
BLOCK 2
QUANTITATIVE AND QUALITATIVE
RESEARCH METHODS

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BLOCK 2 QUANTITATIVE AND QUALITATIVE RESEARCH METHODS

INTRODUCTION

This block consists of *two units*. The *first unit* of this block deals with quantitative research. In this unit of the block, various aspects of research design will be introduced to you. Research design is said to be a blue print or frame work which is prepared before starting the actual research. It acts as a guideline for the conduction of research. They can be classified into many types and it is the researcher's responsibility to decide which of the design will be best suited for his/her research. The unit will also explain about the various aspects of quantitative research method.

In the *second unit* of this block, you will come to know about the qualitative research. The unit deals with the basic concepts, implications and uses of qualitative research in psychology. The unit also tries to introduce and describe the meaning and essence of 'ethnography' in qualitative research. It provides the meaning and types of qualitative research. Comparing qualitative with quantitative research, the unit puts forward the relevance of qualitative research in the field of psychology. In this unit, the various methods of ethnographic research are presented. The ethical guidelines in qualitative research will also be discussed.



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UNIT 4 QUANTITATIVE RESEARCH METHOD*

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* Dr. Smita Gupta, Discipline of Psychology, School of Social Sciences, Indira Gandhi National Open University, New Delhi.

4.0 INTRODUCTION

In this unit of the block, various aspects of research design will be introduced to you. Research design is said to be a blue print or frame work which is prepared before starting the actual research. It acts as a guideline for the conduction of research. They can be classified in to many types and it is the researcher's responsibility to decide which of the design will be best suited for his/her research. The unit will also explain about the various aspects of quantitative research method.

4.1 OBJECTIVES

With the help of this unit, you will be able to:

- Explain the concept of research design;
- Describe the meaning and characteristics of quantitative research;
- Discuss the difference between experimental and non -experimental research method;
- Distinguish between field experiment and field studies; and
- Describe the quasi experimental and ex post facto research.

4.2 RESEARCH DESIGN

As mentioned to you earlier that, research design is a blue print or framework of process, steps, methods and techniques selected by a researcher to carry on the research in a reasonably logical manner to fill the research gap. It refers to the methodology and tries to answer the "how" aspect of research. It is a kind of sketch which guides the researcher to the process of conduction of research. Roughly, research design deals with collection of data, measurement and analysis of data.

The researcher selects the type of research design for his/her research on basis of the nature of problem selected by him/her. The research design guides on selection of tool, collection of data and analysis of data on basis of the selected purpose of research design. An effective research design helps in minimizing error/ biases.

4.2.1 Required Elements of a Research Design

An effective research design helps the researcher to conduct a research in a more reliable way and helps towards more valid interpretations. Few of the basic elements required for an effective research design are as follows:

- There should be a clear purpose/ aim of research.
- The detail of the tools selected for the collection of data should be clearly informed.
- The settings for the research study should be clear and well informed to the researcher.
- The researcher should have a clear idea of the tentative timeline required for the overall research.
- The researcher should also know well in advance about the measurement of analysis.

- The limitations and ethical guidelines of the selected research should be clearly known to the researcher.

4.2.2 Characteristics of Research Design

Some of the characteristics of research design can be mentioned as follows:

4.2.2.1 It is Reliable

It is important that the researcher should ensure that the research design framed has accurate research questions which can help to obtain standard results. Moreover, it is expected that if a research is done on regular basis, it will yield similar results. So, these purposes can be attained only if the research design is reliable.

4.2.2.2 It is Valid

The research design provides an opportunity to select a tool which is standardized, bias free and measures what it claims to measure. Only then the tool prepared from research design can be claimed to be valid.

4.2.2.3 It is Neutral

The results obtained from the proposed research consists of responses from many individuals. So, the results obtained from the research design are free from bias, extremities and judgmental. The research design therefore yields a neutral result.

4.2.2.4 It can be Generalized

The research design helps in providing results which can be generalized and applied to the population.

4.2.3 Types of Research Design

Research design helps a researcher to follow research steps on a correct tract and achieve trustable results. As mentioned to you earlier, it is the onus of the researcher to select the correct research design which can help him/her to achieve the desired outcomes. Therefore, on basis of the selected area of the research, the researcher needs to opt the correct research design. The research design can be broadly classified as follows:

4.2.3.1 Qualitative Research Design

The qualitative research design is concerned with phenomenon and involves the investigation of the reasons of various human behavior; underlying motives and desires. It basically involves the use of in depth interviews and uses open ended questions for data collection. The research method is important in the behavioral sciences where the aim is to discover the underlying motives of human behavior. With the help of qualitative research, the researcher finds a solution to “why” a particular theory exists along with “what” respondents have to say about it. Some of the types of qualitative research are- Ethnography, Grounded Theory, Survey research and Case Study. You will come to know more about the qualitative methods in the next unit.

4.2.3.2 Quantitative Research Design

It is concerned with measurement of quantity or amount of any event, situation or incidence to collect actionable insights. Quantitative research design are applicable to phenomena that can be expressed in terms of quantity. It involves use of questionnaires and uses closed end questions for data collection. It is important in social sciences where the aim is to collect information to analyze relationship between variables, predictions and comparisons. Some of the types

of quantitative research design are- laboratory; field experiments; field studies; quasi experimental research; ex-post facto research.

4.3 INTRODUCTION TO QUANTITATIVE RESEARCH DESIGN

As mentioned to you earlier, the quantitative research method deals with objective measurements and includes statistical or numerical analysis of data collected through polls, questionnaires or surveys. The variables can be manipulated as well as controlled in the quantitative research. Basically, the variables are manipulated to examine the cause- effect relationship, comparative analysis or interventional analysis within a specified population. In a broader sense, the quantitative research designs are either descriptive (in which the scores from the participants are taken only once); the basic purpose of the study is to only establish associations between variable; the study may include a large sample in order to ensure valid results which can be generalized to the population, or experimental (in which the scores from the same participants are collected before and after treatment within a controlled situation); the sample size may be very small and purposefully chosen in experimental research. In a descriptive study, only associations between variables are established while cause- effect relationship or causality is established in experimental studies.

Further, quantitative research deals with numbers. It focuses more on convergent reasoning than on divergent reasoning which means that the researcher tries to find out solutions to a research problem with help of standardised tools and not mere by creative ideas. It mainly focuses on quantifying relationships between variables. Variables refers to any condition that can be varied like- weight, performance, time, and treatment. These variables are measured on a sample of human or animals. These variables are measured and analysed with help of statistics, such as correlation, relative frequencies, or differences between means.

4.3.1 Characteristics of Quantitative Research Design

Certain specific characteristics that are pertinent to quantitative research are as follows:

4.3.1.1 Research Questions

Based on the research problem, the researcher in the quantitative research frames clearly defined research questions and the answers to these questions are sought objectively.

4.3.1.2 Representative Sample

The researcher selects a sample of a specified population from which data is aimed to be collected. These samples are representative of the population, so that the results achieved can be generalised on the respective population accordingly.

4.3.1.3 Deals with Variables

As mentioned before, the quantitative research deals with variables and as per the requirement, the researcher manipulates (e.g. increases or decreases) and even controls the extraneous/controlled variables which can also effect the research study.

4.3.1.4 Involves Data Collection

The quantitative research deals with numbers and the data is collected by the researcher with the help of structured or standardised research instruments. The

data is analysed with help of empirical evidences. The data are collected in form of numbers, and statistics, often arranged in tables, charts, figures, or other non-textual forms.

4.3.1.5 Reliable and Valid

Since the study is done under controlled observation or scientific investigations, they can be replicated or repeated and provide similar results. The quantitative research is high on reliability. Further, as the quantitative research involves the use of standard and structured instruments (which are variable specific), they are equally valid as well.

4.3.1.6 Generalisability

Since the quantitative research design is done in a well- planned manner and are highly reliable as well as valid, the results obtained through the method can be generalized and can also effectively predict results as well as infer causal relationships.

4.3.2 Strengths of Quantitative Research Design

It is worth to be mentioned that quantitative research provides a framework to the researcher to find out relationships or conduct comparative analysis and attempts to control the environment in order to collect the required data. Some of the strengths of the quantitative research can be mentioned as follows:

- The research design provides an opportunity to collect data from a larger sample and helps in conducting broader study as well as generalization of results to a larger population.
- The research design helps the researcher to attain reliable, valid, accurate and objective results.
- The research design provides an opportunity to replicate and design similar studies.
- The research design provides an opportunity to conduct experiment under control environment and so minimizes error variance.
- The design uses close ended and structured questions which provides responses free from personal biases.

4.3.3 Limitations of Quantitative Research Design

Since the quantitative research is done in a controlled setting, it might not capture a response which might occur in a natural setting. Some of the limitations of quantitative research design are as follows:

- As mentioned, the research design lacks contextual details and response in contextual setting.
- The research is limited to statistical approach and so lacks the grounds of the process of discovery.
- The closed ended or structured questions might reflect a limited and incomplete information.
- Results might provide much narrower and sometimes superficial dataset.
- The research does not involve interview or in-depth perception of individuals, so it does not provide complete insight of the real world.
- The research might not yield natural and original response of individuals in a controlled setting.

Self Assessment Questions I

Fill in the following blanks

- 1) The quantitative research design is done in a well- planned manner and are highly
- 2) The qualitative research design is concerned with and involves the investigation of the reasons of various human behavior.
- 3) In the descriptive research the scores from the participants are taken
- 4) The is a blue print or framework of process, steps, methods and techniques selected by a researcher to carry on the research.
- 5) The quantitative research design lacks

4.4 EXPERIMENTAL AND NON-EXPERIMENTAL RESEARCH DESIGN

The Experimental and Non- Experimental research designs differ in terms of nature, process and control of variables. We will deal with both of them in the following sub sections:

4.4.1 Experimental Research Design

In an experimental research design, the researcher can manipulate the predictor variables as well as the participants as per the requirement of the research to examine the cause- effect relationship. The researcher conducts the experiment within a laboratory under controlled environment, where the sample is divided to two groups out of which one group being is treated as experimental group (the group on which experimentation or manipulation is done) and the other is placed as a placebo or control group (the group to which no manipulations or treatments are given).The laboratory-based experiment provides a high level of control and reliability. You should know here that the independent or predictor variables are those variables which can be manipulated to see their effect on the dependent variable, for example, if you vary the intensity of light and temperature to examine its effect on performance of individuals, light and temperature here are the predictor or independent variables and the performance becomes the dependent variable. A predictor variable therefore, predicts its effect on dependent variables.

4.4.1.1 Types of Experimental Research Design

Primarily, the experimental research design is of following three types, which is based on the way in which a researcher classifies the subject on basis of varying conditions and groups:

- Pre-experimental research design
- True experimental research design
- Quasi-experimental research design

The different types of experimental research design are based on the how the researcher classifies the subjects according to various conditions and groups.

4.4.1.1.1 Pre-Experimental Research Design:

The pre-experimental research design is the simplest design which follows basic steps of experiment which is conducted on a single group without the presence

of any control group. Therefore in pre-experimental design, the group is not compared with any equivalent non treatment group. The group is observed to examine the cause effect relationship between variables. This design is considered to be cost effective as it is administered on experimental group only. The pre-experimental research design is further divided into three types:

i) *One-shot Case Study Research Design*

In this type of pre experimental research design, the researcher provides some treatment to a single group and observes whether these treatments have led to some change or effect on the behaviour or response of the group. For example, in order to assess the improvement in academic performance of students (outcome variable), the teacher might give extra classes (predictor variable) to the group of students and then observe the change in their academic performance. The basic purpose of the research design is to examine whether the treatment had any effect on the outcome.

ii) *One-group Pretest-posttest Research Design*

One group pre test- post test research design is a kind of design in which the researcher compares the condition of group before and after giving a treatment. This kind of research design is an interventional design, in which the treatment serves as an intervention, for example if the researcher desires to change the unwanted behavior of a group of children, then he/she might observe the current behavior of the group, and then can administer behavioral therapy to them and then may study their behavior post the intervention. If there will be significant change in behavior of the children then the intervention will be considered to be relevant in bringing about changes in such kind of behavior. The two main features of this research design is, that, it is a one group design (consists of single group participant and all the participants are given same treatments and assessments) and there is a linear ordering in which a dependent variable before and after treatment is measured (pre test- post test design). The effect of a treatment or intervention is determined by calculating the difference between the pre and post assessment of the dependent variable.

iii) *Static-group Comparison*

In a static group comparison research design, there are two groups of participants out of which, only one group receives the treatment and the other group does not. After the treatment is administered to one group, post test scores are determined from both the groups, which is used to measure the difference, after treatment, between the two groups.

4.4.1.1.2 True Experimental Research Design

This design is considered to be the most accurate experimental research design, as it involves the analysing of proposed hypotheses with help of statistics. Experimental research design is used to establish a cause-effect relationship within a group/s. Further, there are three factors which are required to be satisfied in a true experimental research design:

- i) There is a presence of control group (which refers to the group of participants who are similar to the experimental group but experimental research rules do not apply to them) and the experimental group (which refers to those group of research participants on whom experimental research rules are applied).
- ii) There are variable/s which can be manipulated and examined by the researchers.

- iii) The sample selected is representative of population, so there is a random distribution

The experimental research method is commonly implemented in physical sciences.

4.4.1.1.3 Quasi-Experimental Research Design

The quasi experimental research design is not considered to be a true experimental research design, where, the word “quasi” refers to resemblance. The research design resembles an experimental research design but it is not exactly a true experimental research design. There is no random distribution and the participants of a group are not randomly assigned, although, there are independent variables which can be manipulated in the research design. The true experimental research design has probability samples but a quasi- experimental research design has non probability samples.

4.4.2 Non- Experimental Research Design

As the name reflects, this research design lacks the required conditions of experimental research design. In non- experimental research design, the researcher can neither control the participants nor the variables. The researchers come to conclusion with the help of observation, interaction and interpretation from the responses of the participants. So, the researcher cannot apply correlation, survey, case study or cause-effect relationships. The non- experimental research design is high on external validity and can be generalized on a larger population. This kind of research design is used when there is a requirement to study a single variable instead of statistically analyzing cause effect relationship (e.g. a study to examine how accurate is memory of the participants?). It can also be used when the researcher cannot manipulate the independent variables or the participants cannot be randomly assigned (e.g. a study to analyse whether a damage in mid brain affects the sleep pattern of participants), so it can study causal relationships without manipulating the independent variables. It can also be used in exploratory researches (e.g. a study to explore how efficiently child can be nurtured by single mothers).

Therefore, the researcher decides to use experimental research or non- experimental research design on the basis of the nature of questions. At times, same research may have the requirement of using both the researches.

4.5 LABORATORY EXPERIMENT AND FIELD EXPERIMENT

As mentioned to you earlier that experiment is observation under controlled conditions. Researchers try to control extraneous conditions either within laboratory settings (closed boundary) or in natural settings (open environment) while conducting experimental research. You will come to know about both of them in the following sub sections:

4.5.1 Laboratory Experiments

Laboratory experiments are those experiments which are conducted within a laboratory setting, where accurate measurements are possible. The researchers/ experimenters have a sound control over extraneous variables and they can manipulate independent variables as well. Therefore, the laboratory experiment uses a standardized procedure, in which the participants are randomly allocated to

each independent variable group. Example of laboratory experiment conducted in psychological research is the Milgram's experiment on obedience. The laboratory experiment is advantageous because it involves standardized procedure; it can be replicated; control of extraneous variables is possible; cause-effect relationship can be established. Though it is not aloof from disadvantages because it is conducted in artificial setting which may lessen the ecological validity as the participant might not behave as they would have behaved in real life setting. Further, there might be an influence of experimenter's bias or demand characteristics may act as confounding variable and affect the result.

4.5.2 Field Experiments

The field experiments are conducted in natural setting within the environment of the participants. Since, it is an experimental research, the experimenter can manipulate independent variable, but has no control on extraneous variables. The example of field experiment done in the field of psychology is Hofling's hospital study on obedience. The advantages of field experiment are- The behavior reflected by participants in real life setting is natural and spontaneous; the chances of demand characteristics to affect the result are low; it has higher ecological validity than the laboratory experiment. The disadvantage of this experimental research design is that, it has no control over extraneous variable which might affect the results; since it is done in natural setting, it is difficult to be replicated.

Field Studies: These researches are non-experimental in nature, as the researcher do not manipulate any variable, and every thing is studied in natural settings. The data can be collected from a large number of samples through face-to-face interviews, surveys, or direct observation. The data collected is specific to a particular issue/problem. The researcher carefully plans the procedure of research and ensures that the data is accurate, valid, and collected efficiently. The data is analysed and interpreted accordingly. The advantages of field studies are that, they can be used in studies where manipulation of variable is not possible, e.g. manipulation age of sample is not possible; it is also useful in areas where manipulation of independent variables are not ethical e.g. depression. However, the disadvantage of this research design are that, there are possibilities of ethical challenges like, deception, involved in the study; there are more chances of sampling bias; there may be influence of extraneous variables in the study. The field study is more like analysis of an existing situation at a place.

In order to make the concept of the research design (laboratory experiment, field experiment and field study) you may have a look at Table No. 4.1:

Table 4.1 : Differences between laboratory experiment, field experiment and field study

| Laboratory Experiment | Field Experiment | Field Studies |
|--|--|---|
| Experiments are conducted under controlled setting | Experiments are not conducted under controlled setting | Researches are conducted under natural environment |
| Experimenter can manipulate independent variables as well as control extraneous variables. | Experimenter can control independent variables but has no control over extraneous variables. | Researcher has can neither manipulate independent variables nor control extraneous variables. |
| Ecological validity is lowest. | Ecological validity is comparatively higher. | Has very high ecological validity. |

| | | |
|---|--|---|
| We can infer causal conditions, as their internal validity is high. | Depending on their the level of control of extraneous variables they may have high internal validity and accordingly we may infer causal conditions. | We cannot infer causal conditions, as their internal validity is low. |
| The generalisibility of the findings is limited. | The results can be generalized to the population under study. | The results can be generalized to larger sections of people. |

4.6 EX POST FACTO RESEARCH DESIGN

An ex post facto research design is a design in which researches are done to infer the causes of an event that has already occurred. The research design is also known as ‘after the fact’ research which is considered as quasi-experimental because the participants cannot be randomly assigned. The participants can be grouped on basis of characteristics like age, weight and compared with reference to independent and dependent variables, yet, it is not a true experiment because it lacks random assignment. For example, a researcher is interested to study the influence of height on self-esteem levels in adults. So the participants would be separated into differing groups (short height, medium height and tall) and measure their self esteem levels. This is an ex post facto design because a pre-existing characteristic (height) was used to form the groups.

Self Assessment Questions II

Fill in the following blanks

State whether the following statements are ‘True’ or ‘False’:

- 1) An ex post facto research design is a design in which researches are done to infer the causes of an event that has already occurred. ()
- 2) Laboratory experiments are not conducted under controlled setting. ()
- 3) In field study, the researcher can control independent variables but has no control over extraneous variables. ()
- 4) The quasi experimental research design is not considered to be a true experimental research design. ()
- 5) In true experimental design, the group is not compared with any equivalent non treatment group. ()

4.7 LET US SUM UP

It can be summed up from the above discussion that, research design is a blue print of the actual research and needs to be prepared well in advance, before conducting the actual research. There are several advantages of research design. Research design can be categorised in to several types. The researcher needs to select the research design on basis of the problem selected by him/her. We also discussed about different types of research design, their advantages and disadvantages.

4.8 UNIT END QUESTIONS

- 1) What is research design? Describe the required elements of a research design.
- 2) Discuss the characteristics of quantitative research design.
- 3) Point out the advantages and disadvantages of quantitative research design.
- 4) Describe the types of experimental research design.
- 5) Differentiate between laboratory experiment, field experiment and field studies.

4.9 ANSWERS TO SELF ASSESSMENT QUESTIONS

Self Assessment Questions I

- 1) reliable as well as valid
- 2) phenomenon
- 3) only once
- 4) research design
- 5) contextual details and response in contextual setting

Self Assessment Questions II

- 1) True
- 2) False
- 3) False
- 4) True
- 5) False

4.10 GLOSSARY

Independent Variable: Independent variable is one that cause some change in the value of dependent variable.

Extraneous Variable : Independent variable that are not related to the purpose of the study but may affect the dependent variable.

Experimental Group : Group in which subject receive treatment.

Control group : Subjects in an experiment who do not receive treatment.

Factor : The independent variable of an experiment.

Level : A particular value of an independent variable.

Treatment : Particular set of experimental condition.

Random assignment : Unbiased assignment process that gives each subjects an equal chance of being placed in any groups.

Counterbalancing : Controlling for order and sequence effect by arranging that subject experience the various condition in different orders.

4.11 REFERENCES AND SUGGESTED READINGS

- Armstrong, J. Scott; Patnaik, Sandeep (2009-06-01). "Using Quasi-Experimental Data To Develop Empirical Generalizations For Persuasive Advertising" (PDF). *Journal of Advertising Research*. 49 (2): 170–175.
- Babbie, Earl R. (2010). *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage.
- Brians, Craig Leonard et al. (2011) *Empirical Political Analysis: Quantitative and Qualitative Research Methods*. 8th ed. Boston, MA.
- Broota, K.D. (1992) *Experimental Design in Behavioural Research*, Wiley Eastern Limited.
- Bushman, B. J., & Huesmann, L. R. (2001). Effects of televised violence on aggression. In D. Singer & J. Singer (Eds.), *Handbook of children and the media* (pp. 223–254). Thousand Oaks, CA: Sage.
- Dinardo, J. (2008). "natural experiments and quasi-natural experiments". *The New Palgrave Dictionary of Economics*. pp. 856–859. doi:10.1057/9780230226203.1162. ISBN 978-0-333-78676-5.
- Edwards A.L. (1980) *Experimental Design in Psychological Research*, Holt, Rinehart and Winston, New York.
- Godden A., Baddeley A. (1980), When does context influence recognition memory ? *British Journal of Psychology*, 71, 99-104.
- Kerlinger, F. N. (1998) *Foundation of Behavioural Research*, (4th edition) Holt, Rinehart and Windston, Inc.
- Kerlinger, F.N. (2007), "Foundation of Behavioural Research" (10th reprint), Delhi, Surjeet publications.
- McBurney, D.H. & White, T.L. (2007), "Research Method 7" Delhi, Thomson Wadsworth.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York, NY: Harper & Row.
- Morgan, G. A. (2000). Quasi-Experimental Designs. *Journal of the American Academy of Child & Adolescent Psychiatry*. 39. pp. 794–796.
- Myers, A. (1980). *Experimental Psychology*, New York: D. Van Nostrand Co.
- Rossi, Peter Henry; Mark W. Lipsey; Howard E. Freeman (2004). *Evaluation: A Systematic Approach* (7th ed.). SAGE. p. 237. ISBN 978-0-7619-0894-4.
- Rosenhan, D. L. (1973). On being sane in insane places. *Science*, 179, 250–258.
- Shavelson, R.S. (3rd edition) Prentice Hall New York. McNabb, David E. (2008) *Research Methods in Public Administration and Nonprofit Management: Quantitative and Qualitative Approaches*. 2nd ed. Armonk, NY: M.E.
- Singh, Kultar. (200) *Quantitative Social Research Methods*. Los Angeles, CA: Sage, 2007.
- Singh, A.K. (1998) *Tests, Measurement and Research Methods in Behavioural Sciences* (3rd ed.) New Delhi, Bharati Bhawan.
- Thyer, B.A. (1993), *Single-System research design* in R.M. Grinnell (ed.), "Social Work, Research and Evaluation" (4th ed.), Itasca Illinois, F.E. Peacock Publishers.

Websites :

<https://libguides.usc.edu/writingguide/quantitative> accessed on 29/9/19

<http://www.sportsci.org/jour/0001/wghdesign.html> accessed on 29/9/19

<https://www.quora.com/What-are-the-characteristics-of-quantitative-research>
accessed on 29/9/19

<https://study.com/academy/lesson/non-experimental-and-experimental-research-differences-advantages-disadvantages.html> accessed on 29/9/19

<https://opentextbc.ca/researchmethods/chapter/overview-of-nonexperimental-research/> accessed on 29/9/19

<https://www.researchconnections.org/childcare/datamethods/preexperimental.jsp> accessed on 30/9/2019

<https://www.simplypsychology.org/experimental-method.html> accessed on 1/10/19

<https://www.alleydog.com/glossary/definition.php?term=Ex+Post+Facto+Research+Design> accessed on 1/10/19



UNIT 5 QUALITATIVE RESEARCH METHOD*

Structure

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- 5.12 Unit End Questions

* Dr. Smita Gupta, Discipline of Psychology, School of Social Sciences, Indira Gandhi National Open University, New Delhi.

5.13 Answers to Self Assessment Questions

5.14 Glossary

5.15 Suggested Readings and References

5.0 INTRODUCTION

The unit deals with the basic concepts, implications and uses of qualitative research in psychology. The unit also tries to introduce and describe the meaning and essence of 'ethnography' in qualitative research. It provides the meaning and types of qualitative research. Comparing qualitative with quantitative research, the unit puts forward the relevance of qualitative research in the field of psychology. In this unit, the various methods of ethnographic research are presented. The ethical guidelines in qualitative research will also be discussed.

5.1 OBJECTIVES

With the help of this unit, you will be able to:

- Define qualitative research;
- Differentiate between qualitative and quantitative research;
- Explain different types of qualitative research;
- Describe the relevance of qualitative research in psychology; and
- Explain the concept and importance of mix approach research method.

5.2 MEANING OF QUALITATIVE RESEARCH

Qualitative research can be defined as a type of scientific research that tries to bridge the gap of incomplete information, systematically collects evidence, produces findings and thereby seeks answer to a problem or question. It is widely used in collecting and understanding specific information about the behaviour, opinion, values and other social aspects of a particular community, culture or population. An example of a qualitative research can be studying the concepts of spiritual development amongst college students. David (1995) had done such a study at a fairly conservative school. He actually tried to analyse whether there is uniformity or considerable diversity in people's understanding of spiritual development or not. Qualitative research helps in providing an indepth knowledge regarding human behaviour and tries to find out reasons behind decision making tendencies of human.

5.3 HISTORY AND PHILOSOPHY OF QUALITATIVE RESEARCH

Qualitative research method seems to have its roots in the Disciplines of Anthropology and Sociology as a method of investigation and survey in the early 20's. Although, there was no universally accepted format at that time, but researchers were using it to understand about the culture and group adjustment at various places. However, later the social anthropologists like Malinowski (1922); Mead (1935) and the sociologists like Park and Burgess in 1925 started more focused approaches which lead to the shaping of qualitative research. The method was being used to study about the individuals at different settings, street corners, slums and foreign places.

The time frame of 1960's led to the emergence of theories and approaches like the Grounded theory (Glaser and Strauss, 1967) and symbolic interactionist perspective (Becker et al, 1961). Later, several publications like edited volume by Filstead 1970; books on ethnography by Spradley (1979,1980) contributed towards the development of qualitative methods of conducting research. Subsequently, phenomenological approaches were also developed such as phenomenological psychology by Giorgi (1985) and Colaizzi (1978).

Later on, several studies and publications in the field originated. The Journal of Qualitative Sociology was published in 1978 and the International Journal of Qualitative Studies in education was published in 1988. The Handbook of Qualitative Research was an edited book by Denzin and Lincoln in 1994. However, the term qualitative research was interchangeably used as naturalistic inquiry (Lincoln and Guba, 1985); field research (Burgess, 1984; Delamont, 1992); case study approaches (Stake 1995; Travers, 2001); interpretive/interpretative research (Bryman, 2001). Irrespective of the terms being used, qualitative research basically focuses on the lived experience, interaction and language of human beings.

5.3.1 Historical Sketch of Qualitative Research in the Field of Psychology

The use of qualitative research was traced by Giorgi (2009) in the work of Wilhelm Wundt, Alfred Binet, the Würzburg school, John Watson, the Gestalt school, Wilhelm Stern, Jean Piaget, and Frederic Bartlett. He reviewed five holistic approaches to psychological research at the time of the Weimar Republic, none of which survived World War II in Europe: Gestalt psychology, Wilhelm Stern's personalistic psychology, Felix Krüger's Ganzheitspsychologie (integral or holistic psychology), David Katz's phenomenological school, and Edward Spanger's Verstehenpsychologie (psychology of understanding; Giorgi, 2009). The qualitative psychological research was recognized in 1980s and began to appear in professional journals with regularity only since the 1990s (Rennie, Watson, & Monteiro, 2002). It was informed by Danziger (1983, 2001a, & 2001b) that Wundt viewed his 10th volume and *Völkerpsychologie* (1900–1920, 1916) translated it as “social psychology,” “folk psychology,” or “cultural psychology”—involving qualitative research on language, expressive movement, imagination, art, mythology, religion, and morality—as equally important to laboratory research in the science of psychology. Case history, was a prevalent method being used to establish general knowledge like, Freud used it in his research on psychopathology (Breuer & Freud, 1895).

In late 60's, Giorgi started using phenomenological assumptions and integrating qualitative procedures in traditional psychological experiments in order to gain more comprehensive knowledge of the psychology of learning (Giorgi, 1967). Then, on the basis of his general articulation of psychology as a human science (Giorgi, 1970), and later on applied the phenomenological methods to psychological topics outside the laboratory as well (Giorgi, 1975). He further contributed by publishing the four-volume series of *Duquesne Studies in Phenomenological Psychology* (Giorgi et al., 1971, 1975, 1979, 1983) and in the *Journal of Phenomenological Psychology* (A. Giorgi, W. F. Fischer, & R. Von Eckartsberg, Founding Eds.). Further, several other eminent researchers also used the phenomenological analysis for psychology like, Clark Moustakas (1994), Max Van Manen (1990), and Jonathan Smith (Smith, Flowers, & Larkin, 2009). Barney Glaser and Anselm Strauss's in 1967 formulated the Grounded theory

which played a role in sociology that was similar to Giorgi's in psychology. Although, they could not predict that grounded theory would be adopted by multiple disciplines and professions (Wertz et al., 2011).

From past few years the qualitative method is being integrated with other research methods, wherein, a section on qualitative inquiry has been included in APA's Division 5 and the publication of the new APA journal, *Qualitative Psychology*. An historical account of these recent events in American psychology appeared in the BPS publication, *The Qualitative Methods in Psychology Section Bulletin* (Gergen, 2013). Therefore, throughout the world, there has been an advent of the usage of "mixed methods" research designs (Creswell, Klassen, Piano Clark, & Clegg Smith, 2011) by psychologists where the qualitative method is being used along with quantitative method in researches. However, several types of qualitative methods like- neo-positivism, neo-pragmatism, ethnography, case study, phenomenology are still not being used so frequently that may be due to lack of awareness or proper training.

5.4 TYPES OF QUALITATIVE RESEARCH

Attempting to understand human nature, market research purposes, current trends, changing tastes and preferences of people, there are certain approaches of qualitative research. They are:

5.4.1 Case Study

With the help of this method a case of an individual, group, event, institution or society is studied. It helps in providing an in depth knowledge of the nature, process or phenomena of a specific case under study. Multiple methods of data collection are often used in case study research (example, interviews, observation, documents, and questionnaires). The final report of the case study provides a rich (i.e., vivid and detailed) and holistic (i.e., describes the whole and its parts) description of the case and its context.

5.4.2 Ethnography

This approach mainly focuses on the study of a particular community. It is more of a kind of close field observation and basically tries to study a socio cultural phenomena. For example, judging others based on the researchers' cultural standards. Ethnography can be used for comparative analysis of cultural groups (e.g. eating habits of North Indians and South Indians), and also known as 'Ethnology'. Further it can also be used to analyse the cultural past of group of people (e.g. Harrapan civilisation), also known as 'Ethnohistory'.

5.4.3 Historical Method

This method helps in understanding and analysing the causal relationships. With the help of this technique, the data related to the occurrence of an event is collected and evaluated in order to understand the reasons behind occurrence of such events. It helps in testing hypothesis concerning cause, effects and trends of events that may help to explain present events and anticipate future events as well.

5.4.4 Grounded Theory

This approach involves an active participation of the researcher in the activities of the group, culture or the community under study. The data regarding the required information is collected with the help of observation. It is generally used in generating or developing theories. This means that the grounded theorists

can not only work upon generation of new theories, they can test or elaborate previously grounded theories as well.

5.4.4.1 Characteristics of Grounded Theory

- i) **Fit:** It helps in analysing whether the theory corresponds to real existing community
- ii) **Understanding:** The theory generated by grounding is clear and understandable
- iii) **Generality:** The theory provides much information and scope for further analysis or generating more theories.
- iv) **Control:** The theory generated is valid as it has been analysed under controlled conditions.

5.4.4.2 Functions of Grounded Theory

- i) It helps in identifying anchors or codes that allow the key points of the data to be gathered.
- ii) It helps in making implicit belief systems explicit with the help of researchers' questions and analysis.
- iii) It consists of a set of steps whose careful execution is thought to "guarantee" a good theory as the outcome.
- iv) Data collection and analysis continue throughout the study.
- v) **Phenomenology:** In this method, the behavioural phenomena is explained with the help of conscious experience of events, without using any theory, calculations or assumptions from other disciplines. The concept can be best understood with the help of one of the studies that was done in which patients were asked to describe about caring and non caring nurses in hospitals (Creswell, 1998). The patients explained those nurses to be caring who show their existential presence and not mere their physical presence. The existential presence of caring nurses referred to the positive response showed by them to the patient's request. The relaxation, comfort and security that the client expresses both physically and mentally are an immediate and direct result of the client's stated and unstated needs being heard and responded to by the nurse.

5.5 CHARACTERISTICS OF QUALITATIVE RESEARCH

The following are few of the common characteristics of qualitative research:

5.5.1 Data Leads to Formation of Theory

In a qualitative research, the researcher collects data by going to the participants, interacting with them and interviewing them at in-depth level. The data therefore collected is rich in information and becomes a basis for the formation of theories. Therefore, in this method of research, the design is not pre determined or pre defined prior to the start of research. The findings gives way to observe the existing phenomena, bring out relevant changes in existing theories or totally reframe a new theory. Thus, it can be said that the qualitative research has a primacy of data.

5.5.2 Context Bound Research

The qualitative research involves specific studies with reference to context, culture or society. Therefore, the research is more context sensitive. The researchers study

the events or day to day life actions on daily basis and they need to take in to account of all the happenings taking place in the particular situation. They have to exclude their personal biases and deeply involve themselves as participants of the event or situation. Thus, qualitative research is context specific.

5.5.3 Involvement or Immersion of Researchers

As mentioned earlier, the qualitative research leads to complete involvement of the researchers in the natural settings. They need to engage actively in the activities to understand the phenomena or processes. Even before the process of data collection, they need to become familiar with the culture/ society/ situation which they are going to study. They should not be influenced by their perceptions, biases and thoughts and need to involve deeply in to the research settings. Thus, the researchers deeply immerse themselves in the cultural settings in the qualitative method of research.

5.5.4 Researcher-research Relationship

The researcher in a qualitative research needs to be non judgemental and should not have any pre assumptions, since they need to collect the original responses from the participants. The relationship between the researcher and participants of the research should lead to gain of relevant information which is free from biases. Thus, in a qualitative research, the researcher needs to indulge completely to the research settings to gain more natural and honest responses from the participants.

5.5.5 Thick Description

Geertz (1973) mentioned that, immersion of the researchers in the (research) setting will help the researchers to use thick description, meaning thereby that, since the data collected by the participants involve the responses, experiences, interpretations, phenomena and rituals they follow. The description of the events, processes, phenomena, the interview and discussion with the participants should be thoroughly mentioned by the researcher. So the thick description includes the information about facts, theoretical as well as analytical description. Thus, the qualitative research involves thick description, which includes the clear description of the culture, context, process and steps of research which helps in construction of reality and analysis of research.

5.5.6 Data Collection and Data Analysis Occur Simultaneously

The research scholar immerses him/her self in the research settings to collect data through various ways like observation and interview, he/she keeps on analysing and interpreting the data simultaneously.

Self Assessment Questions I

Fill in the following blanks

State whether the following statements are 'True' or 'False':

- 1) The qualitative research leads to complete involvement of the researchers in the natural settings. ()
- 2) Ethnography helps in identifying anchors or codes that allow the key points of the data to be gathered. ()
- 3) Case study method helps in understanding and analysing the causal relationships. ()

- 4) From past few years the qualitative method is being integrated with other research methods. ()
- 5) Barney Glaser and Anselm Strauss's in 1967 formulated the Grounded theory. ()

5.6 KEY ELEMENTS OF QUALITATIVE RESEARCH

Following are few of the key elements related to qualitative research:

The Research Design

- **Naturalistic** – The qualitative research involves studying of different phenomena in natural world. The data is collected by them in an uncontrolled setting, so the findings are also very natural and not predetermined.
- **Emergent of new paths** – The researcher needs to be flexible enough and adapt to the changes. He/she does not follow presumed assumptions and pursue new paths of discovery as they emerge.
- **Purposeful** – The research study selects people, organizations, communities, cultures, events and critical incidences because they provide useful information and serve some purpose to the society.

The Data Collection

- **Data** – The method involves collection of data in form of information through observation, interview and case study.
- **Personal experience and engagement** – Since the researcher are required to have direct contact with people, situation, as well as phenomenon, this engagement and personal experiences have a significant contribution towards the qualitative research.
- **Empathic neutrality** – As discussed earlier also, while gathering information from the target society, the researcher needs to be empathetic without being judgmental (neutrality) and by having flexibility, openness, sensitivity, respect, awareness, and responsiveness and mindfulness.
- **Dynamic systems** Since change is inevitable, the researcher needs to be flexible and attentive towards the situational dynamics.

The Analysis

- **Uniqueness** – The uniqueness refers to treating each case of the selected sample as unique and the analysis of the data is done in such a manner that it involves all the true and correct details of the cases.
- **Inductive analysis** – The analysis of the findings involves inductive reasoning. The data is analyzed to find out important patterns, themes, and inter-relationships which begins with exploring and then confirming the findings. Hence the research analysis is guided by analytical principles rather than rules.
- **Holistic perspective** – The phenomenon under study is understood as a complex system and how the processes involved in the phenomenon are interdependent.
- **Context sensitive** – The researcher is expected to be very sensitive to analysis of findings as it involves generalizations of the result across time

and space. The analysis should have trustworthiness and objectivity while the researcher is expected to be vigilant, aware and analytical.

5.7 QUALITATIVE AND QUANTITATIVE RESEARCH: A COMPARISON

The basic conceptual difference between both of the research techniques is that, quantitative research is based on numerical or graphical representation of data whereas; qualitative research is based on observation and experiences.

Other differences

Table : 5.1 : Differences between Qualitative and Quantitative Research

| | Qualitative Research | Quantitative Research |
|------------------------------|--|--|
| General Frame work: Research | Seeks to explore phenomena using some structured methods such as in depth interviews, experiences, participant observation. | Seeks to confirm hypothesis related to phenomena using highly structured methods such as, questionnaires, surveys, structured observation. |
| Objectives | It aims to describe variation, explain relationships, describe behaviour, experiences and norms of individuals and groups. | It aims to quantify variation, predict causal relationships. |
| Questions | The questions used for data collection are open ended ones | The questions used for data collection are close ended ones |
| Representation of data | Data is represented in form of notes, recordings and video tapes. | Data is represented in form of numbers and graphs. |
| Research Design | The research design allows some flexibility in certain situational aspects. The questions used for the data collection differs individually and depends upon the response of the participants. | The research design is predetermined and stable from the beginning. The questions used for data collection are structured and same for all the participants. |

(Source: Qualitative Research Method: A Data Collector's field guide)

5.8 RELEVANCE OF QUALITATIVE RESEARCH IN PSYCHOLOGY

Qualitative research methods has gained much importance in the discipline of psychology leaving other human sciences far behind, with the main motive of maintaining the historical attempt to frame psychology as a natural science. Comparatively, natural science methods use experimental means in order to examine the causal relationships, wherein, this approach uses a large number of participants and effectively captures aspects of our human nature. Qualitative research is less interested in explaining phenomena than in understanding them and that is why it has several good relevance and implications in psychology.

Qualitative research therefore, helps in attaining an in depth knowledge of human nature, attitude, behaviour and experiences. It has several implications in the discipline of psychology, as it: i) Helps in textual description of experiences of people. ii) Helps in identifying and explaining social norms, religion, roles of gender and socio economic status. iii) Helps in understanding those behavioural phenomena which can not be quantified. iv) Helps in collecting data under more natural situations. v) Helps in determining those factors which are meaningful and are important to the respondents under study. The open ended questions used in qualitative research provide a chance to unfold those facts which can not be done with the help of 'to the point' close ended questions.

5.9 ETHICAL GUIDELINES IN QUALITATIVE RESEARCH

There are certain ethical guidelines which a research must follow on a qualitative research. The respondents and their responses should be respected by the researcher. The researcher must show respect and belongingness to the community he or she is studying. The respondents must be made aware of what is being analysed by the researcher. Researcher must ensure and maintain the confidentiality of the researcher. Researcher should be aware of the expected risks and benefits including the psychological and social aspects while performing the research. Ethical dilemmas that may rise from an interview are difficult to be predicted but the researcher needs to be aware of sensitive issues and potential conflicts of interest. An interview is usually equated with confidentiality, informed consent, and privacy, but also by recurrence of "old wounds" and sharing of secrets. anonymity, confidentiality and informed consent.

5.10 MIX APPROACH RESEARCH METHOD

The trend of mix approach method of research has recently gained much importance among research scholars. It refers to the integrating of both quantitative and qualitative method in a single research. They provide a better understanding of viewpoints from the findings of both the research method.

5.10.1 Characteristics of Mix Approach Research Method

The characteristics of mix approach research method can be mentioned as follows:

- It is an integrated method which involves collection of data by both close-ended and open-ended questions.
- It involves a rigorous procedure of collecting and analyzing data through quantitative as well as qualitative research.
- The method helps to understand a process, behavior or phenomena from various perspectives, for example, in order to understand the quality of service of an organization, the research scholar needs to take the viewpoints of employees, clients, suppliers, owners and the end users for the same.
- The method helps to provide an information rich data.

5.10.2 Uses of Mix Approach Research Method

5.10.2.1 Validate Findings

It helps in collection of data through both the ways at the same time. This parallel assessment of information and analysis of both the qualitative and quantitative data helps to validate the findings and helps in generalization of the results. The

method also helps to cross check the validity of both the research findings by comparing the data with each other.

5.10.2.2 Develop Survey Instruments

The method involves collection of data by both the research method, which might help in the development of appropriate quantitative instruments that provide accurate measures. Further, the findings might also help to develop and test a psychometric instrument that improves on existing measures.

5.10.2.3 Help in Understanding Community Dynamics

The approach involves community participants in many quantitative and qualitative phases of research to bring about change (Mertens, 2009). The multiple phases deals with a single phenomenon. Therefore, the method helps to analyse, address, and implement the required changes.

5.10.2.4 Reflects Participants' Point of View

Mixed methods provide an opportunity to study participants and ensure that study findings are grounded in participants' experiences. They provide flexibility and more details or a complete story in comparison to any single method being used.

5.10.2.5 Collects Rich, Comprehensive Data

Mixed methods helps in collecting information by integrating quantitative and qualitative data which also helps in minimizing errors and biases in the research findings. Hence, the data collected through mix approach method is rich and comprehensive.

5.10.3 Limitations of Mix Approach

The limitation and challenges of the mixed approach are as follows:

5.10.3.1 Involves Complex Evaluations

Mixed methods studies need careful planning and conduction of research. It needs to understand all the aspects of research, analyse data from both qualitative and quantitative perspective. Further, integrating qualitative and quantitative data during analysis is also a challenging phase for many researchers.

5.10.3.2 Requires Multiple Expertise or Experts

Since the data needs to be analysed from both the perspectives, the scholar should be well trained in both the research methods or should involve experts from both the fields for better understanding and interpretation of the data.

5.10.3.3 Requires Increased Resources and Time

The mixed methods require greater resources and time than those needed to conduct a single method of study.

Self Assessment Questions II

Fill in the following blanks

- 1) refers to the integrating of both quantitative and qualitative method in a single research.
- 2) helps in determining those factors which are meaningful and are important to the respondents under study.
- 3) Qualitative research is less interested in explaining phenomena than inthem.

- 4) The uniqueness refers to treating each case of the selected sample as
- 5) The method involves collection of data in form of information through, and

5.11 LET US SUM UP

Qualitative research is a type of scientific research which helps in collecting, analysing and interpreting the data of a group, community, culture or a market. It helps in understanding the reasons behind the behavior, experience and attitudes of the people of the group, community, culture or market under study. It is authentic in nature because the researcher takes an active participation in the activities of the population under study. Unlike quantitative research, it does not require a preplanned framework, objective or interest. The primary interest of the researcher may change according to the community and cultural understandings. In order to overcome the difficulties of qualitative research as well as quantitative research, the mix approach method is used. Although it has several uses yet it has certain limitations too.

5.12 UNIT END QUESTIONS

- 1) Trace the history and philosophy of qualitative research.
- 2) Describe the different types of qualitative research.
- 3) Discuss the characteristics and key elements of qualitative research
- 4) Compare and contrast the qualitative research method and quantitative research.
- 5) Elaborate upon the mix approach research method.

5.13 ANSWERS TO SELF ASSESSMENT QUESTION

Self Assessment Questions I

- 1) True
- 2) False
- 3) False
- 4) True
- 5) True

Self Assessment Questions II

- 1) Mix Approach method
- 2) Qualitative research
- 3) Understanding
- 4) Unique
- 5) observation, interview and case study

5.14 GLOSSARY

Qualitative research: A type of scientific research that tries to bridge the gap of incomplete information, systematically collects evidence, produces findings and thereby seeks answer to a problem or question.

Immersion of Researchers: The researcher needs to engage actively in the activities to understand the phenomena or processes. Even before the process of data collection, they need to become familiar with the culture/ society/ situation which they are going to study.

Case study: The research method in which a case of an individual, group, event, institution or society is studied.

Ethnography: This approach mainly focuses on study of a particular community.

Historical method: This method helps in understanding and analysing the causal relationships. With the help of this technique, the data related to the occurrence of an event is collected and evaluated in order to understand the reasons behind occurrence of such events.

Grounded theory: This approach involves an active participation of the researcher in the activities of the group, culture or the community under study.

Mix Approach Research Method: It refers to the integrating of both quantitative and qualitative method in a single research.

5.15 REFERENCES AND SUGGESTED READINGS

Allwood, C. M., & Berry, J. W. (2006). Origins and development of indigenous psychologies: An international analysis. *International Journal of Psychology*, 41, 243–268. doi:10.1080/00207590544000013

American Psychological Association Ethics Committee. (2002). Report of the Ethics Committee, 2001. *American Psychologist*, 57, 650–657.

Anderson, R. (2004). Intuitive inquiry: An epistemology of the heart for scientific inquiry. *The Humanistic Psychologist*, 32, 307–341. doi:10.1080/08873267.2004.9961758

Breuer, J. & Freud, S. (1895/1957). *Studies on hysteria*. New York, NY: Basic Books, Inc., Publishers.

Brown, L. M., & Gilligan, C. (1992). *Meeting at the crossroads: Women's psychology and girls' development*. Cambridge, MA: Harvard University Press. doi:10.4159/harvard.9780674731837

Bruner, J. S. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bruner, J. S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.

Camic, P. M., Rhodes, J. E., & Yardley, L. (2003). *Qualitative research in psychology: Expanding perspectives in methodology and design*. Washington, DC: APA Publications. doi:10.1037/10595000

Charmaz, K. (2000). Constructivist and objectivist grounded theory. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research*, 2nd ed. (pp. 509–535). Thousand Oaks, CA: Sage.

Charmaz, K., & Henwood, K. (2008). Grounded theory in psychology. In C. Willig & W. StaintonRogers(Eds.), *Handbook of qualitative research in psychology* (pp. 240–260). London, UK: Sage.

Clemends, W. V., Crawford, M. P., & McKeachie, W. J. (1996). John Clemans Flanagan Pioneering Psychologist (1916–1996), *Observer*, 9(4), July/ August. Retrieved from <http://www.psychologicalscience.org/index.php/publications/>

observer/1996/ july-august-96/john-clemans-flanagan-pioneeringpsychologi
st-1916-1996.html

Creswell, J. W., Klassen, A. C., Piano Clark, V. L., & Clegg Smith, K. (2011). Best practices for mixed methods research in the health sciences. Bethesda, MD: Office of Behavioral and Social Science Research, National Institutes of Health. Retrieved from http://obssr.od.nih.gov/scientific_areas/methodology/mixed_methods_research/pdf/Best_Practices_for_Mixed_Methods_Research.pdf

Danziger, K. (1983). Origins and basic principles of Wundt's *Völkerpsychologie*. *British Journal of Social Psychology*, 22, 303–313. doi:10.1111/j.2044-8309.1983.tb00597.x

Danziger, K. (2001a). Sealing off the discipline: Wundt and the psychology of memory. In C. D. Green, M. Shore, & T. Teo (Eds.), *The transformation of psychology: Influences of 19th century philosophy, technology, and natural science*. Washington, DC: American Psychological Association.

Danziger, K. (2001b). Wundt and the temptations of psychology. In R. W. Rieber & D. K. Robinson (Eds.), *Wilhelm Wundt in history: The making of a scientific psychology* (pp. 69–94). New York, NY: Kluwer Academic/Plenum Press. doi:10.1007/9781-4615-0665-2_2

Darwin, C. (1871/1981). *The descent of man, and selection in relation to sex*. Princeton, NJ: Princeton University Press.

Darwin, C. (1872/2007). *The expression of emotions in man and animals*. New York, NY: Filiquarian. Denzin, N. K., & Lincoln, Y. S. (1994, 2000, 2005, 2011). *The Sage handbook of qualitative research*, 1st, 2nd, 3rd, & 4th editions. Thousand Oaks, CA: Sage.

Ericsson, K. A., & Simon, H. A. (1993). *Protocol analysis: Verbal reports as data*. Cambridge, MA: Cambridge Press. Fishman, D. (1999). *The case for a pragmatic psychology*. New York, NY: NYU.

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51, 327–358. doi: 10.1037/h0061470

Freud, S. (1900). *The interpretation of dreams*. New York, NY: Norton.

Geertz, C. (1973). *The Interpretation of Cultures*. New York, Basic Books.

Gergen, K. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26, 309–320. doi:10.1037/h0034436

Gergen, K. (2013). The rugged return of qualitative inquiry in American psychology. *The Qualitative Methods in Psychology Section Bulletin*, 15, 38–41.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Giorgi, A. (1967). A phenomenological approach to the problem of meaning and serial learning. *Review of Existential Psychology and Psychiatry*, 7, 106–118.

Giorgi, A. (1970). *Psychology as a human science*. New York: Harper.

Giorgi, A. (1975). An application of phenomenological method in psychology. In A. Giorgi, C. T. Fischer, & E. Murray (Eds.), *Duquesne studies in phenomenological psychology*, Vol. 2 (pp. 82– 103). Pittsburgh, PA: Duquesne University Press. doi:10.5840/dspp197529

Giorgi, A. (1985). *Phenomenology and psychological research*. Pittsburgh, PA: Duquesne University Press.

Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Pittsburgh, PA: Duquesne University Press.

Giorgi, A., Fischer, W. F., & Von Eckartsberg, R. (Founding Eds.). (1971, 1975, 1979, 1983). *Duquesne studies in phenomenological psychology (Volumes I, II, III, IV)*. Pittsburgh, PA: Duquesne University Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.

Jahoda, M., Lazarsfeld, P. F., & Zeisel, H. (1933/ 1971). *Marienthal: Sociography of an unemployed community*. Chicago, IL: Aldine.

James, W. (1902). *The varieties of religious experience*. New York, NY: Penguin Books.

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58, 697–720. doi:10.1037/0003066X.58.9.697

Kohlberg, L. (1958). *The development of moral thinking and choice, ages 10 through 16 (Unpublished doctoral dissertation)*. University of Chicago, Chicago, IL.

Kohlberg, L. (1963). The development of children's orientation toward a moral order: Sequence in the development of moral thought. *Vita Humana*, 6, 11–33. (Reprinted in 2008, *Human Development*, 51, 8–20.)

Kohlberg, L. (1994). *Moral development: A compendium, Vol. 3*. (Ed. B. Puka). New York, NY: Garland Publishing. (Reprint of Kohlberg, L. (1958). *The development of moral thinking and choice in the years 10 through 16. Unpublished doctoral dissertation*. Chicago, IL: University of Chicago).

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.

Marecek, J., Fine, M., & Kidder, L. (1997). Working between worlds: Qualitative methods and social psychology. *Journal of Social Issues*, 53, 631– 644. doi:10.1111/j.1540-4560.1997.tb02452.x

Maslow, A. H. (1954). *Motivation and personality*. New York, NY: D. VanNostrand.

Maslow, A. H. (1959). Cognition of being in peak experiences. *The Journal of Genetic Psychology*, 94, 43–66. doi:10.1080/00221325.1959.10532434

Maslow, A. H. (1968). *Toward a psychology of being*. New York, NY: Van Nostrand Reinhold Company.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

O'Neill, P. (2002). Tectonic change: The qualitative paradigm in psychology. *Canadian Psychology*, 43, 191–194.

Polkinghorne, D. E. (1983). *Methodology for the human sciences: Systems of inquiry*. Albany, NY: SUNY Press.

Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany, NY: SUNY Press.

Ponterotto, J. (2002). Qualitative research methods: The fifth force in psychology. *The Counseling Psychologist*, 30, 394–406. doi:10.1177/ 0011000002303002

Potter, J. (1996). *Representing reality: Discourse, rhetoric and social construction*. London, UK: Sage.

- Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London, UK: Sage.
- Rennie, D. L., Watson, K. D., & Monteiro, A. M. (2002). The rise of qualitative research in psychology. *Canadian Psychology*, 43, 179–189. doi: 10.1037/h0086914
- Sarbin, T. R. (Ed.). (1986). *Narrative psychology: The storied nature of human conduct*. New York, NY: Praeger.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method, and research*. Thousand Oaks, CA: Sage.
- Van Manen, M. (1990). *Researching lived experience*. Albany, NY: SUNY Press.
- Wertz, F. J. (1983a). From everyday to psychological description: Analyzing the moments of a qualitative data analysis. *Journal of Phenomenological Psychology*, 14, 197–241. doi: 10.1163/156916283X00108
- Wertz, F. J. (1983b). Some components of descriptive psychological reflection, *Human Studies*, 6, 35–51. doi:10.1007/BF02127753
- Wertz, F. J. (1987a). Common methodological fundaments of the analytic procedures in phenomenological and psychoanalytic research. *Psychoanalysis and Contemporary Thought*, 9, 563–603.
- Wertz, F. J. (1987b). Meaning and research methodology: Psychoanalysis as a human science. *Methods: A Journal for Human Science*, 1, 91–135.
- Wertz, F. J. (1993). The phenomenology of Sigmund Freud, *Journal of Phenomenological Psychology*, 24, 101–129. doi:10.1163/156916293X00099
- Wertz, F. J. (2001). Humanistic psychology and the qualitative research tradition. In K. J. Schneider, J. F. T. Bugental, & J. F. Pierson (Eds.), *The handbook of humanistic psychology: Leading edges in theory, research and practice* (pp. 231–246). Thousand Oaks, CA: Sage. doi:10.4135/9781412976268.n18
- Wertz, F. J. (2011). The qualitative revolution and psychology: Science, politics, and ethics. *The Humanistic Psychologist*, 39, 77–104. doi:10.1080/08873267.2011.564531
- Wertz, F. J., Charmaz, K., McMullen, L., Josselson, R., Anderson, R., & McSpadden, E. (2011). *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry*. New York, NY: Guilford Press.
- Wertz, F.J (2014). Qualitative Inquiry in the History of Psychology. *Qualitative Psychology*, Vol. 1, No. 1, 4–16.
- Wundt, W. (1900–1920). *Völkerpsychologie* (Vols. 1–10). Leipzig, Germany: Engelmann.
- Wundt, W. (1916). *Elements of folk psychology: Outlines of a psychological history of the development of mankind* (E. L. Schaub, Trans.). New York, NY: Macmillan. doi:10.1037/13042-000

References-

Websites-

<https://library.spalding.edu/c.php?g=461133&p=3153021> accessed on 8/8/19