| PAI 705 | Name: |
|---------|---------------|
| Exam 1 | |
| McPeak | March 7, 2018 |

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) 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 |
| The research team is trying to understand the concept of resilience in | | |
| the context of climate change in rural Senegal. Financial support for | | |
| this work has come from DfID who describe resilience in terms of 'the | | |
| 3As'; absorption, adaptation, and anticipation. The research team is | | |
| hoping to conduct focus group meetings with community members of | | |
| a village called Keur Mboucki. Specifically, the team wants to find out | | |
| how these concepts apply to males and how they apply to females | | |
| based on the gender roles in these communities. To recruit | | |
| participants in these focus groups, they have stood outside the mosque | | |
| after Friday prayers asking people if they would be willing to come talk | | |
| to them for the next few hours about this topic. | | |
| The research team is trying to assess the impact on health outcomes of | | |
| a cowpea biscuit that has been given to children following discharge | | |
| after visits to the pediatric emergency room in Bukavu, DRC. The | | |
| biscuit is high in protein and helps address malnutrition. The biscuit | | |
| intervention has been in place over the past 12 months. A random | | |
| sample of 100 households is drawn from hospital records that show | | |
| who has been discharged over the past 12 months. Another random | | |
| sample is drawn from households who were discharged in the 12 | | |
| months prior to the start of the biscuit intervention (13-24 months | | |
| ago). The research team is trying to identify any impact that the biscuit | | |
| intervention may be having on reducing readmission rates of children | | |
| following a first discharge. | | |
| The research team is trying to understand the size and operation of the | | |
| market for the plant variously known as Khat, Chat, Miraaa (scientific | | |
| name Catha edulis). They suspect the market has grown over the past | | |
| five years. Chewing this plant is common in East Africa, and with the | | |
| growth of refugee populations from East Africa in Minnesota there is | | |
| concern that this market may be growing here. Production, sale, and | | |
| use of the plant is not allowed in the United States. Contacts at an | | |
| NGO who have been working with East African refugees have | | |
| introduced the research team to some individuals they believe are | | |
| involved in the khat trade. The researchers are trying to follow the | | |
| leads from one person to another to get a sense of how this market | | |
| works and assess the nature of the public health issue that this may (or | | |
| may not) pose. Their main objectives are to identify: one, what volume | | |
| of khat is being sold per month; and two, estimate where the supplies | | |
| are being sourced and how they are being delivered to Minnesota. | | |
| are being sourced and now they are being delivered to winnesold. | | |

2) Elements of social theory.

a) Contrast the role of a hypothesis in inductive reasoning and deductive reasoning.

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

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

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 incarcerated populations.

c. What is the difference between 'anonymity' and 'confidentiality'?

4) Measurement Issues.

| Measured item | Category of this measured item (circle one) | | |
|---|---|---------------------|-----------|
| The number of seats in this room. | Direct observable | Indirect observable | Construct |
| The number of male goats a head of a household reports that they own currently. | Direct observable | Indirect observable | Construct |
| The degree to which a head of a household indicates they feel involved in community decisions. | Direct observable | Indirect observable | Construct |
| The number of times a head of household indicates he attended community meetings. | Direct observable | Indirect observable | Construct |
| How many people in this room are currently wearing hats? | Direct observable | Indirect observable | Construct |
| Rank order the last five presidents in terms of the empathy you think they showed during their State of the Union addresses. | Direct observable | Indirect observable | Construct |
| The quality of the rule of law in a country as measured by the World Bank's governance indicators. | Direct observable | Indirect observable | Construct |
| The degree of state fragility as revealed in the fragile states index. | Direct observable | Indirect observable | Construct |

5) Index and scale issues.

Assume you have results from survey responses to questions about the idea of imposing a 25% import tariff on steel. The question is asked of respondents, how do you view the idea of imposing an import tariff on steel to the US economy?

Approach A

| | Very | Somewhat | Neither | Somewhat | Very | |
|-----------------------|------|----------|---------|----------|------|--------------------------|
| Terrible | | | | | | Fantastic |
| Premature | | | | | | Overdue |
| Unjustified | | | | | | Justified |
| Harmful to US economy | | | | | | Beneficial to US economy |

a) What is this approach to asking a question called?

b) Are the answers to this set of questions better viewed as components of an index or components of a scale? Why?

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) |
|---|---|
| Threatening to impose steel tariffs merits discussion | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Threatening to impose steel tariffs is a good idea. | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Threatening to impose steel tariffs is a top priority | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| Threatening to impose steel tariffs is the most important | Strongly Disagree Disagree Neutral Agree Strongly Agree |
| priority | |

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

6) True or False.

| Statement | ls it Tru | le or |
|--|-----------|---------|
| | False (o | 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 snowball sample is an example of an equal probability of selection | True | False |
| method. | | |
| Content validity is concerned with how much the chosen measure covers | True | False |
| the range of meanings included within a concept. | | |
| The Hawthorne effect describes how people may change behavior as a | True | False |
| response to the knowledge that they are being observed rather than the | | |
| treatment that is being evaluated. | | |
| The deductive method begins with a set of observations, and analyzes | 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. | | |
| Durkheim used publicly available social statistics on suicides to understand | True | False |
| patterns in human behavior. | | |

7) Measures.

| Item measured | What kin | d of measu | re is it? (circle) |
|---|----------|------------|--------------------|
| Which individuals fall in one of 6 different age and gender categories: | Nominal | Ordinal | Interval |
| male youth or female youth (under 18); male working age or female | | | |
| working age (18-66); male elderly or female elderly (67+). | | | |
| Adjusted Gross Income value when a household files taxes in April | Nominal | Ordinal | Interval |
| 2018. | | | |
| Empathy as measured by attitudes towards refugee resettlement | Nominal | Ordinal | Interval |
| using a Bogardus social distance scale. | | | |
| 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 |
| How many of you taking this exam are in each of the career tracks in | Nominal | Ordinal | Interval |
| the IR program? | | | |
| 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 in the professional | Nominal | Ordinal | Interval |
| evaluation of IR faculty? Yes or No. | | | |

8) Reliability and Validity.

An NGO with the symbols below on the side doors of their Land Cruiser has come to conduct a series of community based focus groups to determine development priorities in 15 communities. They are

surprised and encouraged to find that all 15 communities they visited identified windmills for water pumping as their highest priority over other things like health centers, schools, transport infrastructure, and market infrastructure.



a) How would you explain to the NGO that they might be misinterpreting these results using the concepts of reliability and validity?

To predict the likelihood of success for the windmill water pump projects, one NGO staff member suggests that data needs to be collected on the current physical and management status of other infrastructure in the community such as markets, public schools, and roads. Another suggests we should collect information on average windspeeds throughout the different seasons of the year. A third suggests we should collect information on opinions about whether Jeff Sessions was correct to recuse himself from the Russia investigation.

b) Evaluate these three suggestions using the concepts of face validity and predictive validity.

|) Assign the name of the scale to | |
|-----------------------------------|---|
| 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 so there are 'scale types' of |
| | response patterns. |
| | Symmetric scale centered on neutral 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. |
| | |

9) Assign the name of the scale to the description.

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.