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Week 2 Essays

1.) Inductive reasoning is when an idea or conclusion is coming from specific oriented observations, but they are generally concluded. Inductive learning works with basic generalizations for example, saying you have a piggy bank and when you take a coin out, with inductive learning they will say every coin is the same. The most important fact about deductive learning is that they work on forming theories. Deductive learning with the same example would say that yes you took out a quarter but there are more than just quarters. They would say that the piggy bank is filled with coins that consists of pennies, dimes, nickels, and quarters.

4.) A hypothesis is when you have an idea from an observation through an experiment and you have a built sentence that signifies a conclusion from a theory. In other words, an explanation made based off evidence found through an investigation. A theory is when you have an idea or a group of ideas that are based and proven through a system a general principle. In religion we use theories as an explanation to why we believe in a higher power or force.

6.) A sample and population are both different. The difference is that a population is when you are drawing a conclusion from the entire group. Versus when in a sample is from a specific group of people you collect conclusions or data from. An example would be studying and collecting data from the idea of "Americans are losing jobs when immigrants are getting theirs." In population, you collect data from a massive group and different jobs and their companies to

see who is working and their positions. In sample, they would only collect data based off one specific company and group.

7.) There is a difference between a negative and positive correlation. A positive correlation is a relationship between two variables that are moving in the same direction. Meaning that they are two variables in an experiment that draw the same conclusion to a certain behavior or activity. In a negative correlation, the two variables are different because one may decrease behavior while the other will increase that behavior or activity.

8.) Experimenter bias or observer bias is when the observer tended to already go into an experimenter knowing what to expect. They already have prior knowledge to the experiment and already have feelings towards it. To minimize this effect, I think experimenters should use the concept of using population size data that are proven through a large sample size. This would help because it would bring different ideas and concepts versus being biased just in your own.

11.) Skepticism plays an essential role on scientific research. They say that skepticism is reliable learning and that it helps fully understand all sides of an argument. I agree because in every aspect of research that is conveyed, you need ideas, arguments, and principles that all come together to form one concept of reasoning proven by many factors.

12.) If the telephone survey is conveyed and this study is designed there is an advantage and disadvantage. Collecting data from 3,000 homes if how much television their children watch from an advantage point of view would be that data is collected from a sample size. Meaning you can gain a broad idea of what television does to children and how long they stay watching it. But a disadvantage is that the idea and conclusion you draw is very limited because that is a small amount of people to get an idea from. The conclusions drawn would not be as clear or supported.

14.) Operational definitions are supposed to allow researchers to describe specifically why they use the terms that they do. When thinking about operational definitions, you can think about many factors of behavior and anxiety. With this example in the perspective of operational definition, the observers would come up with what, how, and why a person will have anxiety and draw a conclusion from their history.

16.) Debriefing is when there are people that discuss their thought processes and basically come together for emotional and psychological support after a traumatic event. The goal of debriefing is to prevent PTSD and trauma from continuing in one's life. This is important because with debriefing you have people with you that mourn with you to show you their trauma as well. This creates community and on-going peaceful relationships between one another.