



“शिक्षा मानव को बन्धनों से मुक्त करती है और आज के युग में तो यह लोकतंत्र की भावना का आधार भी है। जन्म तथा अन्य कारणों से उत्पन्न जाति एवं वर्गगत विषमताओं को दूर करते हुए मनुष्य को इन सबसे ऊपर उठाती है।”

– इन्दिरा गाँधी



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“Education is a liberating force, and in our age it is also a democratising force, cutting across the barriers of caste and class, smoothing out inequalities imposed by birth and other circumstances.”

- Indira Gandhi

APPLIED SOCIAL PSYCHOLOGY

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School of Social Sciences
Indira Gandhi National Open University

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BPCC 110: APPLIED SOCIAL PSYCHOLOGY

The course on Applied Social Psychology (BPCC 110) is a core course offered in IV Semester of BA Psychology Honours Programme (BAPCH), under Bachelors Degree Programme of IGNOU.

The main objectives of this course are to introduce the definition, nature and scope of applied social psychology, to discuss the different issues and social problems, discuss intervention and evaluation and explain the application of social psychology to varied fields. The course is of 06 Credits, comprising Theory (04 Credits) and Practical (02 Credits). The course is divided into five blocks. Each of these blocks represents a specific theme which is discussed in terms of units. The units are arranged in a logical sequence so as to cover the main aspects of each theme.

Before proceeding to read the units, you are advised to go through instructions about how to read the course material. Given below is the explanation of the organization and sequencing of the unit.

Organization and Sequencing of a Unit

The following is the structure of each unit:

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Section (Theme of the section)
 - 1.2.1 Subsection of 1
 -
- Check Your Progress I
- 1.3 Section (Theme of the section)
 - 1.3.1 Subsection of 2
 -

Check Your Progress II

Let Us Sum Up

References

Key Words

Answers to Check Your Progress

Unit End Questions

As the scheme suggests, each unit is divided into sections for easy reading and better comprehension. The numbering and length of each section and subsection may vary from one unit to the other, depending upon the depth of information in each unit. Each section is indicated by **BOLD CAPITALS** and each sub.section by a **relatively smaller but bold typeface**. Divisions within the sub.sections are in **relatively smaller bold typeface** so as to make it easy for you to understand.

Let us now discuss each section of a unit.

Objectives

We begin each unit with the section Objectives. It tells you briefly about the objectives of the unit what you will learn after you study the unit.

Introduction

The section Introduction will mainly focus on introducing the theme of the present unit.

Illustration

There are several illustrations in each unit in the form of figures and diagrams. The main purpose of these illustrations is to make the study comprehensive and interesting.

Check Your Progress

We have given self-check exercises under the caption Check Your Progress at the end of main sections. You can provide your answers in the space given below each question/ exercise.

You will be tempted to have a glance of the main text as soon as you come across an exercise. But we do hope that you will resist this temptation and turn to the main text only after completing the answers.

You should read each unit and note the important points in the margin provided in the course material. This will help in your study. It will also help you to answer the self-check exercises and the assignment questions, as well as help in revising your course before appearing for your Term End Examination (TEE).

Let Us Sum Up

This section of each unit under the heading Let Us Sum Up summarises the whole unit for the purpose of ready reference and recapitulation.

References

We have given a list of references in each unit. This is a list of books and articles used by the course writers to prepare the units. This reflects that your course material is based on a wide spectrum of literature available on a particular theme, related to your course. This also informs you of the wide literature available in the particular area of study. If interested in widening your knowledge, you may look for the mentioned references. Each reference mentions the name of the author, year of publication, title of the book/article, name of publisher and place of publication.

Suggested readings help you to increase your level of understanding of a particular theme in each unit.

Key Words

The key words at the end of the unit explain the basic ideas, technical terms and difficult words.

Answers to Check Your Progress

Answers to Check Your Progress are given in this section.

Unit End Questions

Besides Check Your Progress, we have given Unit End Questions in each unit. Practicing these questions will help you in answering assignments and Term End Examination Question Paper, though the pattern and style of questions asked may not be similar.

Audio and Video Aids

Some Units have been selected for the audio and video programmes to supplement the printed material. This will help you to understand the units with greater clarity.

Apart from this, you may also access IGNOU's FM radio channel, Gyanvani (105.6 FM), which is available across many cities in India, for regular programmes, related to themes on Psychology. You can listen to the live discussions by faculty and experts on the topic of the day and interact with them through telephone, email, and through chat mode.

You may also watch Gyandarshan TV channel (free to air educational channel), for programmes related to topics on Psychology. The schedule of Gyanvani and Gyandarshan is displayed on www.ignou.ac.in. The radio and TV channels may also be accessed on Gyandhara, webcast facility for Gyanvani and Gyandarshan, provided by the University.

Practical

The course on Applied Social Psychology (BPCC 110) will include practical. In practical, learners will be required to conduct two practicals (from amongst three practicals, practical 1 being compulsory) based on topics in this course (for example, influence of media on aggression and violence of children, violence against women/child/ abuse).

Assignment

You will receive a set of assignments for the whole programme. These are Tutor Marked Assignments, which are to be submitted to the respective Study Centre after completion. These assignments will be evaluated by academic counsellor from your Study Centre. Ensure that you complete all your assignments because the grades that you get in each of these assignments are included in the final evaluation of your degree. Before answering the assignments, read all the units and additional material (if available).

Guidelines for assignments

While working on the tutorial and assignment, kindly ensure the following points,

- 1) Clearly write your Enrollment number
- 2) Answer them in your handwriting and in your own words (**do not copy the sentences from the course material or any other source**).
- 3) Write clearly and neatly so that it is easy to read your answers
- 4) Leave margins on one side of your answer sheets so that evaluator may write his/ her comments on your performance.
- 5) Organise your answers well based on the question asked.
- 6) You will submit the assignments at your Study Centre on or before the date mentioned as per the admission cycle. Kindly check the dates from www.ignou.ac.in or your Regional Centre website.

Term End Examination (TEE)

Consider the following points while answering TEE.

- 1) Questions need to be answered in **one's own words** and they need to be focused based on the question asked.
- 2) Answer the questions keeping in mind the word limit.
- 3) Organise answers well based on the question asked and also keep in mind any bifurcation given in the marks.
- 4) Ensure that you mention correct question numbers for respective answers.

Preparation of Course Material

The syllabus of course material BPCC 110 is designed by an Expert Committee (see page 2 of this course) and prepared by Course Preparation Team which comprises the author(s) of units, content editor(s), language editor, and the course coordinator. The expert committee selected the themes and sub.themes of the blocks and units, keeping in view the prescribed syllabi of UGC (CBCS model).The authors of units have provided their expertise in elaborating them in the form of the main text of each unit. The content editor has carefully examined the course contents and has made an attempt to make the material clear and comprehensible.

For any query or feedback related to the course, you may kindly contact the course coordinator at,

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COURSE STRUCTURE

BLOCK 1 APPLIED SOCIAL PSYCHOLOGY: AN INTRODUCTION

Unit 1: Introduction to Applied Social Psychology

Definition, Nature and Scope of Applied Psychology

Differences between Social Psychology and Applied Social Psychology

Applied Social Psychology as a Science

Applied Social Psychology and Social Policy

Levels of Analysis

Unit 2: Methodological Approaches in Applied Social Psychology

Concept of Research in Applied Social Psychology.

Research Concepts and Components

Quantitative Research in Applied Social Psychology

Action Research

Ethics in Psychological Research

Unit 3: Qualitative Research in Applied Social Psychology

Qualitative Research: An introduction

Methods of Data Collection in Qualitative Research

Data analysis in Qualitative Research

BLOCK 2: INTERVENTION AND EVALUATION

Unit 4: Social Issues and Social Problems

Definition and Nature of Social Problems

Approaches to Social Problems

Social Issues and Problems

Unit 5: Intervention and Evaluation

Intervention

Design and Implementation of Intervention

Impact Analysis

Evaluation

BLOCK 3: APPLICATION OF SOCIAL PSYCHOLOGY I

Unit 6: Application of Social Psychology to Environment and Diversity

Social Psychology and Environment

Social Psychology and Diversity

Unit 7 Application of Social Psychology to Community and Legal system

Concept of Community

Application of Social Psychology to Community.

Applications of Social Psychology to the Legal System

Unit 8: Application of Social Psychology to Political Behaviour

Social Perception and Political Behaviour.

Voting Behaviour

Media Influence on Political Behaviour

Unit 9: Application of Social Psychology to Consumer Behavior

Concept of Consumer Behaviour

Consumer Behaviour Models

Factors Influencing Consumer Behaviour

Application of Social Psychology to Consumer Behaviour

Unit 10: Application of Social Psychology to Work settings

Social Perception in Work Settings

Application of Social Learning Theory in Work Settings

Work Motivation and Job Satisfaction

Group Dynamics

Conflicts in Work Settings

BLOCK 4: APPLICATION OF SOCIAL PSYCHOLOGY II

Unit 11: Application of Social Psychology to Educational Setting and Classroom

Intrapersonal Process

Interpersonal Processes

Unit 12: Application of Social Psychology to Sports

Teams in Sports

Leadership

Effective Communication

Unit 13: Application of Social Psychology to Social Media

Social Media: Meaning, Types and Usage

Human Attributes and Social Media

Application of Social Psychology to Social Media

Unit 14: Application of Social Psychology to Health, Mental Health and Wellbeing.

Application of Social Psychology to Health

Application of Social Psychology to Mental Health and Wellbeing

Application of Social Psychology to Promoting Health and Healthy Behaviours

BLOCK 5: PRACTICAL

Practical 1: Psychological Testing

Practical 2: Interview

Practical 3: Designing Intervention based on Theory of Planned Behaviour

Format for Practical Notebook

Evaluation

BPCC110: COURSE INTRODUCTION

Dear Learner,

The course on Applied Social Psychology (BPCC 110) is a core course offered in IV Semester of BA Psychology Honours Programme (BAPCH), under Bachelors Degree Programme of IGNOU.

It is important that before you start with this course, you revisit what you have studied in BPCC107 as that will help you understand the application of social psychology to varied settings.

To provide an overview of this course, the course structure is divided into five blocks.

Block 1: The very first block of this unit is titled 'Applied Social Psychology: An Introduction' and has three units, Units 1, 2 and 3. Unit 1 will discuss definition, nature and scope of social psychology, This unit will serve as a basis for the whole course as significant information about applied social psychology has been covered. Distinction will also be carried out in this unit between social psychology and applied social psychology. Applied social psychology as science will also be discussed. The unit will also focus on applied social psychology and social policy and highlight levels of analysis. Unit 2 focuses on the methodological approach in applied social psychology and will cover concept of research in applied social psychology, research concepts and components, quantitative research in applied social psychology, action research and ethics in psychological research. Unit 3 focuses on qualitative research, methods of data collection in qualitative research and data analysis in qualitative research.

Block 2: Block 2 is titled 'Intervention and Evaluation' and includes two units, Unit 4 and 5. The focus of the block is on intervention and evaluation, though before an intervention strategy is developed, we need to understand the social issues and problems. Thus, in unit 4 we will discuss about definition and nature of social problem, approaches to social problem and varied social issues and problems. Unit 5 covers intervention, design and implementation of intervention, impact analysis and evaluation.

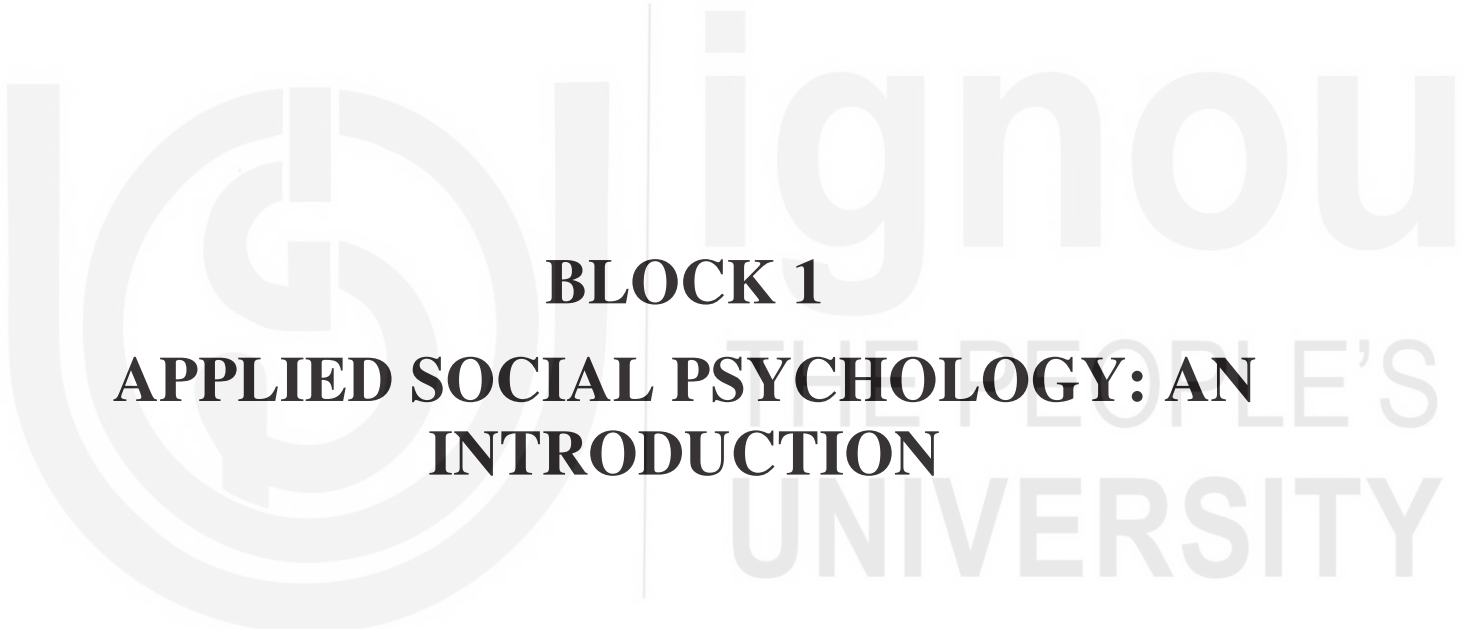
Block 3: The title of this block is 'Application of Social Psychology I' and it will cover application of social psychology to environment and diversity (Unit 6), application of social psychology to community and legal systems (Unit 7), application of social psychology to political behaviour (Unit 8), application of social psychology to consumer behaviour (unit 9) and application of social psychology to work settings (Unit 10).

Block 4: This block is titled 'Application of Social Psychology II' and covers application of social psychology to educational setting and classroom (Unit 11), application of social psychology to sports (unit 12), application of social psychology to social media (Unit 13) and application of social psychology to health, mental health and wellbeing (Unit 14).

Block 5: This block pertains to practicals and the learners are expected to carry out practicals as specified in the block. Three practicals namely, practical 1, 2 and 3 have been discussed in this section with a focus on their procedure. Format and evaluation methodology has also been provided. Practical 1 is compulsory and the academic counsellor will select one from amongst practical 2 and 3 to be conducted by the learner.



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The background features a large, light gray watermark of the Ignou logo, which consists of a stylized 'U' and 'G' inside a circle, followed by the text 'ignou' in a lowercase sans-serif font. Below this, the words 'THE PEOPLE'S UNIVERSITY' are written in a smaller, all-caps sans-serif font.

BLOCK 1

APPLIED SOCIAL PSYCHOLOGY: AN INTRODUCTION

UNIT 1 INTRODUCTION TO APPLIED SOCIAL PSYCHOLOGY*

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Definition, Nature and Scope of Applied Social Psychology
- 1.3 Difference between Social Psychology and Applied Social Psychology
- 1.4 Applied Social Psychology as a Science
- 1.5 Applied Social Psychology and Social Policy
- 1.6 Levels of Analysis
- 1.7 Let Us Sum Up
- 1.8 References
- 1.9 Key Words
- 1.10 Answers to Check Your Progress
- 1.11 Unit End Questions

1.0 OBJECTIVES

After reading this unit, you will be able to:

- discuss the definition, nature and scope of applied social psychology;
- differentiate between social psychology and applied social psychology;
- explain applied social psychology as a science;
- describe applied social psychology and social policy; and
- discuss the levels of analysis.

1.1 INTRODUCTION

In BPCC107, you studied about a branch of psychology called social psychology. By social we mean the social environment or behaviour of an individual and psychology as we know is systematic and scientific study of human and animal behaviour. Thus, social psychology mainly focuses on human behaviour in social contexts. As you may even notice, your own behaviour is different when you are with your family, when with friends and when in a more formal set up. Thus, our behaviour is greatly influenced by the social context that we are in. Therefore as a students of psychology we also need to focus on the social dimension of human behaviour.

* Prof. Suhas Shetgovekar, Faculty, Discipline of Psychology, SOSS, IGNOU, Delhi

In the present course we are not going to discuss about social psychology, but will focus more on its application to different setting. Thus, to word it appropriately, we will focus on applied social psychology.

In the very first unit of this course we will discuss about the definition, nature and scope of applied social psychology, the difference between social psychology and applied social psychology. We will also explain applied social psychology as a science and describe applied social psychology and social policy. Further we will also discuss the levels of analysis.

1.2 DEFINITION, NATURE AND SCOPE OF APPLIED SOCIAL PSYCHOLOGY

Applied social psychology can be explained as a branch of social psychology. It mainly deals with application of principles of social psychology to varied fields. According to Schneider et. al (2012), social psychology can be defined as a science with an objective to comprehend how individuals relate, think, feel and influence each other. Thus, social psychology mainly focuses on the social dimension of human behaviour.

With regard to applied social psychology, it can be defined as “ branch of social psychology that draws on social psychology theories, principles, methods and research evidence to contribute to

- a) the understanding of social and practical problems and
- b) the development of intervention strategies for improving the functioning of individuals, groups, organisations, committees and societies with respect to social and practical problems”(Schneider et. al , 2012, page 8).

As can be seen in the above definition the focus is mainly on developing a better understanding of the problems both social and practical and then developing a suitable intervention strategy.

Applied social psychology can be termed as a sciences as it is a branch of social psychology which is also termed as a science. Thus, social issues and problems are interpreted and interventions are developed in an empirical manner in order to effectively deal with the social issue or problem and bring about a change that is positive. This is based on an assumption that any problem or issue has social dimension to it. Thus, an attempt is made to deal with the social issues and problems with the help of social psychology principles in a scientific and systematic manner.

Oskamp and Schultz (1998) defined applied social psychology as application of the constructs, principles, theories, intervention techniques, research methods and findings of social psychology in order to develop a comprehensive understanding of social problems in order to deal with them effectively. In the definition, construct can be explained as that psychological entity that is defined in a clear and specific manner, principle can be

described as an explanation regarding varied psychological processes and theory is description, explanation and prediction of an event that is observable with the help of a set of principles that are integrated.

As such, the roots of applied social psychology can be traced to Kurt Lewin, who conducted a research in 1936 that focused on certain social and practical issues and problems (Schneider et. al , 2012). The purpose of these studies carried out by Lewin and his collaborators was not on adding to the exiting fund of knowledge but to find a solution to a problem. Thus, Lewin mainly worked in the direction of creating a link between theory and application. Sherif's research on conflict resolution in 1966 also greatly contributed to the development of the field of applied social psychology. 1960s also saw many a need to make psychology socially relevant thus playing a greater role for betterment of the society. In 1969 various articles that were published in the *American Psychologist* focused on an interaction between science and social issues and problems (Schneider et. al , 2012). By 1970s the applied social psychology was well established as a separate field. *Journal of Applied Social Psychology* was established during 1970-71 and a doctoral programme in the subject area was offered by Loyola University, Chicago, USA in 1974. This was followed by launch of another journal *Basic and Applied Social Psychology* in 1980 and the very first book on the subject titled *Social Psychology: An Applied Approach* by Fisher in 1982 (Schneider et. al , 2012). And today, it can said that the filed is thriving and developing. Therefore, as students of psychology we need to focus on the subject area, learn from it and try to apply its fundamentals and principles for betterment of the society.

Applied social psychology can be termed as science and we will further discuss about this in a later unit. Though applied social psychology can also be termed as based on humanism. According to Shetgovekar (2017, page 248), "In psychology, humanism is mainly expressed in terms of humanistic psychology that not only believes in uniqueness of the individuals but also in their potential to develop to their fullest". The term humanistic social psychology can also be rooted in this and this sub-field mainly deals with the contribution of interpersonal relationships in overall development and potential realisation of individuals. Humanism also denotes equal treatment for individuals that includes, respect, compassion and dignity in the way the individuals are treated. It also promotes the involvement and participation of individuals in decision making especially in issues related to them (Fisher, 1982).

As we have seen from the definitions, the main focus of applied social psychology is development of suitable intervention strategy. But before this is done, we also need to focus on relevant theories. Theory can be defined as "a set of interrelated hypotheses or propositions concerning a phenomenon or set of phenomena" (Shaw and Costanzo, 1982, page 4). In applied social psychology interventions could be based on these theories and thus

understanding the theories could be relevant. In social psychology, the main components of theories are scope, range, testability and parsimony (Chung-Yan and Towson 2012, page 27).

- **Scope:** Scope denotes the number of individuals behaviours that are covered or explained by the theory.
- **Range:** Range has to do with whether behaviour of certain individual is covered or that of all the individuals.
- **Testimony:** Testability has to do with whether a theory can be tested, that is whether it can be proved or disproved.
- **Parsimony:** Parsimony denotes that less propositions are utilised by a theory while an event or phenomenon is explained.

Further, in order to understand theories in an adequate manner, it is also important to follow the scientific process including observation, theory development, specific hypothesis and hypothesis testing (Shetgovekar, 2018). A theory can be developed based on the observations of the events or phenomenon as they occur in day to day life and the specific hypothesis that are derived from the theory can then be stated and then tested. Though, in applied social psychology the results obtained by testing a theory are further utilised in order to modify the theory and carry out further observations. The findings could also be used in order to develop suitable intervention strategies to deal with certain social issues or problems.

Further, applied social psychology can be theory driven or problem driven (Kok et al. 1996). The focus of the theory driven applied social psychology is on testing certain theories and how their application in actual social situations. It also includes the validation of the theory. Whereas, the focus of the problem driven applied social psychology is on development of intervention strategies in order to deal effectively with social issues and problems. The scope of applied social psychology is thus very vast and it finds application in various fields ranging from health, education, sports to work setup. In the second, third and fourth block of this course we will mainly discuss about application in varied fields.

Applied social psychology includes various applications including research, programme designing, evaluative research, consultation and advocacy

The research in applied social psychology mainly focuses in understanding the social issues and problems, developing suitable intervention strategy and evaluating the effectiveness of the intervention strategy (this can be termed as evaluative research). Thus, you may notice that a lot of action research is carried out in applied social psychology. Applied social psychology also includes programme designing. Programme designing mainly involves developing certain programmes or intervention strategies based on the research results obtained. With reference to consultancy, an applied social psychologists could work with certain organisations and use his/ her expertise

to help the organisations deal with certain issues faced by them. And advocacy involves working in direction of bringing about a social change.

Thus, through applied social psychology, the principles and theories of social psychology can be applied to various fields.

They can be applied to environment and diversity, community and legal system. For example, with the help of suitable intervention strategy, a positive attitude towards environment can be developed amongst the individuals. It can also be used to understand political behaviour. Further consumer behaviour can also be understood with the help of applied social psychology and suitable strategies can be developed in that direction. Applied social psychology has relevant application in work setup, where better understanding can be developed about groups and teams, conflict and conflict resolution, leadership and so on. It has application in educational set up as well besides sports, where team dynamics can be studied and suitable strategies can also be developed to build high performing teams. The field of applied social psychology also has application in the context of social media and how it influences the individuals. Further, it can also be applied to the field of health where better understanding about the health related behaviours of the individuals can be developed and suitable intervention strategy to promote healthy practices and behaviour can be developed.

Thus, applied social psychology not only focuses on theory but also on application of the theories to understand social issues and problems and develop suitable interventions to deal with the social issues and problems. The scope of applied social psychology is very vast and it finds application in various fields ranging from health, education, sports to work setup. In the second, third and fourth block of this course we will mainly discuss about application in varied fields.

In the blocks 3 and 4 of this course we will discuss these applications in detail.

Check Your Progress 1

1) Define applied social psychology.

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1.3 DIFFERENCE BETWEEN SOCIAL PSYCHOLOGY AND APPLIED SOCIAL PSYCHOLOGY

Social psychology can be termed as a branch of psychology and applied social psychology in turn can be categorised under social psychology. In social psychology you studied about various concepts like social perception, social influence, obedience, conformity, crowd and so on. Whereas, in applied social psychology we will study about the applications of the principles of social psychology to various social problems and issues. Thus, it is more practical in nature where the focus is on studying the social problem or issue and then developing a suitable intervention strategy in order to alleviate the problem or issue.

Both the fields, that is, social psychology and applied social psychology can be described as science and both focus on development of theories and testing them (Schneider et. al , 2012). Thus, theories on one hand can help understand the social problem and then the studies carried out by applied social psychologists can further lead to adding to the fund of knowledge of social psychology.

Let us now look at the difference between social psychology and applied social psychology.

	Social Psychology	Applied Social Psychology
Description	Focuses on human behaviour in social contexts.	Deals with application of principles of social psychology varied fields.
Branch of	Social psychology is a branch of Psychology.	Applied social psychology is branch of social psychology.
Focus	The main focus is on theories.	The focus is on comprehension and resolution of social problems and issues.
Approach	Deductive approach: Involves testing of a theory. How a certain theory could help in comprehending social behaviour of individuals.	Inductive approach: Involves deriving a new theory. And which theory provides adequate explanation and description of the social issue or problem.

Check Your Progress II

- 1) Site any one difference between social psychology and applied social psychology.

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1.4 APPLIED SOCIAL PSYCHOLOGY AS A SCIENCE

Applied social psychology can necessarily be termed as science not only because it is branch of social psychology which in turn is a significant area under psychology, but also because it utilises systematic and empirical methods and is guided and directed by the scientific core values. Some of the significant scientific core values are accuracy, objectivity, skepticism, open-mindedness and ethics. (Schneider et. al , 2012). Let us look at these core values and understand what they are:

- **Accuracy:** This is in the context of measurement as well gathering of information that needs to be carried out without any scope for error and with great precision.
- **Objectivity:** In the process of testing a theory or in measurement and information collection, there needs to be no subjectivity. The process needs to be objective and free from any bias.
- **Scepticism:** Any outcome or results need to be questioned and not accepted without verifying it.
- **Open-mindedness:** The outcomes and results obtained after an empirical study that are valid and reliable need to be accepted with an open-mind even if they contradict one's own beliefs.
- **Ethics:** Ethical issues need to be taken care of while carrying out any study or research.

All the above core values are extremely important and need to be taken care of while carrying out an empirical study.

There are four main goals of science that include description, prediction, determining causality and explanation were discussed. **Description** mainly elucidates description of a particular event or phenomenon, its nature, frequency and other details. **Prediction** deals with the factors that could be related or lead to the phenomenon. **Determining causality** denotes determining the cause and effect relationship between the two factors. That is, whether changes occurring in one variable lead to changes in another

variable. **Explanation** deals with the reason why the phenomena occurs. There could be a cause and effect relationship between two factors but why does this relation exists is explained/ discussed under explanation.

When we talk about applied social psychology there is an important scientific goal that is **Control**. Control in research context denotes ability to manipulate the situation or research condition in order to study the changes occurring in phenomenon (Schneider et. al , 2012).

Thus, the applied psychology makes use of the scientific core values in order to not only understand the social problems and issues but also to develop suitable intervention strategies and also to test these intervention strategies for their effectiveness. In this context the applied social psychologists also need to focus on any negative outcomes of the intervention strategies developed and implemented by them.

Check Your Progress III

- 1) List the scientific core values.

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1.5 APPLIED SOCIAL PSYCHOLOGY AND SOCIAL POLICY

When we talk about policy, the focus is mainly on bringing about a change. Policies are mainly developed in order to bring about positive change or for betterment of the individuals. Social policy can be described as actions that are taken by governmental organisations in order to bring about reforms or development in society. They can play an important role in determining the wellbeing of individuals in society. Social policies also focus on the social welfare of the individuals and they can be termed as principles and guidelines that create conditions that are favourable and beneficial to promote individual welfare. Social policies aim at ensuring that all the individuals in the society are provided with certain standards of living and also a chance or opportunity to make their lives better and develop.

Social policies are mainly developed in order to promote the welfare of the individuals in the society and could have objectives that focus on the economical and non-economical goals. They also focus on a fair and equal distribution of resources amongst various sections of the society.

Social policies do not exist in a vacuum and the social and psychological aspects of the individuals or society for which they are developed need to be

considered. When such social policies are framed, the values of the individual especially need to be focused on. It is important that the knowledge, attitude and practices of the individuals in the society are focused on as the policies are framed so that they lead to development and do not interfere with the effective functioning of the individuals in the society. Utmost care thus needs to be taken when such policies are developed.

The focus also needs to be on the issue or problem for which the policy is developed. And applied social psychology can play an important role here. As we discussed in the definition of applied psychology, it mainly focuses on understanding the social issue or problem and develop suitable intervention strategy. the very first step is to understand the issue or problem and once we do so it is easier for us to develop suitable intervention strategy to alleviate the same. Applied social psychology can provide systematic and scientific methods to understand the social issues and problems and then it can also play a role in developing intervention strategies including development of effective social policies.

Further, applied social psychology can play an important role not only in understanding the social issue or problem, that can be considered as the very first step in development of social policy, but it can also play an important role in in the implementation and evaluation of the social policy. The social policy once developed can be implemented keeping in mind various social and psychological aspects of the group of individuals or community for which it is developed. Further, the effectiveness of the policy can also be assessed using the systematic and scientific methods of applied social psychology (these will be discussed by us in the last unit of this course).

Check Your Progress IV

1) What is social policy?

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1.6 LEVELS OF ANALYSIS

Individual behaviours are influenced greatly by social surrounding and conditions. Any behaviour thus needs to be interpreted in terms of social context. For instance, think about why you have taken up this programme and identify the social aspects that determined your behaviour for pursuing this programme and pursuing it, Who motivated you to take up the programme? Did you take up the programme due to the expectations that significant others in your life have from you? Reason for pursuing this programme could also

be that you want to study further and do your best in life, maintain certain standard in the society for yourself and your family.

Thus, as you can see any behaviour will have a social dimension to it. Social influence that we talk about here can be direct or indirect but the influence that it has on individual is significant. Thus, the social determinants could be interpersonal, group, organisational, community and societal or cultural (Schneider et al, 2012, page 17). And these determinants can also be termed as levels of analysis. Thus, there are various levels of analysis including the interpersonal, group, organisational, community and societal/ cultural that can have an impact on the individual behaviours. All these levels play an important role and it is not so that one level is superior to another. But in fact they could even interact in their influence on individual behaviours. Though in the context taking in to account individual differences is also important, for example personality.

Let us look at the various levels of analysis:

- **Interpersonal:** This mainly has to do with the influence of other individuals, especially, the significant others in one's life.
- **Groups:** This has mainly to do with the effect of groups on the individuals behaviour. It could also be in terms of the social norms prevalent in a group.
- **Organisational:** These include varied organisational variables including structure and communication pattern etc.
- **Community:** This denotes the aspects of the community ranging from demography to ethnicity etc.
- **Societal/ cultural:** The cultural fabric and other relevant aspects related to the society as a whole.

Individual differences also play an important role in the context of levels of analysis.

In applied social psychology, it is relevant to identify level (s) of analysis so that suitable intervention can accordingly be developed.

Check Your Progress V

- 1) State various levels of analysis.

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1.7 LET US SUM UP

To summarise, in the present unit, we mainly focused on the definition, nature and scope of applied social psychology. Applied social psychology can be explained as a branch of social psychology. It can be defined as branch of social psychology that draws on social psychology theories, principles, methods and research evidence to contribute to the understanding of social and practical problems and the development of intervention strategies for improving the functioning of individuals, groups, organisations, committees and societies with respect to social and practical problems. We also differentiated between social psychology and applied social psychology. Further, applied social psychology was explained as a science with a focus on significant scientific core values are accuracy, objectivity, skepticism, open-mindedness and ethics, that are used in applied social psychology as well. Further we also described applied social psychology and social policy. Social policy can be described as actions that are taken by governmental organisations in order to bring about reforms or development in society. Applied social psychology can play an important role here. Applied social psychology mainly focuses on understanding the social issue or problem and develop suitable intervention strategy. The very first step is to understand the issue or problem and once we do so it is easier for us to develop a suitable intervention strategy to alleviate the same. Applied social psychology can provide us systematic and scientific methods to understand the social issues and problems and then it can also play a role in developing intervention strategies including development of effective social policies. Lastly, we discussed about the levels of analysis including the interpersonal, group, organisational, community and societal or cultural.

1.8 REFERENCES

Cartwright, D. (1949). Basic and Applied Social Psychology. *Philosophy of Science*, 16(3), 198-208. Retrieved June 1, 2021, from <http://www.jstor.org/stable/185515>.

Chung-Yan, G. A., & Towson, S. M. J. (2012). Social Psychological Theory. In F. W. Schneider, J. Gruman, & L. M. Coutts (Eds.), *Applied social psychology: Understanding and addressing social and practical problems*. Delhi: Sage.

Fisher, R.J.(1982). *Social Psychology: An Applied Approach*. New York: St. Martins Press, Inc.

Osakamp, and Schultz, P.W. (1998). *Applied Social Psychology* (2nd ed). California: SAGE.

KoK,G; Sericola. Schaalma, Hj De vries, Hj Parcel,G& Paulussen, J. (1996). Social Psychology and Health Education. In W. Stroebe & M. Hewsture (Eds.), European Review of Social Psychology (Vo./7 pp241-282). Chichester: John Wiley and sons Ltd.

Schneider, Frank.W, Gruman, Jamie and Coutts, Larry, M. (2012). Defining the Field of Applied Social Psychology In F. W. Schneider, J. Gruman, & L. M. Coutts (Eds.), Applied social psychology: Understanding and addressing social and practical problems.Delhi: Sage.

Shaw, M. E. and Costanzo, P. R.(1982). Theories of Social Psychology. New York: McGraw-Hill.

Shetgovekar, S. (2018). An Introduction to Social Psychology. Delhi: Sage

1.9 KEY WORDS

Applied social psychology: Applied social psychology can be explained as a branch of social psychology. It can be defined as “ branch of social psychology that draws on social psychology theories, principles, methods and research evidence to contribute to the understanding of social and practical problems and the development of intervention strategies for improving the functioning of individuals, groups, organisations, committees and societies with respect to social and practical problems” (Schneider et. al , 2012, page 8).

Social psychology: Social psychology can be defined as a science with an objective to comprehend how individuals relate, think, feel and influence each other. Thus, social psychology mainly focuses on the social dimension of human behaviour.

1.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) Define applied social psychology.

Oskamp and Schultz (1998) defined applied social psychology as application of the constructs, principles, theories, intervention techniques, research methods and findings of social psychology in order to develop a comprehensive understanding of social problems in order to deal with them effectively.

Check Your Progress II

- 1) Site any one difference between social psychology and applied social psychology.

Social psychology focuses on human behaviour in social contexts and applied social psychology deals with application of principles of social psychology varied fields.

Check Your Progress III

- 1) List the scientific core values.

The scientific core values are

- Accuracy
- Objectivity
- Scepticism
- Open-mindedness
- Ethics

Check Your Progress IV

- 1) What is social policy?

Social policy can be described as actions that are taken by governmental organisations in order to bring about reforms or development in society. They can play an important role in determining the wellbeing of individuals in society.

Check Your Progress V

- 1) State various levels of analysis.

Various levels of analysis are interpersonal, group, organisational, community and societal or cultural

1.11 UNIT END QUESTIONS

- 1) Define applied social psychology and discuss its nature and scope.
- 2) Differentiate between social psychology and applied social psychology.
- 3) Explain applied social psychology as a science.
- 4) Describe levels of analysis.
- 5) Describe methodological approaches in applied social psychology.

UNIT 2 **METHODOLOGICAL APPROACHES IN APPLIED SOCIAL PSYCHOLOGY***

Structure

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Concept of Research in Applied Social Psychology.
 - 2.2.1 Goals of Psychological Research
 - 2.2.2 Characteristics of Psychological Research
- 2.3 Research Concepts and Components
- 2.4 Quantitative Research in Applied Social Psychology
- 2.5 Action Research
- 2.6 Ethics in Psychological Research
- 2.7 Let Us Sum Up
- 2.8 References
- 2.9 Key Words
- 2.10 Answers to Check Your Progress
- 2.11 Unit End Questions

2.0 OBJECTIVES

After reading this unit, you will be able to,

- discuss the research in applied social psychology;
- explain research concepts and components;
- describe qualitative research in applied social psychology;
- explain the concept of action research; and
- discuss ethics in psychological research.

2.1 INTRODUCTION

Seema was a psychologist working with a Non Governmental Organisation. She mainly worked with migrant labourers and felt that health related

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awareness was very low amongst the migrants that made them vulnerable to various illnesses. So she decided to carry out a research to understand the areas of health related behaviours that need to be focused on. She used a standardised tool to measure health related knowledge, attitude and practices and collected data. As she analysed the data using statistical techniques, she could identify the areas of health that needed attention. Based on the results she developed a workshop plan for the migrant labourers.

As you can see in the above example, with the help of research, Seema was able to develop a suitable health related intervention strategy to help migrants. In a similar manner, in order to understand and deal with various social issues, research can be carried out and based on the results of these research suitable intervention strategies can be developed.

There are a number of problems and issues in the society that can be directly or indirectly related to human behaviour, be it aggressive behaviour in terms of road rage, bullying or even cyberbullying, overindulgence in social networking, lack of effective communication and interpersonal relationship, suicidal ideation and so on. Such problems and issues need to be researched further in order to not only develop better understanding about them including factors leading to them and to develop suitable intervention strategies to deal with them effectively.

Research is an important aspect of any subject area. In applied social psychology as well, research is carried out in order to further broaden the scope and knowledge area of the subject. Further, research in applied social psychology also focuses on development, implementation and evaluation of intervention strategies.

2.2 CONCEPT OF RESEARCH IN APPLIED SOCIAL PSYCHOLOGY

Before we go on to specifically discuss about research in applied social psychology, let us look at the definition, goals and principles of psychological research. You may have covered this to great extent in BPCC105: Psychological Research, that was core course in third semester. We have to remember that applied social psychology is a branch of social psychology, which in turn is an area under psychology. Thus the goals, principles and characteristics of psychological research also hold true for applied social psychology.

Research in simple terms can be explained as adding to the existing fund of knowledge. The term research is derived from the French word ‘recherche’ which means to travel through or survey. Research can be described as an enquiry that is not only critical but complex as well. Research can also be described as an analysis and recording of controlled observation that is

objective and systematic in nature. And this analysis and recording can result in generalisations, and also development of theories.

Some of the definitions of research are given as follows:

Kerlinger (1995, page 10) defines scientific research as “a systematic, controlled, empirical and critical investigation of natural phenomenon guided by theory and hypotheses about the presumed relations among such phenomena”.

Research, in simple terms, can be defined as “a systematic investigation to find answers to a problem” (Burns, 2000).

Best and Khan (1999) have defined research as “systematic and objective analysis and recording of controlled observation that may lead to the development of generalisation, principles or theories, resulting in prediction and possibly ultimate control of events”.

Some of the key points in the above given definitions of research are as follows:

- 1) **It is systematic in nature:** Psychological research is systematic as well as scientific in nature and follows a pattern and scientific process. It is important that research is carried out in systematic and scientific manner so as to ensure that the outcome of the research can be relied on and the researcher(s) have confidence in the outcome of the research.
- 2) **It is objective:** Objectivity is a significant characteristics of any research and care needs to be taken that no subjectivity creeps in so that the internal validity of the research is maintained. Thus, the subjective beliefs of the researcher should not interfere in the research process or the outcome, rather the focus needs to be on reality that is objective in nature.
- 3) **It seeks answers to certain problem:** Psychological research is carried out with an objective that needs to be clear and specific. There could be certain problems and issues that the researcher(s) may come across and may seek answers to.
- 4) **With the help of research, generalisations can be made and theory and principles can also be developed:** Based on the research findings generalisations can be made. Further, based on the findings, theory and principles can also be developed.

2.2.1 Goals of Psychological Research

The main goal of psychological research is to comprehend human and animal behaviour. The more the researchers are able to decipher human behaviour, the more it will benefit the society in general and individuals in specific. For example, developing a better understanding about aggressive behaviour

amongst youth, can help develop suitable intervention. Let us now look at certain specific goals of psychological research, that are discussed as follows:

- 1) **Description:** This is one of the prominent goals of research that involves description of behaviour in a systematic manner. Description involves information about what exactly is happening in a situation, where and with whom is it happening. In description a certain phenomenon/ event or issue is identified and reported. For example, safety behaviour of employees can be observed and described.
- 2) **Explanation:** This mainly involves explaining why a certain behaviour/ phenomenon is taking place. For example, if employees in an organisation are not using safety devices, then explanation can be generated as to why they are doing so.
- 3) **Prediction:** Yet another goal of psychological research is prediction. Based on research certain predictions can be made about the behaviour under study. In prediction, the factors that may be correlated or related with certain behaviour or phenomenon are identified. For example, predictions are made with regard to why employees are not using safety devices based on previous research and information.
- 4) **Control:** Control is also an objective of research which involves bringing about a change in the behaviour with the help of suitable intervention strategies. For example, suitable intervention strategies can be developed to promote use of safety devices amongst the employees.
- 5) **Application:** Inferences can be drawn based on the results obtained by carrying out the research and these can then be applied for problem solving as well as decision making.

A good psychological research is systematic and scientific in nature. It also needs to be valid as well as verifiable and replicable. A good psychological research needs to be logical as well and it should be possible to make generalisations or develop theories and principles based on the research outcomes. Thus, a research could be carried out to systematically and scientifically test certain hypothesis(es) and theories and this is done by controlling the influence of extraneous or confounding variables.

2.2.2 Characteristics of Psychological Research

An adequate psychological research needs to have the following characteristics:

- 1) **The purpose and objective(s) of the research needs to be stated in clear and specific manner:** It is important that the purpose and the objective(s) of the research are stated clearly and specifically, as the choice of research design and other aspects of the research will depend on the objectives of the research.

- 2) **In order to ensure objectivity, the research procedure needs to be planned adequately:** Any research needs to be adequately planned. Even while building a house, a plan is to be drawn that is followed. In a similar manner while carrying out research as well, a plan is to be drawn. That is the reason why often a research proposal or synopsis is created that provides details about the problem, objectives, hypothesis(es), sample, research design, tools for data collection and data analysis.
- 3) **Research design needs to be appropriately selected based on the purpose and objective(s) of the research:** Research design provides a structure to the research and it is important to adequately select a research design based on the statement of problem stated in the research. Suitable selection of research designs can ensure high internal validity.
- 4) **Appropriate tools need to be used for data analysis:** Data analysis is an equally important aspect of a psychological research and again based on the purpose and objective(s) of the research suitable techniques of data analysis need to be employed.

Let us now focus on research in applied social psychology. The main focus of research in applied social psychology is not only on understanding the social issue or problem but also to develop suitable intervention strategy to deal with the issue. For example, if a research is carried out to understand elderly abuse, after understanding the issue, an intervention strategy will be developed to reduce elderly abuse. Though, in certain cases, applied social psychologists may also refer to the existing research in order to develop suitable intervention strategy to deal with certain issues.

Some of the important aspects of research in applied social psychology (Shetgovekar, 2018) are as follows:

- The research may not be based on scientific curiosity. Rather it focuses on a social issue or problem and how to alleviate it.
- The approach utilised is an interdisciplinary approach as any social issue or problem cannot be studied from a single dimension.
- The research is mainly carried out in field set up.
- An action plan is developed based on the results obtained. And this intervention could be further subjected to evaluation to understand its effectiveness.

Check Your Progress I

- 1) List the goals of psychological research.

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2.3 RESEARCH CONCEPTS AND COMPONENTS

You have already studied of psychological research in BPCC105. This is just an overview to revisit what was learned by you. Let us look at some of the research concepts and components in research.

Constructs

When we discuss about constructs, it is also important to understand what is concept in the context of psychological research. As defined by Kerlinger (1995, page. 26), a concept “expresses an abstraction formed by generalisation from particulars”. Thus, height can be a concept, that can be expressed in terms of observation of objects that are long or short. To take an example of a psychological variable, adjustment, abstraction can be formed for adjustment based on observations of individual behaviour. In a similar manner various psychological variables can be abstracted based on certain behaviours that can be categorised together.

A construct can be termed as a concept that is adopted for empirical purpose (Kerlinger, 1995). Thus, when adjustment is adopted in a research for empirical purpose, it will be termed as a construct. When a concept is adopted as a construct in a research, it is entered in to the theoretical framework and thus can be related to other constructs in numerous ways. Further, constructs can be subjected to observation and measurement (Kerlinger, 1995). For instance, a standardised scale on adjustment can be used to measure the construct of adjustment.

Variables

Variable means something that varies. It can also be explained as quantity or a number that will vary or will have different values. If a researcher is carrying out a study on emotional intelligence and self esteem of adolescents in India, in this study, emotional intelligence and self esteem can be termed as variables. Emotional intelligence and self esteem can be high or low. Both these variables can possess varied values. Even gender can be termed as a variable because it will vary in terms of males or females. Variables can be of different types including the following:

- **Independent variable:** Variable that is manipulated by the researcher is independent variable.
- **Dependent variable:** In a research, variable that is measured for any changes when independent variable is manipulated is dependent variable.
- **Extraneous variable:** Variables that may impede or interfere in the relationship between independent variable and dependent variable are called extraneous variables.

Population and Sample

The term population can be used to describe the persons, objects, elements, animals or even reactions that display a pattern of characteristics that is unique. It can also be explained as set of persons, objects, elements, animals, reactions that the researcher wants to study. If a researcher wants to carry out a study on adolescents in New Delhi, then his/ her population will be all the adolescents in New Delhi. Population can be finite or infinite in nature (Mohanty and Misra, 2016, page 3). An example of finite population is number of students in a school who have failed in mathematics. And an example of infinite populations would be number of stars in the sky.

In simple terms, sample can be defined as the group of individuals who participate in the research. If we take the example of adolescents in New Delhi, discussed above, it is not feasible for the researcher to contact and collect data from all the adolescents in New Delhi. Thus, the researcher will take a sample (preferably representative) from that population. To take another example, in a cold drink factory, if the quality inspector wants to find out if the quality and taste of the cold drink is adequate, he/she will not test all the bottles of cold drink, but take a sample and test the same and preferably this sample is taken randomly.

Thus, a sample is a smaller group from the population that participates in the research. It is important that the sample is representative of the population, that is, it is as much as possible similar to the population or possesses the same characteristics or elements as the population (Mohanty and Misra, 2016). Thus, sampling techniques are relevant in research, which help in selection of sample. Sampling techniques can be categorised in to probability sampling and non probability sampling. The sampling techniques have been described in table 2.1

Table 2.1: Sampling Techniques

Sampling technique	Description	Example
Probability Sampling	Every individual who is part of the population has an equal chance of being included in the sample. Sample is assumed to be representative of the population.	If the population for a research is students in class 9th of a school, each and every student has equal chance of being selected for the research.

Table 2.1: Sampling Techniques

Simple random sampling	Participants are randomly selected from the population using methods like lottery method.	Names or roll numbers of all the students are written on the chits that are then put in a bowl and ten chits are taken out (sample size for research is 10) and these students form the sample of the study.
Systematic random sampling	A list of individuals in the population is created in a random order and sample is selected based on a random integer, keeping in mind the sampling fraction and the interval size.	For 50 students in a class (N), the research may want to take a sample of 10 (n) for the research. Sampling fraction (f) = $n/N = 10/50 = 0.2$. Interval size (i) = $N/n = 50/10 = 5$. The random integer from 1 to 5 could be 4. Thus, from the 4th student in the list the researcher will select every 5th student (4, 9, 14, 19 and so on) till he/ she gets the sample of 10.
Stratified random sampling	Population is divided into homogeneous groups and then the sample is selected randomly.	Population divided into males and females and for each group sample is randomly selected.
Cluster sampling	Population divided into clusters that are then randomly selected and then all the individuals falling in the selected clusters are taken.	In a school, from all the classes, five classes are randomly selected and then all the students in these classes form the sample for the research.
Multistage random sampling	As the name suggests, this is carried out at multiple levels.	Using cluster sampling the classes in a school are selected and then simple random sampling/ stratified random sampling, sample is selected from these classes.
Non-probability Sampling	There is no random selection of the participants to be included in the sample. Hence, the sample may not be representative of the population.	If a study is to be carried out on female victims of domestic violence, then randomisation is not used and based on the availability and consent of the persons, they are included in the sample.

Table 2.1: Sampling Techniques

Convenient sampling	Whether an individual will be included in the sample will depend on his/ her availability.	The researcher will approach the female victims of violence and based on their availability, they will be included in the sample.
Voluntary sampling	Participants willing to be part of the research are included in the sample	Female victims of violence who are willing to participate in the research are included in the sample.
Judgement sampling	Sample selection is carried out an individual who has a good idea about the sample	A teacher may identify students who will participate in the research.
Quota sampling	Based on a fixed quota, the sample is selected.	Quota could be 100 junior managers and 50 senior managers in a company that will form the sample of the study.
Snowball sampling	A researcher approaches an individual with characteristics as per the requirement of the sample and then this individual is asked to further refer individuals with similar characteristics.	A researcher may contact parents having gifted children and then they may be asked to refer other parents having gifted children.

Experimental and control group

The group for which independent variable is manipulated is called experimental group and a group for which independent variable is not manipulated is called control group. For example, if we want to study the effect of noise distraction (independent variable) on performance of an individual on a simple task (dependent variable). The experimental group will be subjected to noise distraction, whereas, the control group will perform a task under normal condition. Inclusion of control group in a research can strengthen the research, though it is important to use techniques of randomisation and matching while selecting sample and dividing them in to group, experimental or control.

Confederate

Research in applied social psychology (as also in social psychology) could involve confederates. Confederates are individuals who help or serve as accomplices in the research. They are provided certain specific role to play. For example, in Milgram experiment, the participants had to deliver electric shock to another participant who made errors in given task. The other participant was an accomplice or confederate.

Research design

Based on the problem, the researcher needs to select suitable research design. Research design denotes structure of the research. As stated by Kerlinger (1995, page 280) "Research designs are invented to enable researchers to answer research questions as validly, objectively, accurately and economically as possible". Research designs not only help in obtaining answers to the research problem but also help in variance control, that includes maximisation of true variance (variance in independent variable leads to variance in dependent variable) and minimisation of error variance (variance in dependent variable that can be attributed to extraneous variable). There are various types of research designs, for example, factorial design, small n designs and so on that can be selected based on the requirement of the research and research problem. Further, research could be qualitative or quantitative in nature or may employ a mixed approach. Some of the research designs have been given in table 2.2.

Table 2.2: Research Designs

Sr. No.	Research Design	Description	Example
1	True designs	1) Independent variable (s) [IV] can be manipulated 2) High control (of extraneous variables) 3) Randomisation possible 4) Can be used for studies in laboratory set up	Effect of temperature (IV) on Performance of the participants. Temperature can be manipulated as warm, normal and cold.

2	Faulty designs	1) Independent variable (s) cannot be manipulated as they have already taken place. 2) Low control 3) Randomisation not possible 4) Used in field studies	Caregivers burden of caretakers of individuals with terminal illness (IV). Here IV is the terminal illness that has already occurred and not under the control of the researcher.
3	Quasi Experimental designs	1) Quasi means resembling 2) This design resembles true designs 3) Independent variable can be manipulated 4) Control is possible to some extent 5) No randomisation 6) Used in field experiments	Two teaching methods (lecture and group discussion, IV) given to two different classes to see their impact on students' learning.
4	Factorial designs	1) Used to study the effect of more than two independent variable (s) on the dependent variable. 2) Main effect (of each variable separately) as well as interactional effect (of all the IVs) studied.	Effect of gender (IV1) and Socio- Economic Status (IV2) on Self Esteem (Dependent Variable) of adolescents.
5	Small n designs	1) Small sample 2) In-depth study 3) Same sample studied over a period of time.	Study on soldiers having Post Traumatic Stress Disorder

Methods of Data Collection

There are various methods of data collection that can be used by the research to collect data. Though it is also possible that more than one method of data collection is used in a research. These are briefly explained as follows:

- **Observation:** Observation can be described as a process of data collection in which the units/ events/ phenomena/ individuals witnessed first hand. A researcher, for example, can observe employees at work, children

interacting with each other, people belonging to certain community and so on. Observation can be carried out either in a naturalistic set up or it can be carried out in a laboratory or a clinical set up. The benefits of naturalistic situation are in a way high as the behaviour of individuals in their natural set up can be studied. In such a case there is no manipulation or control of any variables. Observer plays an immensely important role in observation as he/ she needs to observe and record events and details. Types of observation include participant observation, nonparticipant observation, structured and unstructured observation.

- **Interview:** Kerlinger (1995, page 441) described interview as “a face to face interpersonal role situation in which one person, the interviewer, asks a person being interviewed, the respondent, questions designed to obtain answers pertinent to research problem”. The key points in this definition are that there are two main individuals involved, interviewer and interviewee who are involved in a face to face interaction. And during this interaction, the interviewer will ask certain questions to the interviewee to elicit responses. One of the main aspects of the interview is the interview schedule. Interview schedule is nothing but questions that the interviewer has to ask as well as certain guidelines with regard to how the interviewer is expected to proceed with the interview. Types of interview include structured interview, unstructured interview, semistructured interview.
- **Psychological tests:** Cohen and Swerdlik (2010, page 2), defined psychological testing “ as the process of measuring psychology-related variables by means of devices or procedures designed to obtain a sample of behavior”. Psychological tests are objective in nature and need to be valid and reliable. they also have a discriminant feature and are comprehensive in nature.
- **Projective techniques:** These are subjective in nature. Here, the test taker may be asked to respond to certain semi-structured or unstructured stimuli. The responses are then to be interpreted by the administrator, where subjectivity may creep in. Examples of projective tests are Rorschach Inkblot test, Somatic Inkblot Series, Sentence Completion Test, Thematic Apperception Test and Children’s Apperception Test.
- **Questionnaire:** These could include questions that are open ended or closed ended. Often rating scales like Likert’s five point scale are also incorporated in the questionnaire. Care needs to be taken while the questions are formulated so that they are simple and clear.
- **Sociometry:** In social psychology, (and applied social psychology) yet another method of data collection is sociometry, that can be used in order to study social interaction. It involves data collection and analysis related to communication and interaction between individuals. Sociometric matrices or sociograms can also be created based on the data obtained.

The process of research mainly starts with review of literature and selection of variables. Once the basic idea of what research is to be carried out is clear, then the problem and objectives are specified and hypothesis (if required) are formulated. The nature and sample size along with sampling technique is also decided. Further, research design as found to be adequate and suitable for the study is to be finalised. Methods of data collection is then to be selected and once the data is collected it needs to be analysed and interpreted. The results can then be published or made available for other researchers, policy makers, subject experts, general public and so on. And more importantly in case of applied social psychology, the results can be utilised to develop suitable intervention strategy.

Data analysis

Once the data is collected, the data needs to be analysed. Based on whether the data is quantitative or qualitative, the analysis needs to be carried out. For quantitative data various statistical analysis can be computed as per the objectives of the research. We discussed about statistical techniques in BPCC104 and BPCC108 and these can be adequately used for statistical analysis. Qualitative analysis can also be carried out using various techniques. We will discuss qualitative research in next unit.

The above concepts and components are relevant as they provide a background about research, which will assist you carrying out research in applied social psychology.

Check Your progress II

- 1) What are the different types of variables?

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2.4 QUANTITATIVE RESEARCH IN APPLIED SOCIAL PSYCHOLOGY

Let us now discuss about various types of quantitative research that can be used in applied social psychology.

Descriptive research

Descriptive research involves description of certain phenomenon or event. It mainly involves observation and recording about the phenomenon or event. Descriptive research helps the researcher describe certain behavioural

patterns and it can be effectively used when manipulation of variables that are being studied is not possible.

The data that is collected in descriptive research could either be qualitative, quantitative or both. Qualitative data can be organised on the basis of emerging patterns and descriptive statistics (discussed in later units of this course can be used to analyse the quantitative data.

There are three main categories of descriptive research, viz, naturalistic observation, case study and surveys. These are discussed as follows:

- 1) **Naturalistic Observation:** This involves observation as well as recording of behaviour in a natural setting. As such there is no control and the researcher is involved in mere observation of the phenomenon or event. For example, researcher can observe a group of children playing or may want to study crowd behaviour. In such a case, he/ she can effectively use naturalistic observation, that will provide valuable information about how individuals behave in a natural set up. Naturalistic observation has higher ecological validity (that is, findings can be applied in realistic situations).
- 2) **Case Study:** In case study, a single individual or situation is studied in an in-depth manner. For example, a person having certain psychological disorder or a rare chronic illness is studied. As such it is not possible to make any predictions based on the case study method. While using this method, the researcher's bias could creep in, that can have an impact on the way research is carried out.
- 3) **Survey method:** In survey method, it is possible to contact a large number of individual and carry out a survey. For example, a survey can be carried to get feedback about a certain product from general public. Questionnaires or interview can be used to collect data from the participants. It is important that the questions that have been framed are adequate, clear and easy to understand.

Correlational research

Correlational research is mainly used to study relationship between variables. For example, we may carry out study to understand the relationship between Family environment and self concept of children. Correlation ranges from – 1.00 to + 1.00. Here, the 0 indicates lack of relationship and 1 indicates strong correlation. The signs – and + indicate whether the relationship is negative or positive respectively. Though correlations provides adequate information about the relationship between the variables and its direction and degree, it provides no information about cause and effect relationship between the variables.

Experimental research

In experimental research the independent variable can be manipulated. The research or experiment is carried out under controlled condition. Thus, the interference of extraneous variable (s) can be controlled. Randomisation can be used in order to select the sample. It has high internal validity and thus it can be said that the changes in dependent variable (s) are as a result of independent variable(s) and not extraneous variable(s). Though, it has lower external validity (as the study is carried out under controlled conditions, the results as such cannot be generalised to other situations).

Non-experimental research

A lot of research in applied social psychology is carried out using non-experimental research. In this research independent variable cannot be manipulated. The control is also low. It may not be possible to use probability sampling and thus mainly the non-probability sampling techniques are used. Non-experimental researches have high external validity, but low internal validity. An example of non-experimental research in applied social psychology would be the Mental health and Perceived Social Support of Individuals who recovered from COVID19.

Field experiments

These are researches that are carried out in natural setting but it is possible to manipulate independent variable and there is some control possible. For example, a research can be carried out in classroom or work setup. The external validity of this research is high, though it may not be possible to select the sample using randomisation. Internal validity would be lower compared to the experimental research. An example of field experiment could be the effectiveness of an intervention strategy developed to help employees deal with work stress. In this research, there can be two groups, experimental and control group. The experimental group will receive the intervention strategy, whereas the control group will not. Here a pretest-posttest design could be used.

Field Studies

These researches are non - experimental in nature. The study is carried out in naturalistic setting. The researcher cannot manipulate the independent variable(s). It is not possible to select sample using randomisation. The internal validity of field experiments is low, though the external validity is high. An example of field study could be the Psychological hardiness and Psychological wellbeing of Health professionals.

Box 2.1: Internal and External Validity

Internal Validity: Internal validity denotes that the changes in dependent variable (s) are as a result of independent variable(s) and not extraneous variable(s).

External validity: External validity denotes whether the results can be generalised to other situations or population. External validity is of two types, ecological validity and population validity. Ecological validity denotes whether generalisation of the results can be carried out to other situations and population validity denotes whether generalisation of the results (of the study carried out a certain group of participants) can be carried out to the population.

Check Your Progress III

- 1) State the three main categories of descriptive research.

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2.5 ACTION RESEARCH

This is yet another significant research that can play an important role in applied social psychology.

Action research was developed and promoted for application in psychology by Kurt Lewin in 1946 (Lafreniere et al., 2012). It can be termed as a research having certain purpose. Here the focus is mainly on how the research will benefit the participants. Kurt Lewin who is also credited with contribution to the development of applied social psychology, also emphasised the use of action research. Lewin believed that a research rather than leading to a book, could lead to an action that results in benefit to the participants and society in general.

The focus of action research is thus on intervention as is that of applied social psychology.

Action research can be described as a method that can be used in designing research studies that not only inform the practice but also influences it (Reason and Bradbury, 2006). Winter and Munn-Giddings (2001, page 8) define action research, as a “study of a social situation carried out by those involved in that situation in order to improve both their practice and the quality of their understanding”.

According to Meyer (2000), the main strength of action research is its focus on seeking solutions to certain practical problems. And this is done by carrying out research and then developing and implementing an intervention base don the results of the research.

Let us highlight the features of action research (Koshy, 2010).

- 1) Action research involves action, evaluation and also critical reflections.
- 1) It is collaborative and participative in nature and can be carried out by individuals with common purpose.
- 2) It is specific to a context and a situation.
- 3) Reflections can be developed based on the participants' interpretations.
- 4) There is creation of knowledge through action and during application.
- 5) It can involve problem solving if the solution results in improvement of practices.
- 6) Findings in action research are not conclusive or absolute in nature.

The main characteristics of action research are thus, its participatory aspect, democratic tendency and contribution to the area of knowledge as well as social change. The participatory aspect focuses on the perception and willingness of the participants to change and also play an active role in the research process. With regard to democratic tendency, in action research, all the participants are equal. And the findings of an action research will not only help in adding to the existing fund of knowledge of the subject area but will also help in bringing about social change. The intervention strategies developed based on the results of the research can help deal effectively with the problem.

The main phases in action research are planning, fact finding and execution (Ronald J Fisher, 1982). Planning mainly involves developing better understanding of the situation. Fact finding phase involves collection of data and the execution or action phase involves development of an action plan or intervention strategy.

Action research can be of varied types (Shetgovekar, 2018), including:

- **Diagnostic action research:** The problem or issue is analysed or diagnosed in order to understand it better.
- **Participant action research:** The persons who will implement the action or on whom the intervention strategy will be implemented are involved in the research process. This also helps deal with any resistance.
- **Empirical action research:** As an action is taken, the same is to be regularly monitored. And to do so an external researcher may also be appointed.
- **Experimental action research:** Experimental action research is utilised in order to study the effectiveness of an action or intervention strategy.

The process of action research involves, identifying the problem, developing an action plan, data collection and analysis, deriving conclusions leading to modification of theory. The process can be repeated with modified theory being put to evaluation, ultimately leading to reporting of the results.

Check Your progress IV

1) What is action research?

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2.6 ETHICS IN PSYCHOLOGICAL RESEARCH

Research in psychology is necessarily carried out on humans and in this regard it is important to follow certain ethical issues while carrying out research, in order to ensure that they are treated in respectful way.

Before we go on to discuss various ethical issues, let us look at two of the experiments that raised questions related to ethics in research.

A research was carried out by John Watson in order to study whether emotional responses are learned. The study was carried out on a young child named Albert. In the study Albert was repeatedly exposed to a white rat. Initially, he did not show any negative reaction to the white rat. However, when the exposure to the white rat was accompanied repeatedly with a loud noise, Albert displayed negative reaction to the white rat. Further, as the study continued, Albert displayed negative reactions towards stimuli that were similar to the white rat like a white rabbit and fur coat.

This study raised some serious ethical issues as there is no mentions whether any informed consent was taken from the parents/guardian of Albert (Albert being a minor). Further, ethical issues can also be raised with regard to whether it was really fair to subject Albert to such conditions and instilling fear in him, that could have repercussions later in his life.

Yet another study was carried out by Zimbardo and is known as Stanford Prison Experiment. In this research, Zimbardo attempted to study participant's group behaviour, how they adopted the abusive roles in the process of following certain orders. In this study, a simulation of prison was created and the participants were divided in to two groups, prisoners and guards. The participants also signed a contract and received monetary benefits. The guards were give instructions by Zimbardo (who acted as a warden of the prison) to maintain order amongst the prisoners (though any physical aggression was not allowed). The experiment had to be ended within a few days as role was internalised by the participants to such an extent that the guards were displaying aggressive behavior that negatively affected the participants who played the role of prisoners.

This experiment as well raised certain ethical issues, as the beneficence of the participant was at stake.

Thus, the above two experiments and many more led to more and more focus on ethical issues in research in order to ensure wellbeing of the participants.

As such, the origin of ethical codes can be found in the Hippocratic oath that was written way back in 400 BC. Though, ethics in research received attention mainly after certain studies, as discussed above, raised questions regarding safety as well as welfare of the participants in research. The experiments carried out by Nazis during World War II also lead to development of the Nuremberg Code (that mainly focused on informed consent and coercion) that was a result of the Nuremberg war crime trials. Besides, there were other studies as well that raised ethical issues, like the Tuskegee syphilis study that was conducted by the U. S. Public Health Services in 1930s on African Americans, having low income, who suffered from syphilis. The participants were not aware that they were suffering from syphilis and were not given any treatment (Penicillin) as they participated in the study.

Yet another study on how development of children is affected by social interaction, was carried out by René Spitz in 1940s. The study involved two groups of children whose development were studied from birth onwards. One of these groups were babies in orphanages who were deprived of any human contact and appropriate care. The other group of babies (from prison nursery) belonged to incarcerated mothers, who received care from their mothers. The results of the study indicated that social deprivation had an impact on the development of the children.

Thus, such studies brought ethical issues and concern for safety and welfare of participants in the light. The Belmont Report was presented by U.S. Department of Health, Education and Welfare in 1979, where three ethical principles were highlighted:

- **Respect for persons:** Recognising the autonomy of the participants and protecting those with lower autonomy.
- **Beneficence:** Maximising benefits and minimising any harm and risk to the participants.
- **Justice:** Fairness in terms of who receives the benefits of research and faces risks.

These ethical principles were later stated as regulations by Department of Health and Human Services and the Food and Drug Administration. In 1991, they were adopted by the Federal Policy for the Protection of Human Subjects.

American Psychological Association proposed their own ethical standards in 1953, that were revised from time to time. And these are the ethical issues that we mainly follow while we conduct research.

Ethics as such are relevant at every stage of research. Any research is to be carried out keeping in mind the risk and benefit ratio. If the risks are high and benefits are low, there is no point in carrying out the research. If the benefits are high and risks are low, provided that the minimal risks are taken care of, the research can be initiated. If the benefits and risks both are low, then again there is no use of carrying out the research. If the benefits and risks, both are high, then the decision with regard to whether the research should be carried out or not is difficult. But such researches can be carried out by managing the risks. Besides the vulnerability of the population also needs to be kept in mind. For example, children can be considered as vulnerable population.

In psychology and also in applied social psychology research, deception could also be used. Deception can be defined as “efforts by researchers to withhold or conceal information about the purpose of a study from the persons who participate in it” (Baron and Byrne, 1995, page. 31). Though deception needs to be avoided, it may not be possible to do so in case of certain researches. Using deception could also raise certain ethical issues as the participants may not be pleased when they come to know about the actual objective(s) of the research and may in fact resent for participating in research and may avoid participating in any research in future. Further, deception may lead to the participants being subjected to stress and anxiety. If deception cannot be totally avoided then it should be ensured that the participants don't face any serious risk during the research and debriefing needs to be provided. In debriefing, after the data is collected from the participants, information about the research is provided to them, their doubts are clarified and privacy and confidentiality are assured.

There are certain significant ethical issues that need to be considered before any research is carried out, these are discussed as follows:

Beneficence and Non-maleficence: A research needs to be carried out by keeping in mind its benefits to the participants (beneficence) and it should be ensured that the participants are not subjected to any harm (non-maleficence). Thus, any risk to the participants is to be identified and eliminated and if there is any minimal risk, the participants need to be informed about the same and their consent for participation in the research needs to be taken,

Privacy and Confidentiality: In any research, privacy and confidentiality of the participants is to be maintained. The researcher needs to take adequate care to ensure that the identity of the participants is not revealed. The participants may seek privacy and may not want others to know that they participated in the research. For instance, an employee may participate in certain research being carried out in his/ her organisation but may not want

other employees to know about the same. Confidentiality is equally important as is privacy, where, information and details regarding the participants are not shared by the researcher with others. One way in which privacy and confidentiality can be assured is by using codes instead of the names of the participants.

Anonymity: Anonymity denotes that even the researcher may not be able to identify the participant. In anonymity, the participants may have objection to others knowing that they participated in the research, but may have no problem with their performance details being shared.

Informed Consent: As discussed earlier, the participants need to be informed about the details of the research, and this is done by taking informed consent from the participants. According to Berg (1998, page 47) informed consent means “the knowing consent of individuals to participate as an exercise of their choice, free from any elements of fraud, deceit, duress, or similar unfair inducement or manipulation”. Though, when deception is used in psychological research, obtaining informed consent could be a challenge, as is also true when a study is carried out with the help of naturalistic observation. An informed consent needs to provide details about the research including the duration, procedure and benefits of participating (including incentives, if any) in research. It also needs to mention the participants right to decline from participating in research or to leave or withdraw even after the research has started. Any consequences with regard to denying to participate in research or withdrawing from the research also need to be explained in the informed consent. The participants also need to be updated with any risks that they may face during their participation. If there are any limitations with regard to confidentiality, the same also needs to be mentioned in the informed consent. Lastly, the details of contact person whom the participants can contact in case if they have any query also need to be mentioned in the informed consent.

Ethical issues are significant at every stage of research right from selecting the research problem, finalising the research design, sample to data collection and analysis and reporting of the research. While the research is being written and reported, the researcher needs to ensure that there is no plagiarism and that the sources cited in the research are duly acknowledged.

For detailed information on the Principles of Psychologists and Code of Conduct given by American Psychological Association, refer to the following link <https://www.apa.org/ethics/code>

CheckYourProgress V

- 1) List the three ethical principles that were highlighted in the Belmont Report.

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2.4 LET US SUM UP

In the present unit, we mainly focus on the methodological approach to applied social psychology. Research methods employed in psychology can also be employed in applied social psychology. In the unit we defined research and discussed about the goals and characteristics of psychological research. Various research concepts and components were also discussed. The quantitative research in applied social psychology was then highlighted. The unit also discussed action research that plays an important role in applied social psychology. Lastly the ethics in psychological issues were also explained.

2.5 REFERENCES

American Psychological Association. (2010). American Psychological Association ethical principles of psychologists and code of conduct. Assessed on 15/11/2014, from <http://www.apa.org/ethics/code/index.aspx> Berg. B. (2009). Qualitative Research. Methods for the Social Sciences. Boston: Allyn & Bacon

Barnett J (1994) The nurse-patient relationship. In Gillon R (Ed) Principles of Health Care. Chichester, John Wiley and Sons.

Best, J. W and Kahn, J. V. (1999). Research in Education. New Delhi: Prentice Hall of India Pvt. Ltd.

Bordens, K. S and Abbott, B. B. (2011). Research Designs and Methods: A Process Approach. New Delh: McGraw Hill Education (India) Private Limited.

Broota, K.D. (1992) Experimental Design in Behavioural Research, Wiley Eastern Limited.

Burns, Robert B. (2000). Introduction to Research Methods. New Delhi: Sage publication Ltd.

Ethics and Research on Human Subjects: International Guidelines, Proceedings of the XXVIth CIOMS Conference, Geneva, Switzerland, 5-7 Feb 1992, Edited by Z. Bankowski & R. j. Levine

Gabriel, D. (2013). Inductive and deductive approaches to research retrieved from <http://deborahgabriel.com/2013/03/17/inductive-and-deductive-approaches-to-research/> on 15th March, 2019 at 8:30 am.

Goodwin, C. J. (2003). Research in Psychology: Methods and Designs. Hoboken, New Jersey: Wiley.

History Module: The Devastating Effects of Isolation on Social behaviour assessed on 20/11/2014 on http://thebrain.mcgill.ca/flash/capsules/histoire_bleu06.html

Jackson, S.L. (2009). Research Methods and Statistics: A Critical Thinking Approach 3rd edition. Belmont, CA: Wadsworth.

Kerlinger, Fred, N. (1995). Foundations of Behavioural Research. Bangalore: Prism Books Pvt. Ltd. for information on research, research designs, types of research and methods of data collection.

Koshy, V (2010) Action Research for Improving Educational Practice. A Step-by-step guide. London: Sage.

Lafreniere, K. D; Page, S and Senn, C. Y. (2012). Applying Social Psychology to Community. In F. W. Schneider, J. Gruman, & L. M. Coutts (Eds.), Applied social psychology: Understanding and addressing social and practical problems. Delhi: Sage.

Majumdar, P.K. research Methods in Social Science. New delhi: Viva Books.

Mcbride, B. M. (2010). The Process of Research in Psychology. Sage Publications: USA Wilson-

Meyer, J. (2000) 'Using qualitative methods in health related action research', British

Medical Journal, 320: 178–181.

Meyer, J. (2006) 'Action research', in K. Gerrish and A. Lacey (eds), The Research Process

in Nursing. Oxford: Blackwell.

Organ, D. W. (1988). Organizational Citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.

Reason, P. and Bradbury, H. (2008) The SAGE Handbook of Action Research: Participative

Inquiry and Practice (2nd edition). London: SAGE.

Ruane, J. M. (2016). *Introducing Social Research Methods: Essentials for Getting the Edge*. United Kingdoms: John Wiley and Sons Ltd.

Shetgovekar, S. (2018). *An Introduction to Social Psychology*. Delhi: Sage.

Sieber, J. E & Tolich, M. B. (2013). *Planning Ethically Responsible Research*. Sage Publication: USA.

Winter, R. and Munn-Giddings, C. (2001) *A Handbook for Action Research in Health and Social Care*. London: Routledge.

2.6 KEY WORDS

Action research: Winter and Munn-Giddings (2001, page 8) define action research, as a ‘study of a social situation carried out by those involved in that situation in order to improve both their practice and the quality of their understanding’.

Research: Research can also be described as an analysis and recording of controlled observation that is objective and systematic in nature. And this analysis and recording can result in generalisations, and also development of theories.

Research designs: Kerlinger (1995, page 280) “Research designs are invented to enable researchers to answer research questions as validly, objectively, accurately and economically as possible

Sample: Sample can be defined as the group of individuals who participate in the research.

Variables: Variable means something that varies. It can also be explained as quantity or a number that will vary or will have different values.

2.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) List the goals of psychological research

The goals of psychological research are:

- Description,
- Explanation
- Prediction
- Control
- Application

Check Your progress II

- 1) What are the different types of variables?

The different types of variables are:

- **Independent variable:** Variable that is manipulated by the researcher is independent variable.
- **Dependent variable:** In a research, variable that is measured for any changes when independent variable is manipulated is dependent variable.
- **Extraneous variable:** Variables that may impede or interfere in the relationship between independent variable and dependent variable are called extraneous variables.

Check Your Progress III

- 1) State the three main categories of descriptive research.

There are three main categories of descriptive research, viz, naturalistic observation, case study and surveys.

Check Your progress IV

- 1) What is action research?

Action research can be termed as a research having certain purpose. Here the focus is mainly on how the research will benefit the participants.

Check Your Progress V

- 1) List the three ethical principles that were highlighted in the Belmont Report.

The Belmont Report was presented by U.S. Department of Health, Education and Welfare in 1979, where three ethical principles were highlighted:

- **Respect for persons:** Recognising the autonomy of the participants and protecting those with lower autonomy.
- **Beneficence:** Maximising benefits and minimising any harm and risk to the participants.
- **Justice:** Fairness in terms of who receives the benefits of research and faces risks.

2.8 UNIT END QUESTIONS

- 1) Explain the significance of research in applied social psychology.
- 2) Describe any three research concepts and components
- 3) What is population and sample? Describe various sampling techniques.
- 4) Describe descriptive and experimental research.
- 5) Describe action research.
- 6) Highlight the ethics in psychological research.

UNIT 3 QUALITATIVE RESEARCH IN APPLIED SOCIAL PSYCHOLOGY*

Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Qualitative Research: An Introduction
- 3.3 Methods of Data Collection in Qualitative Research
 - 3.3.1 In-depth Interview
 - 3.3.2 Narrative Interviews
 - 3.3.3 Focus Group
 - 3.3.4 Participant Observation
 - 3.3.5 Ethnography
 - 3.3.6 Grounded Theory
 - 3.3.7 Case Study
- 3.4 Data analysis in Qualitative Research
 - 3.4.1 Grounded Theory Codir
 - 3.4.2 Trematic Analysis
 - 3.4.3 Qualitative Content Analysis
 - 3.4.3.1 Techniques of Quantative Content Analysis
- 3.5 Let Us Sum Up
- 3.6 References
- 3.7 Key Words
- 3.8 Answers to Check Your Progress
- 3.9 Unit End Questions

3.0 OBJECTIVES

After reading this unit, you will be able to,

- explain qualitative research;
- discuss the methods of data collection in qualitative research; and
- describe data analysis in qualitative research.

3.1 INTRODUCTION

Fatima was a psychology student and wanted to carry out her research on women related issues. She read through various review of literature and also

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discussed with experts and decided to carry out a study on female survivals of domestic violence. Based on her discussion with her supervisor, she decided to use an in-depth interview method to collect relevant information from the participants.

Sonal worked as a counsellor with a Non Governmental Organisation that worked to create health related awareness amongst people in a village in Bihar. She wanted to understand the awareness about reproductive health amongst women in the village. In order to do so, she decided to create focus groups and collect information from the women participants.

John was a psychology faculty in a college. He wanted to understand the use of social media by adolescent students in his college. He decided to use interview method to collect information on the use of social media by the adolescent students.

As can be seen in the above examples, the methods of data collection used are interview and focus groups. These and many more can be described as the methods of qualitative research. In the previous unit, we discussed about research in general as well as we focused on quantitative research. In the present unit, we will discuss about qualitative research, methods of data collection and data analysis in qualitative research.

In psychology, the focus is often on quantitative methods of research, that we discussed in the previous unit. But we also need to focus on the qualitative research that can help us collect relevant information and data. Often mixed methods approach is also employed where both qualitative method and quantitative method are employed in the research.

3.2 QUALITATIVE RESEARCH: AN INTRODUCTION

It is important to remember that the approach, method, design, sampling technique, tools for data collection and analysis that you use for your research are selected based on the research objectives. There are many research areas that cannot be suitably studied with the help of quantitative methods and qualitative research methods are more adequate. The focus of quantitative research is on numbers (you studied about quantitative research in BPCC105 and also discussed various statistical analysis under BPCC104). With regard to qualitative research, the data is non-numerical. It helps provide an in-depth knowledge and information about the area of research. It also helps bridge the gap created as a result of the limitations of quantitative research. Qualitative research helps in providing a qualitative understanding of certain events, phenomenon or behaviour. The types of data in qualitative research (Flick, 2014) are:

- **Talk data:** A lot of qualitative research depends on talk. The very first approach in this regard is interviews, where the interviewee has to respond

to certain questions. The second is narratives, where the participants are asked narrate about their experience or their life histories after certain event, for example after death of a significant person. Interviews could also combine questions and narratives. The third approach is focus group, where discussions are stimulated or questions are asked in groups. The data thus collected can either be noted down or recorded using audio visual aids so that they can be analysed later on.

- **Data beyond talk:** We know that not all behaviour is verbal but there is also a significant aspect, that is nonverbal behaviour. And this can very well be studied with the help of observation. Observation can also be noted and recorded with help of various method including checklist or with the help of visual aids.
- **Use of existing data:** Various records, documentations, research articles etc. are already available can be studied. Besides the above there are also books, videos, films and photographs that can be studied.

Thus, the verbal data that mainly denotes the words can be collected using methods like interview, narrative interviews (interviews and narratives are used in combination as well), focus groups and so on and data beyond words can be collected using methods like observation ethnography and so on. Besides, information can also be collected with the help of photographs, videos, films and documents. The selection of the method of collecting verbal data will mainly depend on the research question. Though it also depends on whether the interviewer will be able to apply the type of interview and whether the interview type is suitable for the interviewees.

Analysing data in qualitative research is complex. There are two important approaches in this regard, the first is coding and categorisation and the other is investigation of data in a context. Coding can be explained as a process where, the statements from an interview are identified and labeled by putting them in categories (Flick, 2014). In coding mainly the grouping of the data is carried out and then they are categorised. And this can be done with statements, observations and even documents. These categories can be predefined before the analysis or during the analysis. Various softwares like ATLAS.ti, NVivo, MAXQDA, etc. can be used in order to code and categorise the data.

With reference to investigating data in context, the context of the data is focused on and the responses, narratives etc are analysed based on the context.

Often, as per the objectives of the research, both quantitative and qualitative research approaches can be used to study a certain research area, this is also referred to as mixed methods approach. Triangulation can also be carried out. According to Flick (2014, page 183), triangulation can be defined as “the combination of different methods, study groups, local and temporal settings and different theoretical perspectives in dealing with phenomenon”

Triangulation includes formalisation of relation between quantitative and qualitative research, enhancing the quality of qualitative research and adequately carrying out qualitative research. The types of triangulation are as follows:

- **Data triangulation:** This denotes utilisation of various data sources. In this context we can differentiate between time, space and persons. Thus an event or phenomenon can be studied on different dates, in different places and from different individuals.
- **Investigator triangulation:** In order to reduce biases, different interviewers/ observers are employed.
- **Theory triangulation:** The data is approached through multiple perspectives and hypothesis with an aim to multiply the possibilities of generating knowledge.
- **Methodological triangulation:** Methodological triangulation can be categorised into within- method and between-method. An example of within-method includes measuring an item in a questionnaire using different sub-scales. And an example of between-method includes combining questionnaire with an interview method.

Thus, by using triangulation, the methodological and theoretical access of the area of research selected by the researcher can be extended. Though it needs to be remembered that it requires investment of effort and resources

Check Your Progress I

- 1) List the types of data in qualitative research.

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3.3 METHODS OF DATA COLLECTION IN QUALITATIVE RESEARCH IN APPLIED SOCIAL PSYCHOLOGY

Let us now look at some of the methods of qualitative research that can be adequately used in applied social psychology. Qualitative research mainly involves data that is not numerical or is based in interviews, observation, written evidences and records and so on. Qualitative research are also exploratory in nature and have an inductive approach. the methods of qualitative research are described as follows:

3.3.1 In-depth interview

We discussed briefly about interview when we described the methods of data collection in unit 2. Here we will discuss in-depth interview as a method of qualitative research. In-depth interview mainly includes asking questions and these questions are open ended rather than close ended. Interviews are often carried out face to face and there is one (or sometimes more than one) interviewer and one interviewee. One of the main advantages of this method is that as it is face to face, the interviewer is able to observe the interview. Thus along with verbal information, a lot of non-verbal information is also collected. There are three main types of interview, structure, unstructured and semi structured. Structured interview is also referred to as standardized interview. This type is standardised, as the name suggests and includes predefined questions that are sequenced in certain predefined order and also worded in certain way. Thus, there is not much freedom to the interviewer to make any changes to the questions asked. Unstructured interview is termed as unstandardised interview, this type of interview is more flexible and as such questions are not predetermined and the interviewer has full freedom to ask the questions in the way and sequence that he/ she wants to. This in a way provides the necessary freedom to the interviewer to make any modifications as per the demand of the situation. Semistructured interview is a combination of structured and unstructured interview. There will be an interview schedule that is predetermined, but the interviewer has full freedom to modify and make changes in it. It is very important that before the interview begins, the interviewer not only works on the interview schedule but also collects background information about the participant(s). During the interview listening and observation skills are very important as they will help the interviewer collect relevant information. As the interview starts, the rapport formation process also is significant as a good rapport with the participant will help interviewer gather more information.

The questions asked during the interview need to be clear and specific and care need to be taken that the interviewee has understood the question. After developing the questions you can also carry out 'piloting', that is, taking opinion from the experts regarding the questions developed by you. The questions can be critically analysed by the experts and suggestions can be given to delete, modify or improve them. The questions can also be administered to a small group of participants (as per the population of the research) to check their effectiveness. The questions can then be finalised for the research.

Some of the types of questions, that could be asked are as follows:

- **Warmup questions:** These can be used to create rapport with the participants. For example: How are you? How was your day?
- **Demographic questions:** These are questions asked to collect demographic details of the participants, like age, religion and so on.

- **Core questions:** The questions that pertain to the main objective of the research or subject area of the research are termed as core questions. The interviewer needs to ensure that maximum information is collected with the help of these core questions. And in this regard, the interviewer can use probes and prompts as well.
- **Clarifying questions:** Such questions can be used to further clarify certain points or aspects that were reflected in answers to the core questions.

The response can be written down or even recorded (with prior permission of the interviewee) so that they can be analysed later on.

The responses received can be thematically analysed. During the interview process, the interviewer needs to be careful about interviewer's bias.

3.3.2 Narrative Interviews

This can be termed as one of the major approaches in qualitative research. As described by Schütze, it can be described as a method for collecting narrative data. In narratives, initially how the whole situation started is denoted and then the relevant event from the narrative are selected and presented in a sequence as they occurred and the final situation is mentioned.

An interesting distinction can be made between 'research on narratives' and 'research with narratives'. Research on narratives denotes that the research is carried out on the narratives. Here narratives are analysed in order to understand their construction and how they work. Whereas, research with narratives denote that narratives are used in order to collect data regarding certain issue.

There are various ways of using narrative data in qualitative research and these include,

- analysing the written or recorded narratives, that already exist.
- stimulating narratives during interviews or focus group discussions.
- analysis of narratives that take place during an interview.
- Stimulating narratives in the interviews. Thus, there is an integration of narratives in the interview.

In narrative interview, the participant is asked to narrate the history related to the area of interest (based on the research objective) and the interviewer records this extempore narration and ensures that the narrative is consistent story of the events that occurred from beginning till the end. Such an interview begins with generative questions that are used to stimulate the narration. These are followed by narrative probing, where certain details that could have been left out during the narration are elicited. The last stage is balancing phase. In this the view point and theoretical accounts of the interviewee is taken. They can explain why certain things happened the way they happened.

Though a lot of relevant information can be collected using narrative interviews but there are disadvantages as well. The interviewee may not be adequately narrate the events. The interviewer as well needs to be adequately skilled to use the method.

Narratives can be analysed at four levels, personal, interpersonal, positional and ideological (Flick, 2014, page 286).

- **Personal:** What information is revealed about the individuals biography and life history.
- **Interpersonal:** The co-constructing process of events or issues that is seen as a shared achievement of the narrator and the person who is listening.
- **Positional:** Denotes how the narrator positions himself/ herself towards the event or issue that they narrated.
- **Ideological:** Denotes the contribution narratives constitution and delimitation of social groups and how boundaries are maintained.

3.3.3 Focus Group

In this method of qualitative research, certain questions or issues are discussed by a group of participants. Focus groups can be structured or unstructured and the group could be heterogeneous or homogeneous in nature. It may involve experts (referred to as Delphi group) who discuss certain important issues (for instance, health educators could discuss about certain health related issues of a certain community) or could be individuals from certain community/ area discussing about certain issue (like women empowerment). The size of the group will depend on the objective(s) of the research (though an ideal size would be twelve and for Delphi groups it could be around four participants) and the participants may or may not know each other. One of the main advantages of this method is that a lot of information is gathered. Though, there are disadvantages as well, as there could issues related to encouraging the participants to contribute equally and actively. And though this method in a way gives more control to the participants, ethical issue of confidentiality cannot be maintained. Besides, there is also the problem of social desirability on part of the participants that can impact the outcome of the study. The researcher needs to play a role of coordinator in order to facilitate and promote effective discussion and also to avoid any conflict between the participants. He/ she also needs to develop suitable rapport with the participants and provide proper information and instructions. Audio and visual aids can also be used to record the whole discussion that can later be analysed.

3.3.4 Participant Observation

As the name suggests, in participant observation, the observer participates along with other participants in the activities/events/ phenomena being studied so that he/ she is able to gather first hand information and interpret it effectively. Thus, the researcher is actively involved in activities carried out

by the participants. This type of observation is often used by social anthropologist and can be used to study tribal groups (Majumdar, 2015). To take an example, if the researcher is studying rituals and practices of certain community during a festival, then he/ she will actively participate in the same. As the researcher is actively involved he/ she is able to gather relevant information about the day to day activities, rituals, practices etc. of the community/ group. Though, seeking entry to the group could pose a challenge besides creating rapport with the community/ group. Some of the advantages of this method include opportunity to observe the behavior of the individuals in a natural set up, and opportunity to built rapport and closeness with the community/ group members that enables the researcher to collect in-depth information and develop deeper understanding. Further, as the researcher is actually participating, he/ she gets an original perspective about the events, phenomena, rituals etc. To mention some of the disadvantages, this method could be very time consuming. Also exiting the community/ group could be a challenge as the researcher forms a bond with the participants. Another disadvantage of this type is that if the participants are aware about the observer then their behaviour and interaction may get affected as they may not be spontaneous. Though, to deal with this, 'deception' can be used where the participants are not aware that they are being studied. But this can give rise to certain ethical issues and due care needs to be taken to protect the privacy and rights of the participants. The researcher also needs to be careful in noting down the observations and interpreting them. These need to be done as objectively as possible to avoid any bias and subjective interpretations. Also the researcher needs to be adequately trained and skilled to carry out effective observations. He/ she also needs to carry out a background study about the community/ group so that he/ she is able to study the events, phenomena, practices etc. from right perspective.

3.3.5 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. This method mainly involves study of participants in their naturalistic environment. Observation is widely used in ethnography and it is also less structured in nature. The researcher also plays an active role and more often than not participant observation is used. Various other methods like interview, using documental sources are also employed in ethnography besides observation. One of the main advantages of ethnography is that primary data is collected first hand and thus its validity is higher. Though its disadvantages include, lack of generalisation, inability to study cause and effect relationship, ineffective description of what is observed and some ethical issues (for instance, when deception is used by the researcher) may also crop up while using this method. Further, employing ethnography is also complex, as the researcher may find it difficult to decide what to study and why to study it. Further, when the problem and objectives of the study have

been decided, the researcher may find it difficult to get a smooth entry in to that particular community/ group and form a positive rapport with the members of that community group. Exiting the community/ group can again pose a challenge due to deep relationship and bond that the researcher may develop with members of the community/group. Ethnography does demand expertise on part of the researcher and is a time consuming method.

3.3.6 Grounded Theory:

Grounded theory was proposed by Glaser and Strauss in 1967. This qualitative method focuses on 'discovering' and studies the relationship between an empirical investigation and theory. Thus, the data collection is carried out with an aim to promote development of theory from the data collected. Some of the key components of grounded theory (Flick, 2014, page 398) include a continuous cycle of data collection, coding, analysis, writing, design, theoretical categorisation and data collection. Grounded, theory and discovery are the three main concepts of grounded theory besides 'constant comparison'. Constant comparison denotes that data analysis in grounded theory is initiated the moment data is collected and a comparison is carried out between the units of data or between the data units and probable explanations. In grounded theory, the data collected is analysed systematically and interpreted in order to generate a report, that can then lead to development of a theory. The grounded theory analysis includes memoing, sorting and writing.

3.3.7 Case Study

Individuals, groups, event, institutions and so on can be studies with the help of this method. Case study can be described as an approach that helps in obtaining information about the unit from varied perspectives. Case study thus helps obtain in-depth information about the unit . Case study can be used to study not only individuals, but organisations/ institutions, events and so on. Often multiple methods of data collection including interview and observation are used in case study to collect information about the unit. Case study can be termed as exploratory in nature where, in-depth data is collected from the unit/ participant using multiple methods of data collection. With the help of case study method, it is possible to gather relevant and large amount of data about the unit. And based on this information certain hypothesis(es) can be formulated for further research. Also certain unique cases, events, phenomenon and so on can be thoroughly studied with the help of this method. Most frequently used methods of data collection in case study include interviews, observation, referring to letters, notes and diaries of the participant and any other related documents. It is mainly a qualitative approach and the data obtained by the researcher is qualitatively analysed. When a case study is used in a research, it is important to first of all identify the focus of research, which in turn will guide the way the case (unit/ event/ phenomenon etc.) is to be studied by the researcher. In this regard suitable research questions can be formulated so that there is clarity in the

problem and objectives of the study. Also it is important to review the literature in this regard so that the researcher has adequate background knowledge (though this is true with any research). The case study is necessarily complex as any unit will have numerous dimensions like personal, social, economical, political and so on. Once the focus of the case study is clear, then the methods of data collection can be finalised. As stated earlier, varied methods of data collection can be used in case study. However, which methods are to be used will depend on the research questions and the research problem and objectives. The researcher will also need to decide about whether a single case will be taken or a small sample. This again will be determined by the research problem and objectives. Once the data is collected, the researcher can start organising and analysing it and while doing so the research questions and the main focus of the research needs to be kept in mind. Otherwise the main focus of the research can get lost in the large and in-depth amount of information gathered with the help of case study. Once the data is analysed, the researcher can then focus on preparation of report with interpretations, evidence and conclusions.

Check Your Progress II

- 1) List the types of interview.

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- 1) What is grounded theory?

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3.4 DATA ANALYSIS IN QUALITATIVE RESEARCH

Data analysis in qualitative research can be complex. It mainly involves description of an event or phenomenon. There could also be comparison of cases in this context. It also involves explanation, that is, identification of reasons for the differences in two or more cases. And then a theory can be developed with regard to the event or phenomenon. According to Flick

(2014, page 370) qualitative analysis can be defined as “interpretation and classification of linguistic (or visual) material with the following aims: to make statements about implicit and explicit dimensions and structures of meaning making in the material and what is represented in it”. In this context when we refer to meaning making it denotes subjective as well as social meaning. Qualitative data analysis may include both rough as well as detailed analysis of the material.

Data management is an important aspect before the researcher starts with analysis of data. In BPCC104, in the context of statistical analysis of data, we discussed how the raw data needs to be classified and tabulated. In a similar manner, in qualitative research, the researcher needs to prepare and organise the data so that it is available for analysis.

Let us now look at some ways in which data analysis can be carried out:

3.4.1 Grounded Theory Coding

We briefly discussed about grounded theory in methods of qualitative research. In this section we will explain the grounded theory coding. Grounded theory coding denotes the procedure that is followed for data analysis in order to develop a grounded theory (Flick, 2014). The data is interpreted keeping in mind its collection or how the material was sampled.

The grounded theory analysis includes memoing (or memo writing) that can be described as production of evidence by means of writing. They mainly include data conceptualisation in a narrative form. They could also mention the studies carried out in the area of interest as well as diagrams, quotes that are mainly used in order to link the concepts or to structure and conceptualise them. For memo writing there is no standard procedure that is followed but a lot depends on the researcher. The basic principles of memo writing as stated by Lempert, 2007 (as cited in Flick, 2014, page 401) include:

- The focus is not on application and confirmation, but on discovery and development of theory.
- Memo writing and diagramming of the concept is a relevant aspect of data analysis and they assist in further data collection and analysis.
- Memos are often written and read and rewritten that help reach abstract levels of theorizing.

In the context of memoing, it is also important to write field notes and these could include observation notes (related to perceptions in the field), methodological notes (application of methods and structuring of a situation), theoretical notes (memos) and personal notes (maintaining a research diary or journal).

Besides memoing, coding is also relevant in grounded theory. Coding denotes “developing categories, properties and relations between them” (Flick, 2014, page 403). The main purpose of coding is identification of

structures in the material. There are various ways in which the coding can be carried and some of the approaches are Strauss and Corbin's approach to coding, Glaser's approach that includes theoretical coding, Charmaz's approach to coding, to name a few.

There are three main steps involved in coding, open coding (initial coding as referred by Charmaz), structured coding (referred to as theoretical coding by Glaser and axial coding by Strauss and Corbin or focused coding by Charmaz) and selective coding that is the last step (but Glaser has put it before theoretical coding in his approach). The process of coding will culminate when there is theoretical saturation, that is, the coding process does not lead to new theoretical insights.

3.4.2 Thematic Analysis

When we collect data using a method like in-depth interview, the responses need to be analysed and in this context thematic analysis can be adequately used.

Braun and Clarke (2006, as cited in Flick, 2014, page 421) define thematic analysis as “ a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research.

Thematic analysis can be carried out keeping in mind (Flick, 2014 page 421) the following:

- 1) Theme can be explained as something that is relevant based on the research question and that can be viewed on some meaning/ patterned response within the set of data.
- 2) The main aim of the analysis is a description of data that is detailed and rich as well as an in-depth analysis of a certain aspect.
- 3) Distinction needs to be made between inductive thematic analysis and theoretical thematic analysis. Inductive thematic analysis involves development of the codes and themes based on the data. Theoretical thematic analysis is based on the analytical or theoretical interest of the researcher.
- 4) We also need to differentiate between semantic themes and latent themes. Semantic themes are related to the explicit or surface meaning of the data. These are basically the meanings that are expressed by the respondent verbally. Whereas, latent themes are much more in-depth and involves identification of the underlying meaning, ideas, assumptions, conceptualisations and so on. Thus, in latent themes, the underlying aspect or meaning of the explicit meaning of data is examined.

- 5) Decision regarding whether the approach of data analysis will be realist or constructionist is taken in order to achieve epistemological clarity.
- 6) Distinction also needs to be made between the research questions and the questions asked during the interview.

Thus, in thematic analysis the main point is to identify the patterns of meaning that repeatedly occur. And while doing so, the following steps are important:

Step 1 Become familiar with the data: Based on the responses or material of the participants, a transcript can be prepared and it is to be read several times.

Step 2 Initial codes need to be generated: Based on the material, codes are to be developed. This can be done keeping in mind the semantic and latent themes. Also it is important to ensure that the context of excerpt is focused on and any statement can be simultaneously coded for different themes.

Step 3 Themes are to be identified: The codes can be sorted in to different themes and relevant data excerpt can be collated in the themes.

Step 4 Themes are to be reviewed: Themes can be broken in to sub themes in order to refine the development of the codes system. And in this regard less significant themes can be left out. The focus can be either on the whole data set or the excerpt.

Step 5 Themes are to be named and defined: In this step, thematic maps can be created, These maps serve as visual representations of the themes as well as sub themes and also indicate the links between them. Suitable title also need to be provided to the themes so that what they represent is clear,

Step 6 Report is to be prepared: Based on the above steps a report is prepared

3.4.3 Qualitative Content Analysis

Qualitative content analysis can be used to analyse material from interview responses to newspaper article and so on. Any textual material can be analysed with the help of qualitative content analysis. The main goal of content analysis is to reduce the material. Content analysis mainly uses the categories that are taken from theoretical model. Shereier (2014 as cited in Flick, 2014 page 429) defined qualitative content analysis as “a method that can be used for systematic description of meaning of qualitative data. It is a method that is systematic and flexible and can be used to reduce the data”.

The steps involved in qualitative content analysis (Scherier, 2014) are as follows;

Step 1 Research question is decided

Step 2 Material is selected

Step 3 A coding frame is to be built

Step 4 Segmentation is carried out

Step 5 Trial coding

Step 6 Coding frame is evaluated and modified:

Step 7 Main analysis

Step 8 Presentation and interpretation of the findings

In the above steps, building a coding frame is an important step. In this, Based on the material that is selected, structuring and generating is carried out. Structuring involves development of main categories and generating involves creating sub categories for the main categories. The categories can be developed based on the existing literature available or on the basis of area of interest of the research. Development of categories based on the material that is analysed is to be carried out only in certain cases. The categories also need to be labels and a brief description also needs to be provided.

According to Mayring, the procedure for content analysis (Flick, 2014 page 430) mainly involves the following:

Step 1 Material is defined: The interview or the parts of the material that are important in answering the research questions are selected.

Step 2 Situation of the data collection is analysed: This includes focusing on how the material was generated, the persons involved in the generation of the material, individuals present during the situation, the origin of the document and so on.

Step 3 Formal characterisation of the material: The focus here is on whether the material documented with the help of a recording or a protocol, during the editing of the text whether there was any influence on the transcription.

Step 4 Direction of the analysis: The direction of the analysis for the text is to be denoted and what interpretations are to be made from them are defined. Thus the research question is defined again and the intentions of the researcher with regard to the text material is also mentioned.

Step 5 Based on the theories, the research question is further differentiated: It is important that the research questions are defined and categories are identified before the process of analysis of material starts.

Step 6 Defining analytic units: In this context we need to understand coding unit, contextual unit and analytic unit. Coding unit denotes, the smallest element of the text that may be analysed, the minimal part of the material which may fall under in certain category. Contextual unit denotes, the largest element of the material that may fall in certain category. Analytic unit denotes the passages that are analysed in a sequence.

Step 7 Actual analysis and interpretation: The analysis of the material is carried out and the results are interpreted based on the research questions. Questions related to validity are also taken care of.

3.4.3.1 Techniques of Qualitative Content Analysis

Let us now focus on some of the techniques of qualitative content analysis.

Summarising qualitative content analysis: In this technique, the paraphrasing of the material is carried out. The passage having same meaning are dropped, which helps in reducing the material. In order to do so, reformulation of paraphrases are carried out on abstract and general level. Some of the rules involve in this context are:

- In the context of paraphrasing, the passages with less or no content are deleted. Further, the context is also translated in to a coherent level of language. The paragraphs are also converted to short version on the basis of grammar.
- Generalisation is carried out of the paraphrases and predicates on abstract level. The paraphrases that are above the intended level of abstraction are retained.
- The initial reduction is carried out where the paraphrases within the analytic unit that have same meanings are deleted. the paraphrases that fall below the intended level of abstraction are also deleted. The paraphrases carrying the central contents are retained and in case of any doubts the theoretical assumptions are referred to.
- In second reduction, bundling is carried out paraphrases that are similar are summarised in to one statement. Construction/ integration is carried out where the paraphrases on same issue are also summarised. Further, paraphrases with different statements on same issue are also summarised. In case of any doubts the theoretical assumptions are referred to.

Explicative content analysis: In this technique the ambiguous or contradictory paragraphs are diffused. This is done by involving the context material in the analysis, In this context, narrow context analysis and wide content analysis can be described. In narrow content analysis in order to explain the passage that is under analysis, additional statements from the existing texts are used. In wide content analysis, information outside the text is utilised in order to explain the passage that is under analysis. And on the basis of this analysis, explicating paraphrasing is formulated and put to test.

Structuring content analysis: In this technique a formal structure or types in the material are identified. Structuring is carried out on the basis of formal, typifying, scaling level or as per the content. It mainly involves categorisation of data based on a criteria that is previously determined. The steps in structuring content analysis include identifying the analysis material,

defining the structuring dimensions, defining the category system, screening of the material and extracting the fragments and revising the categories.

Check Your Progress III

- 1) What is thematic analysis?

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- 2) List the techniques of qualitative content analysis.

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3.5 LET US SUM UP

To summarise, in the present unit we mainly focused on qualitative research in applied social psychology. With regard to qualitative research, the data is non-numerical. It helps provide an in-depth knowledge and information about the area of research. It also helps bridge the gap created as a result of the limitations of quantitative research. Qualitative research helps in providing a qualitative understanding of certain events, phenomenon or behaviour. Types of data in qualitative research were also discussed. The unit also highlighted various methods of qualitative research like in-depth interview, narrative interview, focus group, participant observation, ethnography, Grounded theory and case study. Further, data analysis in qualitative research was also explained. Data analysis in qualitative research can be complex. It mainly involves description of an event or phenomenon. There could also be comparison of cases in this context. It also involves explanation, that is, identification of reasons for the differences in two or more cases. Under qualitative analysis we discussed about Grounded theory coding, thematic analysis and qualitative content analysis.

3.6 REFERENCES

- Bordens, K. S and Abbott, B. B. (2011). *Research Designs and Methods: A Process Approach*. New Delh: McGraw Hill Education (India) Private Limited.
- Flick, U. (2014). *An Introduction to Qualitative Research*. Delhi: Sage
- Kenneth, M. C and Louise, R. A. (2012). *Research Methods in Applied Social Psychology*. In F. W. Schneider, J. Gruman, & L. M. Coutts (Eds.), *Applied social psychology: Understanding and addressing social and practical problems*. Delhi: Sage.
- Osakamp, and Schultz, P.W. (1998). *Applied Social psychology* (2nd ed). California: SAGE.
- Sears, D. O. Peplau, A. L., and Taylor, S. E., (2006) *Social Psychology*. Englewood Cliffs, New Jersey: Prentice Hall.
- Shaw, M. E. and Costanzo, P. R.(1982). *Theories of Social Psychology*. New York: McGraw-Hill.
- Shetgovekar, S. (2018). *An Introduction to Social Psychology*. Delhi: Sage

3.7 KEY WORDS

Focus group: In this method of qualitative research, certain questions or issues are discussed by a group of participants.

Grounded theory: Grounded theory focuses on ‘discovering’ and studies the relationship between an empirical investigation and theory.

Grounded theory coding: Grounded theory coding denotes the procedure that is followed for data analysis in order to develop a grounded theory (Flick, 2014). The data is interpreted keeping in mind its collection or how the material was sampled.

In-depth interview: In-depth interview includes asking questions and these questions are open ended rather than close ended. Interviews are often carried out face to face and there is one (or sometimes more than one) interviewer and one interviewee.

Narrative interview: As described by Schütze, it can be described as a method for collecting narrative data.

Participant observation: In participant observation, the observer participates along with other participants in the activities/events/ phenomena being studied so that he/ she is able to gather first hand information and interpret it effectively.

Qualitative analysis: According to Flick (2014, page 370) qualitative analysis can be defined as “ interpretation and classification of linguistic (or visual) material with the following aims: to make statements about implicit

and explicit dimensions and structures of meaning making in the material and what is represented in it”.

Qualitative content analysis:Qualitative content analysis can be used to analyse material from interview responses to newspaper article and so on. Any textual material can be analysed with the help of qualitative content analysis.

Thematic analysis:Braum and Clarke (2006, as cited in Flick, 2014, page 421) define thematic analysis as “ a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research.

3.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) List the types of data in qualitative research.

The types of data in qualitative research are:

- Talk data
- Data beyond talk
- Use of existing data

Check Your progress II

- 1) List the types of interview

There are three main types of interview, structure, unstructured and semi structured.

- 2) What is grounded theory?

Grounded theory focuses on ‘discovering’ and studies the relationship between an empirical investigation and theory. Thus, the data collection is carried out with an aim to promote development of theory from the data collected.

Check Your Progress III

- 1) What is thematic analysis?

Braum and Clarke (2006, as cited in Flick, 2014, page 421) define thematic analysis as “ a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail.

- 2) List the techniques of qualitative content analysis.

The techniques of qualitative content analysis are

- Summarising qualitative content analysis
- Explicative content analysis
- Structuring content analysis

3.9 UNIT END QUESTIONS

- 1) Elucidate qualitative research.
- 2) Describe in-depth interview and narrative interviews.
- 3) Explain participant observation as a method of qualitative research.
- 4) Discuss data analysis in qualitative research.



