise
4. You have to extend your analysis of how to increase reliability, validity and discriminatory power to examine confirming (congruent validity) and diverging (discriminate validity) evidence

Answer the questions below. Number your response to each question. Include an explanation or justification for each answer. Be specific in your answers. Use, cite and reference the research methods literature in your responses. Draw on the reviews of research techniques that you and your colleagues have submitted, required readings besides Bryman and my cheat sheets, materials that you find for yourself, and the additional materials listed at the website. Demonstrate that you have extended your knowledge about the specific instrument that you will use, beyond the basics covered during the course. Do not repeat generalities from the literature. Be specific and explain how you used each reference in your own work.

Submit this assignment as YourLastName_Part2. Include your responses to the questions below and the materials that you provided to your colleague(s) for peer (expert) review.

1. Select at least one key construct in the theory that you will operationalize. Do **NOT** select something simple like income, or educational level. In fact, a more complex construct (one with various dimensions) will make this assignment easier because you must provide indicators of congruent and/or discriminant scores in this assignment – internally, from the data you collect. Multiple dimensions would help you do that. You may select more than one construct. This would also help with issues of congruent and discriminant scores. Provide the theoretical definition of the construct from Part 1 of the Semester Project.
2. For each construct (and dimension) that you will operationalize, identify, list and describe variables that you could use to capture the meaning of the construct. Make sure you have reviewed enough research literature to have a thorough understanding of the indicators or variables that others have used for a given construct. You do not have to list every variable here – just the ones that you will examine as “candidates” for your research. Examine and analyze the evidence in the literature that the indicators and variables used by others demonstrate good reliability, validity and discriminatory power. You will probably need to create some new variables based on the context of your study. Identify the variables you **will test as potential selections for your study and to examine congruence and dissimilarities in scores for related constructs or dimensions of constructs**. Explain and justify your decisions about which ones you think you should retain, discard, change or add based on the evidence you found in the literature. Cite and reference the literature consulted in your report. Highlight or otherwise indicate the variables that you will use in this assignment.
3. Indicate the methods of data collection you will use for your study. Do this construct by construct, or measurement by measurement. Explain why you have chosen each method as an appropriate choice for the kind of data that you need to collect to achieve your research objectives.
4. Provide a list of potential items that you will test for each variable listed in your response to question 2 and each form of data collection identified in your response to question 3. Include both items that you “adapt/adopt” from the published literature and items that you develop yourself. Cite and reference the source for each item that you draw from the literature. **It is a requirement that you develop at least half of the items yourself**. Explain the specific characteristics of the context in which you will conduct your study that you took into account in developing the items. Explain what

you considered in making sure that the items incorporate the full range of potential responses (e.g., avoid confirmation bias). Consult, cite and reference the research methods literature in developing your response to this question.

5. Explain how you will convert the responses to individual items into multi-item variable scores. This refers to both quantitative measures and qualitative measures like responses to interview questions or focus groups. Most variables should be multi-item responses. We have examined several types of multi-items responses – like the index, test, or a questionnaire. We have also discussed examples of open response items – like interviews or focus groups. The point is that no matter how you collect data – somehow you have to end up with quantitative or qualitative scores for variables. We are rarely (almost never) interested in the response to a single item in theory-based research. Consult, cite and reference the research methods literature in developing your response to this question. Make sure these references are relevant to the kinds of instruments that you are developing and to the concepts that we have discussed in this class – e.g., citing examples of how to develop a score for an index is not appropriate when discussing how to score open responses from a focus group.
6. Conduct an expert (peer) review with at least one colleague in class. Describe the peer review process that you used. Give them a copy of your various measures for the different variables. They will need to know “which measures go with which variable.” Provide written instructions for what you want them to do.
7. After the review, summarize the weaknesses and strengths that your peer(s) identified. Explain the suggestions they made (if any). This does not have to be just about weaknesses or problems – they might have had suggestions about other variables you could use or about a “nifty technique” you could incorporate. Which of their suggestions do you find most helpful? Why? Make sure you incorporate the issues of reliability, validity and discriminatory power in this discussion about “what to do,” especially your consideration of which suggestions to incorporate.
8. Explain the procedures you will use to test your instrument – develop a testing plan. Be specific about how you will use testing to both eliminate items within a given variable (which we have done before) **and decide which variables as a whole to retain for your study**. Demonstrate that you understand the various procedures open to you. Do not just repeat exactly what you did on the small group projects. Be innovative. Learn from what you did in those projects. Look at alternative techniques and procedures in the literature. Include an explanation or justification for each decision you make and explain how each procedure that you will use will help you improve the reliability, validity (in its totality), and discriminatory power of your results. Here is some further guidance for your consideration in this important component of this assignment.
 - a. **Cognitive testing.** Who will you use as testers in cognitive testing and pre-testing of the final draft instrument(s)? Think about contextual specificity. Some sources will insist that you must test the instrument with a subset of the actual research population. This is preferable, but not always possible. If you will conduct your research at a distant location, for example, you may not be able to contact a subset of the research population. In these cases, a reasonably similar group of testers in terms of key attributes of the research participants may be used. What does “reasonably similar” mean? You have to determine this. For example, if you are using a self-completion questionnaire and your ultimate study population has limited literacy, you need to test the instrument with other people who share that attribute. If your instrument uses technical terms that are readily understood by those in a profession, but unfamiliar to others, make sure the testers have the technical vocabulary

needed. If your study population consists of people between the ages of 10 and 15, you probably need to test with people of the same age due to differences in cognitive ability, language and such. These are fairly obvious attributes. Others are more subtle. Think about “response differences” between groups of people. You may need to take these kinds of differences into account as well. Explain your reasoning.

- b. How will you decide when to end the cognitive testing procedure? Explain your reasoning.
- c. What kinds of changes to your instrument you anticipate making as a result of the cognitive testing? E.g., why bother with this? How will you use the information?

Pretest of Draft Instrument. You will probably to conduct a test of the revised instrument with a broader set of testers. The objective of this procedure is to allow you to analyze the responses or scores that you get to see if they “make sense” with regard to the construct(s) of interest. Unlike in the first test, you *are* concerned about the answers that your testers provide. This test allows you to gain insights into the validity of a set of measures in the overall sense we have focused on in this course. It also is the final way to make sure your instrument has sufficient discriminatory power for your purposes. Here are some things you need to think about.

- d. How will you decide how many testers you need? Different kinds of instruments require different numbers of testers to get meaningful results. For example, scales that use a nominal (yes/no) response format can require hundreds of testers. An interview might only require half a dozen. Explain your reasoning. Make sure you consult the research methods literature as you answer this question. Do not try to use general “rules of thumb.” Be specific with regard to the type of instrument and response format that your instrument(s) employ.
- e. What changes to your instrument do you anticipate making as a result of the tests? Discuss what you hope to learn about the discriminate, content, and congruent aspects of the validity of the instrument and about the discriminatory power of the instrument.

Assessment Criteria -- Part 2 Semester Project	Possible Points	Your Points
Distinguished between constructs, variables and items Provided evidence of a thorough review of the research literature used to identify the indicators or variables that others have used to capture the meaning of the construct Identified multiple variables to represent each construct (or dimension of a construct) and indicated clearly whether the scores should converge or diverge Demonstrated that you analyzed and evaluated the data and results in the published research literature to ascertain the evidence for reliability and validity of indicators/variables identified Clearly explained how each variable in the instruments will contribute to the overall reliability and validity of the results – including a strong discussion of how to incorporate congruent and discriminate validation into a research protocol	40	
Was able to identify a variety of methods of data collection Did not limit the choices to those already used in previous assignments Justified the choices of data collection methods on how the combination of techniques would maintain the interest of the respondent, provide a greater range of measurements, and provide different kinds of evidence The choices complemented each other and would provide different kinds of information The choices would be likely to increase the range of responses obtained in the study	40	

<p>Identified potential items in the literature and developed your own items Items were well developed technically (good wording, not double barreled, etc.) Justified decisions about the items to retain, adapt, or develop from the perspective of contextual specificity Demonstrated that you understand how to convert responses (quantitative or qualitative) into variables scores; and used, cited and referenced extensive research methods literature to justify your decisions about scoring procedures (use of reverse scoring, cumulative versus average scoring, etc.) Used a variety of response categories for “check the box” type items and incorporated other scoring techniques (ranking, coding, etc.)</p>	40	
<p>Used an appropriate, efficient, and effective peer review process – did not take too much time (maximum about 40 minutes), got to the potential problems and areas for improvement quickly, used the respondent’s time well Incorporated considerations of reliability, validity and discriminatory power in deciding which suggestions are of most potential value</p>	30	
<p>Has a viable plan for testing the instruments that includes additional peer review, cognitive testing, and pre-testing with the target population Explained the procedures that will be used in testing Procedures are appropriate for the specific methods of data collection and are specifically identified for each type of instrument (e.g., does not say to use Cronbach’s alpha for ranked responses or open responses) Clearly explains how testing will incorporate considerations of reliability, validity and discriminatory power</p>	50	
<p>Consulted, cited and referenced the research methods literature in developing responses Used materials that are relevant to each specific component of the assignment Drew upon the many additional resources to find information specific to the several methods of data collection incorporated into the study -- not just a “shopping list” of general materials Used materials that build upon, extend, or contrast to the concepts that we have discussed in this class. Used materials other than Bryman and my “cheat sheets,” such as other required readings, additional materials listed at the web site, materials that your colleagues share with the class, and materials that you find yourself. Explained how each reference was used specifically – e.g., what did you “get out of” the material that you applied to respond to the assignment</p>	50	
Total	250	

Individual Project Part 3: IRB (75 Points)

Objectives: After completing this assignment, you will know how to:

1. Complete all requirements for IRB approval

Submit this document as YourLastName_IRB. A pdf is fine for this. It’s the best way to save the IRB protocol form.

Complete the full protocol for IRB-02 clearance at the University of Florida in order to move forward with testing your instrument. Based on what you have done in Parts 1 and 2 of the semester project

and your plan for testing the instrument, you should have all the information you need to complete the IRB protocol. I often get questions about how much of the testing requires IRB approval. My own personal answer to that is – anything past peer (expert panel) review. Here is what is important for you to know. This is all available at the IRB website. <http://irb.ufl.edu/irb02/forms-templates-guidelines/irbrev.html>. I have bolded the things that make me so aware that I cannot make these decisions myself.

“The Code of Federal Regulations defines research as a “systematic investigation ... designed to develop or contribute to generalized knowledge.” Many activities that involve collection of data from or about people are excluded from this definition, including for example evaluation of a social program under contract with the sponsor, for purposes of assessing and improving the program; psychological studies created by students in a research methods class; or surveys of patient satisfaction with healthcare providers. **Whether or not the work will be published or otherwise disseminated is thus not critical in making an activity “research;” many undergraduate and graduate theses are never published, but are still “research” as the intent is to contribute to generalized knowledge; conversely, a methods-class project or program evaluation may have the potential to put their participants at risk, but this does not make it research that needs to be reviewed by the IRB process.**

“It’s not uncommon for such activities to have both service and research purposes. Investigators may be under contract to evaluate a program, but also have scientific interests in the project which will be communicated to peers. Similarly, an instructor may supervise a student project with the hopes that it may generate “publishable results.” As a consequence, IRB02 looks very closely at the stated purpose of the proposed activity. **If there is any chance that the results of the activity will be reported as a scientific contribution, it will be considered as research, and subject to review.**

Your submission includes three things.

Completed IRB protocol form covering both cognitive testing and the broader testing with potential members of the population
 Informed consent for testing (cognitive and broader testing, and those will not be the same informed consent – two IC’s one for each phase of testing)

I use the checklist for informed consent to grade those. Make sure everything on that checklist is in your informed consent – in the order IRB wants them.

Criteria Part 3 Semester Project	Possible Points	Your Points
Answers to all questions in the IRB protocol were complete, detailed, and responsive to what IRB needs to know	35	
Informed consent(s) written in an easy to understand way that any lay person could understand Included all required components in correct order	40	
Total	75	

University of Florida Policies

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open.

Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center

provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575,
www.counseling.ufl.edu/cwc/

Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching

U Matter We Care, www.umatter.ufl.edu/

Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Student Complaints

Residential Course: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

Online Course: <http://www.distance.ufl.edu/student-complaint-process>