PAI 705	Name:
Exam 1	
McPeak	March 7, 2019

Exam is 15 points. There are 10 questions. Each question is worth 1.5 points. If there are sub questions, each part is worth an equal share of the 1.5 points.

- 1) Elements of social theory.
 - a) Describe the relationship between observations and theory when using inductive reasoning.

b) Describe how the relationship between observations and theory when using deductive reasoning contrasts to that of inductive reasoning.

c) Does 'grounded theory' rely on inductive reasoning or deductive reasoning? Explain briefly your reasoning for your answer.

2) We discussed three purposes of social science research. We have also discussed different social science research sampling methods. Below are listed three short descriptions of social science research. For each, identify which is the main purpose of the research and identify the sampling strategy used in the research.

Research Description	Purpose	Sampling Strategy
There is a theory that household income diversification (measured as		
the number of different activities used by a household in a three-month		
season to generate income) in developing countries has a "U" shape		
relationship with household income level. The theory is that at the		
lower end of the income spectrum, poor households are driven by		
poverty to conduct many different activities to piece together sufficient		
income to survive. In the middle end of the income spectrum,		
households concentrate on a few activities that are generating sufficient		
income. At the upper end of the income spectrum, the wealthy have		
sufficient income to invest in numerous high capital requirement – high		
return activities. A random sample of households is identified to		
respond to a detailed questionnaire on household income and activity.		
The data will be used to test the hypothesis of a "U" shape relationship		
between income level and income diversification.		
A researcher is visiting the site to conduct a scoping study. She is trying		
to understand community level perceptions of gender roles in public		
decision making for a development project that is based on community		
driven development. The objective of the development project is to		
identify, design, supervise construction, and manage public good		
investments that will help the community adapt to anticipated climate		
change. For the scoping study, the researcher designs a method to		
interview people at the center of town surrounding the chief's office,		
and then strike up conversations with people as she walks from the		
center of the town to the outer edges of the town. She notices that		
there is a tendency to speak of projects as responding to the		
community's expressed needs, or to respond to the expressed needs of		
the women. In contrast, there is no discussion of projects that respond		
to the expressed needs of men. She also notices that there is more		
awareness of the project among people interviewed in the center of the		
town compare to those on the edges of the town. She uses this		
information in the research design for the more structured qualitative		
study she will return to conduct in two months.		
USAID is funding research teams from UC-San Diego and University of		
Texas El Paso to have graduate student research teams interview		
families who have arrived at the Mexican side of the border who intend		
to claim asylum in the US. Specifically, USAID would like to know what		
is their country of origin, where are they from in that country, what are		
the set of motivations that led them to leave their home, what was the		
cost of migrating from home to the border, and what was the length of		
time it took to get there. For this study they are walking from group to		
group and asking questions of this large number of people who are at		
the border from 6 am to 2 pm each day when the asylum office is open.		

- 3) Research Ethics.
 - a. What are the three basic ethical principles of the Belmont Report?

b. Explain why special care is needed when conducting research on persons under 18 years old?

c. Explain why there can be a tension between the objective of ensuring informed consent of study participants and the Hawthorne effect.

4) Measurement Issues.

Measured item	Category of this measured item (circle one)		
The response rate for the TRIP survey for people contacted in Hong Kong.	Direct observable	Indirect observable	Construct
The number of tables in the TRIP report compared to the number of pages of explanatory text.	Direct observable	Indirect observable	Construct
The best programs in IR for graduate students entering policy in the TRIP report	Direct observable	Indirect observable	Construct
A PAIA online survey question about the number of times respondents have gone to visit career services during their time here.	Direct observable	Indirect observable	Construct
How many chairs are in this classroom?	Direct observable	Indirect observable	Construct
The memorable nature of the Amazon ad in contrast to the Microsoft ad in our Likert Super Bowl commercial evaluations.	Direct observable	Indirect observable	Construct
The quality of governance in a country as measured by the World Bank's governance indicators.	Direct observable	Indirect observable	Construct
Middle Upper Arm Circumference measures used to identify which children are the highest priority for supplemental feeding in a World Food Program distribution center.	Direct observable	Indirect observable	Construct

5) Index and scale issues.

Assume you have results from a survey of IR students about their opinions of when economic sanctions on North Korea should be lifted. The following are possible triggers that could lead to the lifting of sanctions.

Approach A

Statement		Responses (Circle One)	
Sanctions should be lifted after Kim Jung Eun writes more than five letters that the President	Agree	Disagree	
describes as 'really nice'			
Sanctions should be lifted after Kim Jung Eun reports that all missile building and testing	Agree	Disagree	
activities have halted.			
Sanctions should be lifted after US military experts visit all missile building and testing sites and	Agree	Disagree	
verify there is no ongoing activity.			
Sanctions should be lifted when John Bolton verifies that North Korea has transformed into a	Agree	Disagree	
non-nuclear armed democracy.			

a) Explain how you could use these responses to construct an index and how you could use them to construct a scale.

b) Explain how you could look at the pattern of the responses and evaluate whether you wanted to treat the results as a scale or an index.

c) What is the name of the type of scaling used in construction of the version of the question posed below?

Approach B

Statement	Responses (Circle one)
Building this wall is an option to investigate.	Strongly Disagree Disagree Neutral Agree Strongly Agree
Building this wall is a good idea.	Strongly Disagree Disagree Neutral Agree Strongly Agree
Building this wall is a top priority.	Strongly Disagree Disagree Neutral Agree Strongly Agree
Building this wall is the most important priority.	Strongly Disagree Disagree Neutral Agree Strongly Agree

d) Contrast advantages and disadvantages of what you can discover using approach A and approach B.

6) True or False.

Statement	ls it Tru	le of
	False (c	circle)
Confidentiality means a given response cannot be linked to a given	True	False
respondent even by the researcher.		
Ideographic explanation seeks an exhaustive understanding of the causes	True	False
producing events and situations in a single or limited number of cases.		
A convenience sample is an example of an equal probability of selection	True	False
method.		
One-group pretest-postest design is when a researcher studies one group	True	False
of subjects on a dependent variable following the administration of some		
treatment stimulus.		
"Regression to the mean" is a potential threat to internal validity.	True	False
The deductive method begins with a set of observations, and analyses	True	False
these observations to find patterns in the data to develop theory.		
A trend study monitors a given characteristic of the population over time	True	False
using different samples.		
Zimbardo used publicly available social statistics to understand patterns in	True	False
human behavior in one of the earlier sociological studies.		

7) Measures.

Item measured	What kin	d of measu	re is it? (circle)
6 different age and gender categories: male youth or female youth	Nominal	Ordinal	Interval
(under 18); male working age or female working age (18-66); male			
elderly or female elderly (67+)			
Attitudes towards the Attorney General using Semantic Differential	Nominal	Ordinal	Interval
questions			
IQ	Nominal	Ordinal	Interval
Current GPA in your master's program	Nominal	Ordinal	Interval
Ranking of the best IR masters programs for a policy career in IR.	Nominal	Ordinal	Interval
Which career tracks in the IR program are people in this class in?	Nominal	Ordinal	Interval
Did you get your undergraduate degree in the United States or	Nominal	Ordinal	Interval
outside of the United states?			
Do you think a blog devoted to IR should count or should not count in	Nominal	Ordinal	Interval
the professional evaluation of IR faculty?			

- 8) Reliability and Validity.
 - a. We conducted a study in Senegal where we traced out the livestock migration paths followed by herders on long distance migration. As part of that study, we established vegetation transects. On these 1 kilometer long transects, we identified a 100 square meter zone (zone A) where three one square meter samples of vegetation was collected each month over the 4 month rainy season. The sample was dried, weighed, and analyzed in the lab for nutritional content as animal feed. The person collecting the samples wrote down the wrong coordinates for the 100 square meter zone and visited a 100 square meter zone (zone B) that is 26 kilometers away from zone A. All our results are from zone B. The estimates on nutritional content for the samples we have for zone B are very consistent over time. Describe my situation in terms of the reliability and validity of my observations for assessing the nutrition content of feeds on the transect in zone A.

b. Contrast the following concepts: face validity and content validity. The object in question is an application packet to the MAIR program. The concept we are trying to assess is the likelihood of success in our MAIR program. For each applicant we have GRE scores, undergraduate transcripts, personal statements, recommendation letters, and responses to nominal questions about hair color and favorite ice cream flavor. How do different elements of this application packet illustrate these two different concepts of validity?

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Put name of scale here	Description of scale
	A scale that is based on the idea that people who
	support a strong indicator of a variable will also support
	weaker indicators of this variable.
	Symmetric scale centered on zero that captures a range
	of responses both negative and positive
	Results from questions that pair two opposite
	adjectives and have respondents place their reaction
	on their degree of closeness to either adjective.
	Captures the willingness of people to participate in
	social relations of varying degrees of closeness with
	other kinds of people.
	A type of composite measure where weights are
	assigned by 'judges' to assess the strength of particular
	indicators

- 10) Definitions and contrasts.
 - a. Contrast a panel and a cross sectional data set.

b. Contrast a trend study and a cohort study.

c. Contrast a unit of observation and a unit of analysis.

d. Contrast a necessary cause with a sufficient cause.