Research Design and Methodology III

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***Assignment #1 – Core Essential Elements***

Answer the following questions in short answer format and be prepared to discuss them with your classmates in the virtual residency or the discussion forum.

1. Why are research ethics important for protecting human participants (subjects) in social science research? What are some potential risks associated with collecting data from human participants?
2. What is the difference between a target population and a sample? How does sample size relate to parametric (generalizable to the target population) and nonparametric (applicable only to the sample) statistical procedures?
3. Describe the following approaches to recruiting participants and designing sampling procedures: convenience, purposive, and snowball. Why are inclusion and exclusion criteria important when recruiting participants?
4. Why are research ethics important for protecting human participants (subjects) in social science research? What are some potential risks associated with collecting data from human participants?

Ethical considerations in social science research are important because of the strong human component; it involves collecting data from people, about people (Punch, 2014, as cited in Creswell & Creswell, 2018). On many occasions, social science studies also often involve target subjects who are from vulnerable populations or environments. Shanks and Paulson (2022) highlight challenges that researchers encounter when working in areas subjected to social fragility, insecurity, or violent conflicts. Such challenges make ethical practices an essential factor in protecting both participants and researchers through the building of trust and promotion of the integrity of the process (Israel & Hay, 2006, as cited in Creswell & Creswell, 2018). One specific way that protection is reinforced through an ethical process is the assurance of transparency to those directly and indirectly involved in the study (Creswell & Creswell, 2018).

Creswell & Creswell (2018) note the fragility of social research in describing the starting research premise as a power imbalance that exists between the data collector and the participant (p. 150.) Potential risks from this imbalance include the opportunity for bias and deception by the researcher, and the exploitation of subjects. Strict ethical standards are needed to guard against the abuse of subjects, especially when collecting intimate data and considering the use of potentially harmful findings. The impact of this information should be carefully considered when planning and executing the data collection process (Patton 2002, as cited in Creswell & Creswell, 2018).

1. What is the difference between a target population and a sample? How does sample size relate to parametric (generalizable to the target population) and nonparametric (applicable only to the sample) statistical procedures?

Gravetter & Wallnau (2014) define a population as “…the entire set of the individuals of interest for a particular question,” and contrasts it with a sample, being, “...a set of individuals selected from a population, usually intended to represent the population in a research study.” (pp. 5,6).

The researchers explain that the larger the sample, the more accurate parametric procedures will be in generalizing findings from the sample to the population. They note that the means obtained from large samples cluster closer to the population mean, and the means from small samples scatter wider from the population mean. Omega Graduate School (2023) explains further that nonparametric procedures are more appropriate for smaller sample sizes or those that cannot meet normality assumptions; however, it is noted that findings will only apply to the sample, and not the population.

1. Describe the following approaches to recruiting participants and designing sampling procedures: convenience, purposive, and snowball. Why are inclusion and exclusion criteria important when recruiting participants?

According to Makwana et al. (2023) the convenience approach to recruitment and sampling describes the researcher using what is readily available and when carrying out pilot testing where participants are chosen based on ease of recruitment.

Purposive sampling is considered as a more subjective approach which follows a logical step method that justifies the recruitment. Here the researcher uses pre-stated objectives to guide the selection process. Makwana et al. (2023) also aligns purposive sampling with the term “deliberate sampling” or judgmental sampling.

The snowball approach starts with acquiring subjects that are easily accessible and then building out from that initial amount. This method would use the initial respondent to recruit additional persons connected to them such as friends, associates, or relatives. This technique is also referred to as chain sampling or sequential sampling (Makwana et al, 2023).

Connelly (2020) states that the establishment of inclusion and exclusion criteria is important to ensure high-quality research. These parameters determine the desired characteristics of the subjects or elements of the study to produce a sample that is well-aligned with the population of interest. Connelly (2020) highlights that both criteria need to be balanced for usefulness and generalization of findings. The sample will be too small if inclusion criteria are too restrictive and exclusion criteria too extensive. The balance will also affect the internal and external validity of the study.

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