

PAI 705
Exam 1
McPeak

Name: _____

March 7, 2023

Exam is 20 points. There are 10 questions. Each question is worth 2 points. If there are sub questions, each part is worth an equal share of the 2 points.

1) Definitions and contrasts.

a. Use definitions to contrast a panel study and a cohort study.

b. Use definitions to contrast an index measure and a scale measure.

c. Use definitions to contrast a cross sectional study and a longitudinal study.

d. Use definitions to contrast a necessary cause with a sufficient cause.

2) Elements of social theory.

a) Describe the relationship between observations and theory when using inductive reasoning.

b) Describe the relationship between observations and theory when using deductive reasoning.

- 3) We discussed in class three purposes of social science research. Below are listed three short descriptions of social science research. For each, identify which is the main purpose of the research based on those three purposes.

Research Description	Purpose
<p>A research team is investigating the impact of a cash transfer program in Ethiopia on child malnutrition. They are testing the hypothesis that households who have received the cash transfers (the treatment) have lower child malnutrition rates than households who did not receive the cash transfers holding all else equal.</p>	
<p>The PAIA department is conducting a review of the IR curriculum. As part of this process, they have sent out a Qualtrics survey to 257 alumni who graduated from the program from 2015 to 2022. Respondents are asked to evaluate what percent of the content of each required course they took in the program is relevant to what they are doing professionally in their current positions.</p>	
<p>A researcher is interested in the role of boat loaning in fishing communities in Lake Malawi. She has discovered that there is a different word for loans that last less than a year (<i>dabaree</i>) from loans that last for multiple years (<i>kalissime</i>). She has assembled a focus group of people from the fishing community to investigate whether there are local language terms to describe fish harvest sharing rules for a <i>dabaree</i> loan compared to a <i>kalissime</i> loan that she can use in a future survey of households.</p>	

5) Measurement Issues.

Measured item	Category of this measured item (circle one)		
Is the field you are looking at planted with rice or pumpkins?	Direct observable	Indirect observable	Construct
A survey question asked a farmer: How many hectares of land do you currently have planted with rice?	Direct observable	Indirect observable	Construct
A Likert question asking a farmer how resilient they are compared to other farmers in the community.	Direct observable	Indirect observable	Construct
The number of students in this room taking the exam today.	Direct observable	Indirect observable	Construct
The degree of state fragility as reported on the Fragile States Index.	Direct observable	Indirect observable	Construct
The number of windows in Maxwell 110 that open.	Direct observable	Indirect observable	Construct
The quality of 'rule of law' in a country as measured by the World Bank's governance indicators.	Direct observable	Indirect observable	Construct
The number of hours each student taking this exam today studied for this exam.	Direct observable	Indirect observable	Construct

6) Index and scale issues.

Assume you have results from a survey of the US public on possible actions to take in Ukraine.

Approach A

Statement	Responses (Circle One)	
The United States government should share military intelligence with the Ukrainian government.	Agree	Disagree
The United States government should provide military transportation equipment to the Ukrainian government.	Agree	Disagree
The United States government should provide ammunition, missiles, and other armaments to the Ukrainian government.	Agree	Disagree
The United States government should provide fighter jets and other related equipment to the Ukrainian government.	Agree	Disagree

a) Explain how you could treat the results for this question as an index and contrast how you could use the results as a scale.

b) What are the scale types if we are to use this as a scale?

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

7) True or False.

Statement	Is it True or False (circle)	
Anonymity means a given response cannot be linked to a given respondent even by the researcher.	True	False
Ethical concerns about Durkheim's 1968 study of suicide are described in the Belmont report.	True	False
Positivism asserts that in social science, scientific truth can be positively verified by empirical observation and logical analysis of what is observed.	True	False
Snowball sampling is a sampling method that provides an equal probability of selection to all individuals in a population.	True	False
Guttman scaling is used to assess the adequacy of proposed typologies.	True	False
Construct validity is the degree to which a measure relates to other variables as expected within a system of theoretical relationships.	True	False
A panel study monitors a given characteristic of the population over time using different samples.	True	False
Unidimensionality means the intervals between points on the Wong Baker FACES pain rating scale can be treated as ratio measures	True	False

8) Measures.

Item measured	What kind of measure is it? (circle)		
What degree or degrees are people taking this exam working toward currently?	Nominal	Ordinal	Interval
How many students taking this exam have already turned in at least one summary and evaluation assignment for this class?	Nominal	Ordinal	Interval
What is the current GPA of each student taking this exam?	Nominal	Ordinal	Interval
How many credits towards their degree remained to be completed for each student taking this exam at the end of the fall 2022 semester?	Nominal	Ordinal	Interval
Ranking of the best IR masters programs for a policy career in IR in the TRIP report.	Nominal	Ordinal	Interval
The M&M Superbowl advertisement Likert results.	Nominal	Ordinal	Interval
What was the temperature in Maxwell 110 at the start of class each day this semester?	Nominal	Ordinal	Interval
How many applications were received by the MAIR program at Maxwell over the past 10 years?	Nominal	Ordinal	Interval

9) "Opinion polls consistently report that Americans believe foreign aid is in the range of 25 percent of the federal budget. When asked how much it should be, they say about 10 percent. In fact, at \$39.2 billion for fiscal year 2019, foreign assistance is less than 1 percent of the federal budget." ([Ingram, Brookings, October 2019](#) but don't check it right now!!!)

a. Evaluate this from the standpoint of the reliability of the opinion polls as a measure of foreign assistance as a share of the federal budget.

b. Evaluate this from the standpoint of the validity of the opinion polls as a measure of foreign assistance as a share of the federal budget.

10) Elements of social theory.

Put name below for each	Definition
	A phenomena that has been observed
	Recording what we see, hear, touch, taste, smell
	A systematic explanation for why we are seeing the specific observations we are seeing.
	An abstract element representing classes of phenomena within a field of study
	Universal generalization about classes of facts
	Prediction about the relationship between concepts

Choices are:
Concept,
Fact,
Law,
Observation,
Proposition,
Theory