#### Florida State University College of Criminology and Criminal Justice Ph.D. Comprehensive Examination in Research Methods and Statistics, Fall, 2017 Day One of the Exam, November 1, 2017: 8:30am to 12:45pm

### **INSTRUCTIONS**

Answer one question from each of the two sections below. Please notify the proctor when you are finished. Please note: Once a student takes possession of the examination at the start of the exam period, this constitutes an attempt at taking the exam, regardless of whether the student completes the exam, hands in any answers, or remains for the full exam period.

# I. DATA GATHERING METHODS

1. Identify, provide examples, and evaluate at least three methods of increasing response rates in surveys.

2. There have been several recent instances across the U.S. in which the police have been accused of using excessive force as well homicides during encounters with citizens who have done nothing wrong. This has resulted in local and state governments increasing the funding and implementation of body worn cameras (BWCs) for officers. If you were funded to scientifically determine whether BWCs are effective in reducing instances of the use of excessive force, describe what research design would you use, what methods of data collection would be conducted, and justify why those methods would result in more reliable and valid measures than other methods.

# **II. RESEARCH DESIGN**

3. Discuss the strengths and limitations of longitudinal research designs and cross-sectional research designs. Discuss a situation when a longitudinal research design would be preferred over a cross-sectional research design. Discuss a situation when a cross-sectional research design would be preferred over a longitudinal research design.

4. Describe a study that would enable you compare which of two theories is better than the other. Be explicit about the criteria that you would use to judge one theory as "better."

### Florida State University College of Criminology and Criminal Justice Ph.D. Comprehensive Examination in Research Methods and Statistics, Fall, 2017 Day One of the Exam, November 2, 2017: 8:30am to 12:45pm

### **INSTRUCTIONS**

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# **III. STATISTICS**

1. Multilevel modeling is a versatile statistical technique that can be used in a number of different research scenarios. Describe multilevel modeling and provide two examples of when multilevel modeling would be appropriate to use.

2. We spend a great deal of time worrying about statistical significance. Too much? What role should substantive significance play in your thinking about the importance of statistical significance?

# **IV. DATA INTERPRETATION**

3. Interpret the findings of the attached article by Ousey. This means that you should tell what the results mean with respect to the goals of the researchers and what they were trying to find out, just as if you were writing the Results and Discussion/Conclusion sections of the journal article. Do not merely repeat in words what is already shown in numbers in the tables. What conclusions would follow from the results? What problems with the methods might undermine or weaken these conclusions?

4. Interpret the findings of the attached article by Nix, Campbell, Byers, and Alpert. This means that you should tell what the results mean with respect to the goals of the researchers and what they were trying to find out, just as if you were writing the Results and Discussion/Conclusion sections of the journal article. Do not merely repeat in words what is already shown in numbers in the tables. What conclusions would follow from the results? What problems with the methods might undermine or weaken these conclusions?