**Week 4 Notes PSY2060**

| **Distinctive Features** |
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| **Quantitative** | **Qualitative** |
| Numeric data | Complex rich data |
| Measurement | Meaning |
| Explanation | Understanding |
| Prediction | Interpretation |
| Generalizable Account | Contextual account |
| Presentative population sample | Purposive or representative perspective sample |
| Hypothesis-Testing | Exploratory |
| Claims Objectivity | Accepts subjectivity |
| Closed system (experimental control) | Open System (ecological validity |

**Quantitative and Qualitative Analysis**

As we began to discuss last week, when researchers decide to conduct a study, they can either collect data that deal with numerical measurements, or they can collect data that deal with descriptions and observations.

Data dealing with numerical measurement or quantities are known as **quantitative** approaches. Quantitative approaches in psychology aim to test hypotheses and identify numerical differences between groups. In contrast, data dealing with how people understand their experiences or qualities are known as **qualitative** approaches. Qualitative approaches in psychology aim to explore and investigate issues that are difficult to measure.

An investigator may choose to focus on any one approach based on the focus of the study. However, there are times when an investigator may combine the two approaches in their research study (a mixed-methodological approach).

**Ways and Modes of Measurement**

Let's consider another example. Assume you are going to design a study to assess how spouses like to spend their time after being married for more than 10 years.

If you choose to take a quantitative approach, you might ask couples to fill out questionnaires that would ask questions that would allow you to measure how often they spend time together. You can also assign different magnitudes or values to the different types of activities they do as a couple (i.e., use an ordinal scale of measurement). For example, taking walks together might get a higher value than watching television together. Can you think of another quantitative measure you could add to the study?

Alternatively, if you choose to take a qualitative approach, you might ask spouses to write a description of the type of activities they like to do together. You could observe them for a given period and observe whether they appear to be laughing and sharing with each other. In addition, you might observe how they express like and dislike for each other through a one-to-one interview.

**Methods of Data Collection**

**Acquiring Observational Data**

Let's examine specific aspects that you should keep in mind when acquiring observational data. In the Asperger's syndrome learning preference example, the researchers observed children in a classroom setting (a public place). Observations in private places fall into a separate category, because the behaviors that a person might exhibit in private places are different from those displayed where others can see.

When observing behavior of individuals, you need to be unobtrusive. One way to do this is to blend in with your study subjects so you do not alarm them. Blending in with individuals being observed makes it more likely the behaviors will be realistic and not a reflection of a newly introduced person. Another way to handle being unobtrusive is to allow the participants to habituate or acclimatize to you before you start your data collection. For instance, in the classic naturalistic study with chimpanzees and apes conducted by Goodall and Fossy, it was virtually impossible for the researchers to keep from being obtrusive at the onset of the studies. However, with passing time, the creatures eventually were habituated to the researchers and resumed their normal activity.

**Survey Research: Questionnaire Construction**

Surveys are often used to collect data for self-reports. They are also used to assess and understand opinions and thoughts. Questionnaires are economical and provide a quick means of gathering information. Let's briefly focus on designing a questionnaire.

Designing a high-quality questionnaire is more difficult than you might realize. The quality of questionnaires can vary tremendously, and it might surprise you to know that classes are taught on how to design a survey (sometimes referred to as an instrument) with high validity and reliability.