Participant observation social desirability and operational definition psychology...



# 1- Short notes on Participant Observation, Social desirability and operational Definition

### a- Participant Observation

Participant Observation is a humanistic as well as a scientific method that produces a kind of experiential knowledge that allow a researcher talk convincingly. This method of fieldwork produces effective and positive knowledge and it involves getting very close to people and making them feel comfortable with researcher's presence so that he can observe and record information about their lives (Bernard, p. 2006, p. 342).

Participant observer is basically carrying out a naturalistic approach to conducting research and it seems to be a commitment that attempts to adopt the perspectives of studies shared in the day to day experiences. Participant observation has been described as an ongoing and intensive observing, listening and speaking with some explanations (Ely, 1991, p. 42). Many researchers use participant observation as an umbrella term for all qualitative data gathering and data handling.

Participant observation includes going out or staying out in search for qualitative data gathering, and thus the observer may learn a new language in order to express the experiences about the lives of people that the researcher comes to know. With this type of research approach, the researcher is prompted to be immersing himself in a specific culture and also learning how he can get rid of the same immersion so that he will be able to intellectualize what he has seen and heard. He will express them in writing, speaking to others and will try to convince others (Bernard, p. 2006, p. 344).

Participant observation is therefore more likely to be a fieldwork, but all fieldworks are in contrary not participant observation.

### **Social Desirability**

Social desirability is a major source of response bias in conducting a survey research. Some times, participants in a survey research show social desirability bias as their answers reflect an attempt to enhance social desirable characteristics or attempt to minimize certain social undesirable characteristics. Social desirability has been defined as a tendency to give culturally sanctioned and socially approved answers for a survey research to provide socially desirable responses to describe oneself in terms judged as desirable and to present one-self favorably (Craighead and Nemeroff, 2002, p. 1557).

Social desirability affects the accuracy of data to be gathered. It is mainly influenced by the way questions are prepared or asked. Many of survey research questions are more likely to create chances of social desirability so that respondents answer questions in a pre-made answer formats. Engel and Schutt (2005, p. 234) stressed that social desirability effects are more likely to occur when discussing issues that are of controversial in nature or when researcher expresses a view that is not popular or not widely accepted.

When survey researcher or interviewer asks the participants with certain ready-made questions, especially when the questions have highly desirable answers, respondents feel conflicts between a desire to conform to the definition of good respondent behaviour and a desire to respond and appear to the interviewer to be in a socially desirable category. In surveys with pre-

made multiple choice questions, social desirability is more likely to occur among the respondents.

### **Operational Definition**

An operational definition, in the context of data collection and research, is an obvious, brief, complete and careful description of a measure. Social scientist uses operational definition as a measure to explain various conceptual terms (Sprague, Stuart and Bodary, 2008, p. 205). As different types of data were gathered, operational definition is very fundamental. The operational definition is a significant one in a situation at which the decision is to be taken about something regarding whether it is correct or not, or something having the confusion about its accuracy and usefulness.

The data can be collected any time but it should be made clear that how to collect data and how it will be processed. Without processing the data, meaningful information may not be maintained. The ambiguity may arise while people viewing different opinions and it will negatively affect the data collection. Forming a detailed and consistent operational definition helps eliminate such ambiguity.

If data are collected by comprising errors on it or about a product line, for instnace, it may lead to selecting a defective product and probably rejecting a good one. Similarly, when some accounting transactions or other business invoices are inspected to see errors among them, the data collection may not be treated as meaningful unless the term 'error' has not been made clear. Lewis (2010, p. 417) asserted that an operational definition is required in order to maintain almost same meaning and understanding of a problem

mainly to get it solved. It is because, operational definition establishes a language that communicates same meaning to everyone involved in solving the issue.

# 2. Explain the hypothesis testing procedure, using an example.

Developing and testing of hypothesis are critical steps in most researches. Hypothesis testing is a statistical procedure that helps a researcher use sample data to draw inferences about the population according to researcher's interest. As far primary data collection is concerned, observing every individual in a population is practically impossible or difficult to be conducted and therefore most researchers depend on sample surveying and thus sample data are used to help answer specific research questions.

Hypothesis testing has been defined as a process of deciding whether a null hypothesis is to be accepted or rejected in favor of an alternative hypothesis. In hypothesis testing, there won't be any errors in decision making if the null hypothesis is rejected when it is false and also if it is accepted when it is true. Sample data being collected is the base for taking decision regarding whether to reject or accept the null hypothesis.

The statistical hypothesis is an assumption about an unknown population parameter and hypothesis starts from an assumption that is termed as hypothesis. A hypothesis cannot be accepted or rejected on the basis of intuitions or on the basis of general assumptions that researchers have while conducting the research.

#### Process of Hypothesis Testing

In hypothesis testing, the researcher first assumes that the hypothesis is true. The researcher then collects data to test the hypothesis. Based on the data being collected, the researcher will calculate the confidence interval and probability for the hypothesis to become true. In this calculation and assessment, in the probability of hypothesis to be true is smaller than the pre-set level, the hypothesis will be rejected (Vaughan, 2001, p. 59).

Though hypothesis testing can be different from situation from situation, or from project to project, the general process involved in hypothesis testing remains almost same. Hypothesis test is thus a statistical method that uses simple data to evaluate a hypothesis for studying a population. Following are the logics and steps involved in hypothesis testing:

The researcher first states a hypothesis about a population. In general research contexts, the hypothesis concern the population values in parameter.

Before the researcher selects a sample, the hypothesis will be used to predict the characteristics and specifications that the sample must have. The sample also requires being similar to the population and the researcher should always expect certain amounts and levels of errors.

Next, the researcher obtains a random sample from the population.

Finally, the researcher makes a comparison and analysis between the sample data obtained and the data that were predicted for the hypothesis. If this comparison shows that the sample mean is consistent with prediction, it will be concluded that the hypothesis is reasonable. Similarly, if it shows that

there is big discrepancy between the sample data and prediction, then the hypothesis will be reckoned to be wrong (Gravetter and Wallnau, 2008, p. 189).

#### Example for hypothesis Testing

For instance, a researcher wants to find out knowledge and expertise of a university's students in terms of their familiarity with university library and the amount of time they spend in library. Various journalism programs have been arranged to make students more aware of the library use and other relevant matters that are important to them. Do this journalism programs affect the amount of time that students spend in library? This is the main issue to be found out with the research.

A random sample survey has been conducted from around 40 students in the number of hours they spend in the library in a week. As previously thought, students were spending around 5 hours per week in the library, but it is required to test whether students spend more than that after the journalism programs. This hypothesis testing includes following steps:

- a) Formulating two competing hypothesis, namely null hypothesis and alternative hypothesis,
- b) Calculating the test statistics by using the latest sample data being collected.
- c) Determining the probability that the null hypothesis is true based on the test statistics

d) Comparing the pre-set value or pre-determined value with probability value (Vaughan, 2001, p. 59-62).

# Briefly explain the following (i. e., what it is; what it's used for, etc.).

### **Null hypothesis**

There are various types of tests in statistics. In research and hypothesis testing in particular, null hypothesis plays very significant role. Hypothesis is statements that researchers, or decision makers or analysts believe to be true. This statement will be verified by using statistical tests. Practically, hypothesis is employed in pairs. Out of the two hypotheses, the first one is normally stated in negative forms, for instance, stating as 'something is not true', or the variable is not related etc. this negative form is termed as null hypothesis and the other is alternative hypothesis. Null hypothesis is represented by the symbol H0 and alternative hypothesis H1 or H2 (Downing and Clark, 2010, p. 66)

The tested statement in statistics is called the null hypothesis because it is often in the form like ' there is no relationship between a variable and b variable, or both x and y are not related etc. Before testing the measure, the researcher or statistician may draw only two probabilities, X = y and  $X \neq y$ . When a statistician observes a result likely to be so, then that assumption is called alternative hypothesis, and the opposite assumption is called null hypothesis (Howell, 2007, p. 152).

For instance, an investigation is required to know the average ability of students in a class (X standard) in the co-scholastic area. They assumed that

it will be above 50. Then the  $x \ge 50$  is an alternative hypothesis and x < 50 is null hypothesis. The test revealed that the average ability is 70,

H0: m < 50 H1:  $m \ge 50$ . 20 is therefore population standard deviation

### Replicability

A research which has replicability is often considered to be more accurate. When a researcher adopts almost the same procedures with similar settings and systems of research and surveying used by another researcher and this helps him obtain similar findings, the research can be said to be replicable. To be replicable is also considered to be an important tenet of an effective scientific research as well (Holloway, 1997, p. 137).

Langbein and Felbinger (2006, p. 33) noted, replicability of a research helps the researcher make empirical claims more defensible and clearly objective. If the research lacks replicability, the conclusion and claim would be considered to be personal opinion and causal observation. Replicability of a research thus makes conclusions more traceable. Qualitative research may not as replicable as quantitative mainly because the relationship between the researcher and the participant in the research seems to be unique and cannot be replicated.

#### **Moderator variable**

Normally, there are two main variables in a research; they are independent and dependent variables. But, some time, there can be a moderate variable, which is a special type of variable that the investigator has chosen to determine how the relationship between independent and dependent

variables is affected (Brown, 1998, p. 11). In simple terms, moderate variable is a third variable that affects the relationship between independent and dependent variables.

As moderator variable affects the relationship between the independent and dependent variables in a research, it takes form of or plays roles of expressions like specification, contingency, conditional and qualification etc. For example, Mr Joseph decides to study Chinese and the issue to be considered is his study of Chinese for one year and his expertise or proficiency in that language may vary for male and females. In this example, Joseph's study of Chinese is independent variable, his proficiency in Chinese is dependent variable and there is one point to be debated, which is whether the proficiency will vary from male to females. Proficiency variation between male and female is arguably moderator variable.

### **Cross-sectional study**

A cross sectional study is part of sampling or surveying involving observations of a sample of a population or phenomenon that are made at one point in a time. Both exploratory and descriptive research methodologies are often considered to be cross sectional study (Babbie, 2008, p. 111). In a cross sectional study, the researcher or the investigator would make all of his measurements and analysis on a single occasion or within relatively a short period of time.

The researcher who makes cross sectional study draws from the population and searches variables distributions within the sample, often by designating and predicting the outcomes of variables based on information from other

sources. Cross sectional study is very much suited to describing variables and their relative distributions patterns. This type of study never takes into account the temporal relationship between the factors that are already explored and this usually includes an evaluation of a cross section of a particular population in a given period of time (Rao and Richard, 2006, p. 205).

## 4. Compare and contrast each of the following, giving examples:

#### **Primary and Secondary Data**

Sources of data are basically two, either primary or secondary. Primary data comprise of those data that a researcher collects directly from a specific population through ways of sampling, survey or any other technique of data gathering. Primary data are raw data and are not already used or published in books, journals, newspaper or any other sources. When primary data are published through media and made available to the public, and later they are used by others for their purpose, the data becomes secondary and the source becomes secondary source of data.

Primary sources of data are those where the researcher describes his or her own work and the process that has been employed to come to conclusion. Secondary sources are usually books, articles, journals, statistics published in them, and other publications that are written by people with only a passing or second hand knowledge of a specific subject (Guffey and Loewy, 2009, p. 259). Primary data includes information that are developed or gathered by the researcher specifically for a particular research at hand.

Secondary data refers to those data that are previously been gathered by https://assignbuster.com/participant-observation-social-desirability-and-operational-definition-psychology-essay/

someone other than the researcher for some purpose other than the research project at hand. Primary data is raw-data where as secondary data are previously used by others and may not be very appropriate for the purpose of second users.

A survey conducted by local government to know exact numbers of farmers and industrialist in its region gives primary data, but when this data is used by a newspaper for studying the same region's financial strength, it becomes secondary data.

### Field study versus Comparative study

A field study in research methodology refers to a method of data gathering based on direct observation from the population. For instance, a business organization may conduct a field study about its customers, their preferences, their specific requirements and their responses etc. in conducting field study, the researcher or the investigator directly observes users or the population they target, most probably taking notes on certain activities that their targeted people do indulge with, copying their activities clearly, and noting down the answers they give for specific questions.

Comparative study is typically a qualitative analysis tool that attempts to figure out a specific issue or find out answers to specific issues by comparing two known variables or already studied areas of a given topic. An unknown fact may be explored by comparing its dimensions with an already known fact. For example, 50 Biology students in a university who are very fond of reading of library books were found to have scored more than 65 percent of marks. The relation between scoring marks and reading library books in

known. In analyzing what factors led many students score high marks in business studies, the reading and high soring in biology can be compared.

### **Bibliography and References**

Most researches, mainly literature review part, depend on literatures of published book or journals. The researcher may give direct quoting or parenthesizing in between texts and the details of these sources are required, according to almost all referencing formats like APA, MLA, Harvard etc, to show in detail at the end of the research paper on a separate title called references. References thus refers to those sources that are mentioned in text in a research, may be with or without the year of publishing or page numbers, but with last name of the author. Any specific idea that a researcher depends from a previous study and uses to develop his research must give its details in references. References thus indicate sources of specific ideas he parenthesized or quoted from another work.

But, bibliography refers to the lists of books or journals or any other type of literature work that a researcher has read and used for his work, but not directly quoted an idea from them or not parenthesized from those sources. Researchers normally read several books and journals and they list them in bibliography to give readers an insight to further reading.

#### **Criterion and Predictor Variable**

In research methodology, criterion or criterion variable is the variable that measures the construct of interest to the researcher. Criterion variable is an outcome variable that can be predicted from one or more predictor variables, and it is often the main concentration in the study as it is the

outcome variable mentioned in the research problem (Hatcher, 2003, p. 30). The predictor variable, in contrast, is a variable that is used to predict values on the criterion and it has a causal effect on criterion (Hatcher, 2003, p. 30).