**Unit 9 Assignment**

***Name:***

**For the items below, use the drop down boxes to identify the source of error/bias and the best way to work around it. Be sure to also respond to the associated question for each scenario.**

Choose an item. is when participants show different behavior because they know they are being observed. The best way to work around this is to Choose an item..

In 1-2 sentences, why would this be a problem for the study data?

Choose an item.is when participants respond with what they think the researcher wants to hear, or what they think makes them look good, but not with the truth. The best way to work around this is to Choose an item..

In 1-2 sentences, why would this be a problem for the study data?

Choose an item.is when a considerable number of people do not choose to take a survey and the people who take the survey differ in important ways from people who do not. Choose an item. is when, during the course of a study, participants drop out or withdraw from the study. The best way to work around each of these potential sources of error/bias is to Choose an item..

A researcher decides to recruit more participants to replace those who did not respond and/or those who dropped out from the study. In 1-2 sentences, why would this be a problem for the study data and not be advised?

Choose an item.is when a researcher has preconceived notions that affect how they interpret data and respond to study participants. The best way to work around this is to Choose an item..

A researcher feels confident that they will be able to be objective and unbiased and will put in their best effort to do so. In 1-2 sentences, why is this not sufficient for working around this issue?

A common error that people make is interpreting causation from correlation. For example, when X and Y are correlated, people might assume that X causes Y, when there are actually three possibilities. Identify the three different ways that a correlation between X and Y could be interpreted.

Define a confounding variable.

What are the three different ways that a correlation between time spent outdoors and happiness could be interpreted?

What is a possible confounding variable affecting the relationship between time spent outdoors and happiness?

A researcher finds a correlation between smoking cigarettes and stress. What are three different ways that this could be interpreted?

What is a possible confounding variable affecting the relationship between cigarettes and stress?