

Department of Sociology
American University
Comprehensive Examination in Social Research Methods
December 2002

This exam has four parts. You must answer one question in each part for a total of four questions. Your answers should: (1) demonstrate the full range and depth of your understanding of the relevant research techniques; (2) refer to appropriate academic studies or research traditions; and (3) minimize the degree of repetition between responses. Be sure to budget your time.

Please *double-space* your answers or write on every *other* line of the paper. Be sure that your exam number and the page number appear on each page of your answers. Do not write your name anywhere on the exam.

Part I. Answer one question.

1. For this question please compare the strengths and weaknesses of participant observation and sample surveys. Include in your comparison at least 4 of the following 6 items: (1) ethics, (2) insider versus outsider status, (3) cost in time and money, (4) generalizability, (5) reliability, and (6) validity.
2. Two researchers argue why their respective methodological approaches, analysis of available historical records versus a sample survey, are "better." As a neutral observer, how would you tell each of them where the strengths and weaknesses of their approaches lie. Discuss fully the conditions under which both approaches could even be usefully combined in doing sociological research. Suggest one research question to illustrate how such a combined approach will be appropriate and beneficial to knowledge production.

Part II. Answer one question.

1. Zaller argues that sample survey respondents often don't know their opinions until they are asked, and then they tend to respond "off the top of their head".
 - a. Explain the logic of his argument.
 - b. Explain why key informants do not suffer from the same problem (hint: van Haitsma). Describe the characteristics that a researcher should look for in choosing a good key informant.

2. Choose one of the following cases: (1) Robert Staple once said that only black researchers are suited to do research on black families or (2) a diplomat from a Third World country says that only scholars of his country are suited to do research on families in the developing world. Debate insider vs. outsider in doing research in either an ethnic community in case #1 or a Third World country in case #2. In your selected case, discuss the full range of problems both the insider and outside researchers may face (i.e., from conceptualization, measurement, sampling, methods of data collection, objectivity, ethics, politics and etc.). Suggest concrete steps to overcome these problems.

Part III. Answer one question.

1. Sociological research—e.g., interviews, participant observation, experiments, questionnaires, even the analysis of documentary evidence—is in most instances, research done with human beings as the subjects of the investigation. In other words, sociological research creates a relationship between the researcher and her/his research subjects, a relationship marked by unequal power, unequal disclosure, and unequal benefit from the research experience. Sociologists have identified and moved to mitigate several possible ethically questionable outcomes that may flow from this research situation.
- Describe three such potential outcomes and the measures developed in the profession to prevent their occurrence.
 - Comment on the effectiveness of these preventive measures in protecting the research subject.
2. Positivist theorists like Durkheim base their research on the premise that things—social facts—exist “out there” in a form that is knowable as truth. Interpretive theorists like Weber and the symbolic interactionists argue that the distinctive responsibility of the social scientists (as opposed to the natural scientist) is to uncover the meanings that frame human social actions. Critical theorists like Marx and feminist sociologists claim that the purpose of social research should be greater justice for society’s disempowered. Using any 2 of these three approaches answer the following questions:
- How might/does each group of theorists respond to the interview as a means of gathering data?
 - Name one research design strategy that each group would seek to build into an interview-based project in order to achieve its version of a “good” research outcome.

Part IV. Answer one question. Students in the Ph.D. program *must* answer the regression question; students in the M.A. program may answer the tables question.

1. A theory of crime claims that crime rates are higher at places where there are large numbers of potential victims ("targets"). Your research uses a simple random sample to test this theory. As a control variable you include whether the offender was a teenager or older. Your variables are:

TARGET\$: Number of targets, many or few?

HICRIME\$: Is the crime rate high, yes or no?

AGE\$: What is age of offender, teen or older?

- a. Figure 1 shows the relationship between presence of targets and high crime rates. What do you conclude based on these results? Cite chi-square, gamma, & specific percentages to support your conclusion.
- b. Figure 2 and Figure 3 shows the relationship broken down by age of offender. What do you conclude based on these results? Cite chi-square, gamma, and specific percentages in support.
- c. Do these results confirm or disconfirm the theory? Be sure to justify your conclusion.

Figure 1

```
>print none / freq rowpct chisq gamma
>tab targets$ * hicrime$
```

Case frequencies determined by value of variable COUNT.

Frequencies
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total
Few	37	46	83
Many	52	94	146
Total	89	140	229

Row percents
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total	N
Few	44.578	55.422	100.000	83
Many	35.616	64.384	100.000	146
Total	38.865	61.135	100.000	
N	89	140		229

Test statistic	Value	df	Prob
Pearson chi-square	2.789	1.000	0.049

Coefficient	Value	Asymptotic Std Error
Goodman-Kruskal Gamma	0.285	0.135

Figure 2

```
>select age$ = 'Teen'
>tab targets$ * hicrime$
```

Data for the following results were selected according to:
age\$ = 'Teen'

Case frequencies determined by value of variable COUNT.

Frequencies
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total
Few	27	14	41
Many	29	41	70
Total	56	55	111

Row percents
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total	N
Few	65.854	34.146	100.000	41
Many	41.429	58.571	100.000	70
Total	50.450	49.550	100.000	
N	56	55		111

Test statistic	Value	df	Prob
Pearson chi-square	6.171	1.000	0.013
Coefficient	Value	Asymptotic Std Error	
Goodman-Kruskal Gamma	0.463	0.161	

Figure 3

```
>select age$ = 'Older '
>tab targets$ * hicrime$
```

Data for the following results were selected according to:
age\$ = 'Older'

Case frequencies determined by value of variable COUNT.

Frequencies
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total
Few	10	32	42
Many	23	53	76
Total	33	85	118

Row percents
TARGETS\$ (rows) by HICRIME\$ (columns)

	No	Yes	Total	N
Few	23.810	76.190	100.000	42
Many	30.263	69.737	100.000	76
Total	27.966	72.034	100.000	
N	33	85		118

Test statistic	Value	df	Prob
Pearson Chi-square	0.559	1.000	0.455
Coefficient	Value	Asymptotic Std Error	
Goodman-Kruskal Gamma	-0.163	0.214	

2. Below are the results of a study of the effects of income and social status on violent crime. The variables are:

INCOME: income in \$1,000s

STATUS: Social status measured on the standard scale, 0-1,000

CRIME: An index of the possibility of becoming a crime victim, 1-1000

Answer the following questions about the regression results and the plots:

- Explain what you learned from the scatterplot matrix (SPLOM) in Figure 4.
- Explain what the statistics in Figure 5 tell you about the relationship between the variables.
- Explain why the coefficient for status is positive.
- You have theoretical reasons to believe that crime rates vary by race, so you want to enter race as a control variable. Fortunately, your dataset contains a variable coded for race. The variable is called RACE and it has 4 categories that are coded as follows:

Asian is coded as 1

Native American is coded as 2

African American is coded as 3

White is coded as 4

Explain how you would use the information in this variable to control for race in the regression. In your explanation answer the following 3 questions. What would you enter into the regression model? What output would you ask for? How would you interpret the output?

Figure 4

>sploim status income crime / half smo=low

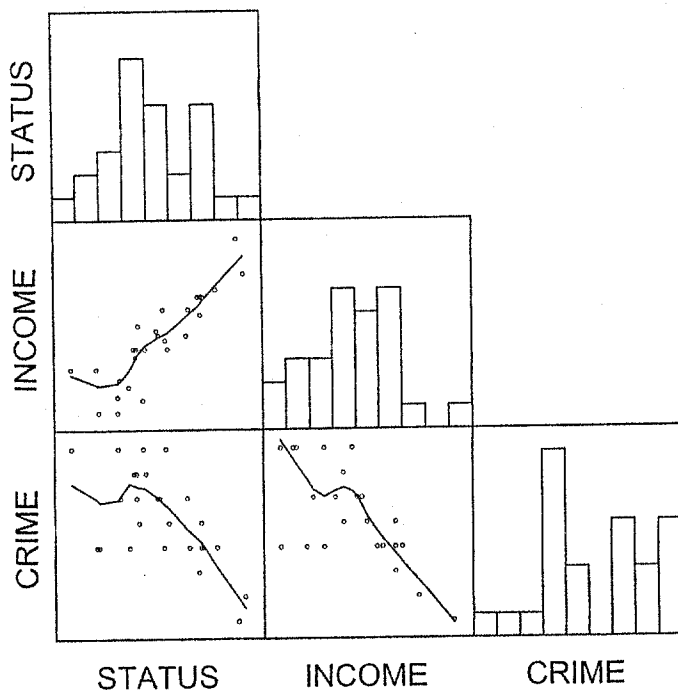


Figure 5

```
>regress
>model crime = constant + income + status
>est
```

Dep Var: CRIME N: 27 Multiple R: 0.683 Squared multiple R: 0.467
 Adjusted squared multiple R: 0.423 Standard error of estimate: 146.015

Effect	Coefficient	Std Error	Std Coef	Tolerance	t	P(2 Tail)
CONSTANT	1671.076	78.832	0.000		21.198	0.000
INCOME	-8.380	4.716	-0.536	0.144	-1.777	0.088
STATUS	0.167	0.307	-0.164	0.144	0.545	0.591

Analysis of Variance Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
Regression	448313.393	2	224156.696	10.514	0.001
Residual	511686.607	24	21320.275		

Durbin-watson D Statistic 2.083
 First Order Autocorrelation -0.052