Florida State University College of Criminology and Criminal Justice

Ph.D. Comprehensive Examination in Research Methods, Fall 2012

Instructions:
There are four sections to the exam. Answer one question from each section. You have until 4:00 PM to finish. If you have problems with the exam, you may consult with faculty proctoring the exam: Dan Mears (Room 308), 8:00-10:00 AM; Gary Kleck (Room 306), 10:00 AM to Noon; Eric Baumer (Room 305), Noon to 2:00 PM; Brian Stults (Room 317), 2:00-4:00 PM. Please notify Margarita Frankeberger (Room 216) when you are finished and ready to have your exam answers printed out. 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. RESEARCH DESIGN

1. Much has been made about the potentially substantial consequences of “The Great Recession,” including its potential for causing increases in crime rates. Describe a research design that would enable you to address whether the recession has produced increases in levels of crime in America. Specify in detail the units of analysis, temporal period(s), measures, and methods you would use. Next, discuss the empirical pattern that would need to emerge from your study to support the contention that the recession has caused increases in crime. Finally, describe the most important weaknesses of your proposed study design.

2. You want to test the hypothesis that the perceived threat of legal punishment for illicit drug use reduces the likelihood of such behavior, but are aware of the possibility that using drugs and repeatedly “getting away with it” (i.e., not being punished) could affect a person’s perception of the risk of punishment. You are also concerned about including enough drug-using persons in the sample
   (a) Design a survey study of the U.S. adult population to test the hypothesis so as to take account of the possibility of two-way causation, stating what survey mode you would use.
   (b) Describe sampling procedures you would use to ensure enough drug-using persons were included.
   (c) Provide suggested wordings for questions measuring perceived certainty and severity of legal punishment, and illicit drug use.
   (d) List and broadly describe the full array of variations in research design that a researcher could use to control for confounding variables.

II. DATA GATHERING METHODS

3. Internet-based sources of administering surveys are increasingly common. Describe the advantages and disadvantages of these approaches as compared to conventional approaches to administering surveys.

4. Research has relied on information from parents, children, and independent observations to measure various relationships in criminology. Discuss the strengths and weaknesses of each of these types of data sources, including the feasibility of the survey methodology, the reliability and validity of the measures produced, and the potential for missing data.
Florida State University College of Criminology and Criminal Justice

Ph.D. Comprehensive Examination in Research Methods, Fall 2012

Instructions:
There are four sections to the exam. Answer one question from each section. You have until 4:00 PM to finish. If you have problems with the exam, you may consult with faculty proctoring the exam: Dan Mears (Room 308), 8:00-10:00 AM; Gary Kleck (Room 306), 10:00 AM to Noon; Eric Baumer (Room 305), Noon to 2:00 PM; Brian Stults (Room 317), 2:00-4:00 PM. Please notify Margarita Frankeberger (Room 216) when you are finished and ready to have your exam answers printed out. 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. RESEARCH DESIGN

1. Much has been made about the potentially substantial consequences of “The Great Recession,” including its potential for causing increases in crime rates. Describe a research design that would enable you to address whether the recession has produced increases in levels of crime in America. Specify in detail the units of analysis, temporal period(s), measures, and methods you would use. Next, discuss the empirical pattern that would need to emerge from your study to support the contention that the recession has caused increases in crime. Finally, describe the most important weaknesses of your proposed study design.

2. You want to test the hypothesis that the perceived threat of legal punishment for illicit drug use reduces the likelihood of such behavior, but are aware of the possibility that using drugs and repeatedly “getting away with it” (i.e., not being punished) could affect a person’s perception of the risk of punishment. You are also concerned about including enough drug-using persons in the sample
   (a) Design a survey study of the U.S. adult population to test the hypothesis so as to take account of the possibility of two-way causation, stating what survey mode you would use.
   (b) Describe sampling procedures you would use to ensure enough drug-using persons were included.
   (c) Provide suggested wordings for questions measuring perceived certainty and severity of legal punishment, and illicit drug use.
   (d) List and broadly describe the full array of variations in research design that a researcher could use to control for confounding variables.

II. DATA GATHERING METHODS

3. Internet-based sources of administering surveys are increasingly common. Describe the advantages and disadvantages of these approaches as compared to conventional approaches to administering surveys.

4. Research has relied on information from parents, children, and independent observations to measure various relationships in criminology. Discuss the strengths and weaknesses of each of these types of data sources, including the feasibility of the survey methodology, the reliability and validity of the measures produced, and the potential for missing data.
III. STATISTICS

5. Criminologists are often concerned with assessing mediating and moderating relationships. Define what is meant by mediation and moderation. As part of your explanation, discuss how the same theoretical construct (e.g., peer influences) could be a moderating variable in one analysis and a mediating variable in another analysis, being sure to clearly distinguish between mediation and moderation in your examples. Finally, identify the most appropriate statistical approaches for assessing mediation and moderation.

6. In criminological research, we often construct indexes and scales to measure our key concepts. Provide at least two distinct reasons why a researcher might want to construct an index or scale. Are there any situations when their use would be inappropriate? Now imagine that you need to construct a neighborhood disadvantage index or scale. Provide a detailed description of two different methods that you could use to construct such a measure. What are the advantages and disadvantages of each method? How would you assess reliability?

IV. DATA INTERPRETATION

7. Interpret the findings of the attached article by Agnew, Brezina, Wright, and Cullen. 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?

8. Interpret the findings of the attached article by Applegate, Cullen, Fisher, and Vander Ven. 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?