

Module 6

Assessment and Appraisal in Guidance and Counselling-I



DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND
FOUNDATIONS OF EDUCATION

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

Who can account by ordinary methods for a Shakespeare, a Beethoven, or a Michelangelo and for all the wonder and renewal of culture such men bring into human life, so that history advances and never does in fact repeat itself? Yet even men of their stature were small children once—they did not know but had first to discover their faculties as they grew up. So it is in some degree with every human being. Every child is on a similar voyage of discovery; as a child, no matter what he may become later, he is in our responsible care, to help or hinder the latent genius of his being. Childhood is an awakening as well as a growing process: it leads from the “sleep” of infancy, through the “dream” of the childhood years, to the “waking to selfhood” of the adult.

—FRANCIS EDMUNDS

Assesment and Appraisal in Guidance and Counselling-I

Module 6



विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

First Edition

December 2008 *Agrahayana* 1930

Reprinted

December 2016 *Pausha* 1938

January 2021 *Pausha* 1942

PD 1T RPS

© **National Council of Educational
Research and Training, 2008**

₹ 105.00

Printed on 80 GSM paper

Published at the Publication Division
by the Secretary, National Council of
Educational Research and Training,
Sri Aurobindo Marg, New Delhi 110 016
and printed at Gita Offset Printers (P.) Ltd.,
C-90 & C-86, Okhla Industrial Area,
Phase-I, New Delhi 110 020.

ISBN 978-81-7450-909-3**ALL RIGHTS RESERVED**

- ❑ No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.
- ❑ This book is sold subject to the condition that it shall not, by way of trade, be lent, re-sold, hired out or otherwise disposed of without the publisher's consent, in any form of binding or cover other than that in which it is published.
- ❑ The correct price of this publication is the price printed on this page. Any revised price indicated by a rubber stamp or by a sticker or by any other means is incorrect and should be unacceptable.

**OFFICES OF THE PUBLICATION
DIVISION, NCERT**

NCERT Campus
Sri Aurobindo Marg
New Delhi 110 016 Phone : 011-26562708
108, 100 Feet Road

Hosdakere Halli Extension
Banashankari III Stage
Bengaluru 560 085 Phone : 080-26725740

Navjivan Trust Building
P.O.Navjivan
Ahmedabad 380 014 Phone : 079-27541446

CWC Campus
Opp. Dhankal Bus Stop
Panihati
Kolkata 700 114 Phone : 033-25530454

CWC Complex
Maligaon
Guwahati 781 021 Phone : 0361-2674869

Publication Team

Head, Publication Division : *Anup Kumar Rajput*
Chief Editor : *Shveta Uppal*
Chief Production Officer : *Arun Chitkara*
Chief Business Manager (In charge) : *Vipin Dewan*
Assistant Production Officer : *Deepak Jaiswal*

Cover and Layout

Blue Fish

Illustrations

Ashwani Tyagi

About the Module

The module on Assessment and Appraisal in Guidance and Counselling – I, as the name implies, has been developed to help you understand the theory and practice of how assessment and appraisal is to be understood and conducted in providing guidance and counselling to your students.

It is essential for you to learn that assessment and appraisal is central to the counselling process. By using assessment and appraisal procedures, you will be able to gain understanding of the individual and in turn foster individual's understanding himself or herself. In this sense, you will appreciate that assessment and appraisal processes and procedures are the means of obtaining comprehensive understanding of students thereby fulfilling the goal of counselling.

There are four units in this module. The first unit will help you understand the meaning and significance of assessment and appraisal and other allied concepts. You will also learn about the principles and assumptions underlying students' assessment and appraisal which are essential for judicious and responsible use of data.

As counsellors, you will be required to be continuously engaged in the process of understanding the individual, and therefore you will learn about the different types of assessment procedures and tools to arrive at the understanding. In the second unit, you will learn about the psychological tests and skills required for selection, administration, scoring and interpretation of tests. As a trained counsellor, you would be most qualified to use psychological tests, therefore you will carry the responsibility to follow certain ethical practices and professional standards. The contents of this unit will also sensitise you towards this end. The third unit focuses on the tools for qualitative assessment. With requisite knowledge and insight, you will be able to evaluate the relative strengths and significance of using qualitative techniques for different purposes. You will also learn about various issues and cautions which need to be kept in mind while selecting and interpreting assessment tools as well as communicating scores. Your competencies in testing and some qualitative tools will be build up through 'Practicum in Psychological Assessment' which has been separately designed.



As you progress through the fourth unit, you will also be able to build your understanding of individual differences within and across individuals on the popularly known psychological attribute of intelligence. The unit will focus on the changing concept of intelligence and its implications for assessment.

Overall this module, through its contents, activities, experiential exercises will provide you the necessary insight into the fundamentals of assessment and appraisal to enable you to conduct informed interventions as part of the counselling process.

Module Development Team

CONTRIBUTORS

Anjum Sibia, *Professor*, DEPF, NCERT, New Delhi
Ashum Gupta, *Professor*, University of Delhi, Delhi
Jayanti Banerjee, *Counsellor*, St. John's School, Chandigarh
Saral Jawa, *Reader*, Lady Sri Ram College of Women, Delhi
Sushma Gulati, *Professor and Head*, DEPF, NCERT, New Delhi

CONSULTING EDITOR (Instructional Design)

Bruce Thompson, British Columbia, Canada

TEAM LEADERS AND EDITORS

Sushma Gulati, *Professor and Head*, DEPF, NCERT, New Delhi
Anjum Sibia, *Professor*, DEPF, NCERT, New Delhi

PROJECT IN-CHARGE

Nirmala Gupta, *Professor*, DEPF, NCERT, New Delhi

MEMBERS OF THE REVIEW TEAM (OCTOBER, 2016)

K.Chandrasekhar, *Associate Professor*, RIE, Ajmer
N.C.Ojha, *Assistant Professor*, RIE, Bhopal
Sushma Gulati, *Professor*, DEPF, NCERT (Retd.), New Delhi
Sushmita Chakraborty, *Assistant Professor*, DEPF, NCERT, New Delhi

MEMBER COORDINATOR

Anjum Sibia, *Professor and Head*, DEPF, NCERT, New Delhi



Acknowledgements

National Council of Educational Research and Training (NCERT) gratefully acknowledges the partnership and support of Commonwealth of Learning (COL), Vancouver, Canada for development of course material. Special thanks are due to Bruce Thompson, sponsored by COL, for his expert guidance and training in preparing the self-instructional material. This has been a gigantic task which has been possible with the help and cooperation of a large number of persons whose contribution we wish to acknowledge.

We gratefully acknowledge the continued support and encouragement provided by Professor Krishna Kumar, Director, NCERT all through the different stages. Special thanks are due to Professor Sushma Gulati, Head, DEPF, NCERT for her constant guidance and leadership in steering the work through its various stages and to Professor D. K. Bhattacharjee the former Head of the Department for his help in initiating this work.

Besides the contributors thanks are also due to – Professor Sushila Singhal, Jawaharlal Nehru University (Retd.), New Delhi, Dr. Renu Kishore, Daulat Ram College, Delhi and Prof. B. N. Puan, Utkal University (Retd.), Bhubaneswar for their valuable suggestions during review workshops.

Our thanks are also due to Dr. Indrani Bhaduri for her inputs in the initial drafts of some units and related coordination work. Dr. P.K. Mishra deserves special thanks for taking it forward till the printing stage.

We also thank Chandar Prakash, Computer Operator and Naresh Kumar DTP Operator for typing, formatting and preparing graphics for this module.

Dr. Vandana Singh and Mrs. Usha Nair also deserve thanks for language editing. The help provided by the Publication Department for preparing illustrations, layout and designing, and getting the material printed is also gratefully acknowledged.



Contents

| | | |
|----------------|--|------------|
| | About the Module | <i>iii</i> |
| Unit 1: | Understanding Assessment and Appraisal | 1 |
| Unit 2: | Using Psychological Tests | 16 |
| Unit 3: | Qualitative Assessment in Guidance and Counselling | 36 |
| Unit 4: | Understanding Intelligence and Its Assessment | 69 |



1

UNDERSTANDING ASSESSMENT AND APPRAISAL

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Meaning of Assessment and Appraisal
 - 1.2.1 Assessment
 - 1.2.2 Measurement
 - 1.2.3 Psychological Test
 - 1.2.4 Evaluation and Appraisal
- 1.3 Purposes of Assessment and Appraisal
- 1.4 Principles of Assessment
 - 1.4.1 Assessment should be Holistic
 - 1.4.2 Assessment should be On-going
 - 1.4.3 Assessment should be Balanced
 - 1.4.4 Assessment should be Accurate
 - 1.4.5 Assessment should be Confidential
- 1.5 Process of Assessment
 - 1.5.1 Formulating Goals
 - 1.5.2 Identifying Tools and Techniques
 - 1.5.3 Data Collection
 - 1.5.4 Interpreting Specific Assessment Data
 - 1.5.5 Integrating Data from Different Sources
 - 1.5.6 Formulating Assessment Information
 - 1.5.7 Reformulating Goals
- 1.6 Summary
 - Self-Evaluation Exercises
 - Answer Key to Self-evaluation Exercises
 - Answer Key to Self-check Exercises
 - Reference
 - Suggested Readings





Understanding Assessment and Appraisal 1

1.0 INTRODUCTION

Assessment and appraisal are an integral part of day-to-day life. You perform many activities in which assessment is used though you may not be conscious of ever doing so.

For example, when you plan to buy items in certain quantity you are assessing the requirements. When you judge the worth and the quality of those items before buying, you are making use of appraisal.

Assessment and appraisal are central to the work of counsellors. A counsellor is constantly engaged in making use of assessment while collecting information about the client and is involved in appraisal while analysing and interpreting the obtained information.

The accuracy involved in the process of selecting appropriate techniques, collecting data, integrating the information obtained from various techniques and sources, interpreting, reporting, and communicating information, depends upon the skills of the counsellor.

In this unit, you will understand the meaning of assessment, appraisal and other related concepts, and the purpose and process of assessment and appraisal in guidance and counselling.

1.1 OBJECTIVES

After going through this unit, you will be able to:

- *differentiate* between assessment and appraisal.
- *describe* the purposes for which psychological assessment data are used.
- *enumerate* the important principles of assessment.
- *illustrate* the process of assessment and appraisal involved in counselling.

1.2 MEANING OF ASSESSMENT AND APPRAISAL

As a counsellor, it is important to know how psychological assessment and appraisal helps in the understanding of the client. Though assessment and appraisal are sometimes used synonymously or interchangeably, to begin with, there is a need to clarify the meaning of assessment and appraisal and some of the related concepts.

1.2.1 Assessment

Assessment is a process of collecting information about the client or individual. When you interact in a social situation and notice a behaviour pattern occurring and make a note of it, you are making use of an informal assessment. Similarly, when a teacher in a class observes that a particular student very frequently shows a particular type of behaviour, she is also making use of informal assessment. Formal assessment is planned. It is based on certain predetermined criteria and is done by using standardised tools and procedures. For example, when a teacher collects and scores a student's written essay, a written examination, practical test or interview, she is making use of formal assessment.

Psychological assessment involves assessment of psychological characteristics such as abilities, interests, aptitudes, personality qualities, attitudes and beliefs. This process of assessment makes use of psychological tests or other qualitative methods. The difference in using a psychological test or a qualitative method is in terms of the approach of the measurement. Psychological tests are standardised tools to assess an individual's characteristics like abilities, interest and personality. Interpretation of data collected by psychological tests is meaningful, accurate and enriched when it is augmented by information collected from qualitative data. Qualitative data involves a detailed description of the situations, events, interactions, and observed behaviour, the use of direct quotations from the counselee about their experiences, attitudes, beliefs and thoughts. The counsellor must make use of both the psychological test data and data collected by qualitative methods.

1.2.2 Measurement

It is an estimate of extent or the magnitude of an attribute, or trait displayed or possessed by the individual based on some assessment procedure. It indicates the magnitude of the characteristics expressed in the form of a score. It does not give the description. Suppose your client gets a score of 50 on a particular ability test. The score of 50 is the measure of a particular ability however; it does not explain whether it is high or low and good or bad.

1.2.3 Evaluation and Appraisal

When you are evaluating you are actually forming an opinion, making a judgment or placing a value on a measurement. For example, in your training programme as counsellor you earn a raw score of 55 on a particular test. Suppose this raw score is classified, as grade B. Placing a B will be an evaluation, which can then help in making comparisons with other trainees in the class.

Appraisal is also a process of giving meaning to the assessed data. It may be in terms of strength, desirability or utility. The assessed characteristics are judged against certain criteria developed by knowledgeable experts. For example, after obtaining a score in a psychological test or tool the counsellor interprets the score in order to say that the score is high or low on the basis of certain standards, in a particular ability.

Evaluation and appraisal are used synonymously because both involve making judgments, drawing conclusions and so on.



Table 1.1 : Meaning of Basic Concepts

| Concept | Meaning |
|--------------------------|--|
| Assessment | Process of collecting information – formal, informal, qualitative, quantitative. |
| Measurement | Process of assigning numbers to the collected information which is quantitative i.e., it is a numerical estimate of how much of something an individual displays or possesses. |
| Evaluation and Appraisal | Process of attributing meaning to collected information through assessment. |



Self-check Exercise 1

Please fill in the blanks from the alternatives given below:

(i) Test (ii) Assessment (iii) Appraisal (iv) Measurement

- _____ is a quantitative measure which estimates the extent of the presence of something an individual possesses.
- _____ is giving a judgement on the desirability or utility of assessed characteristics.
- _____ is the process of collection of information through different types of tools.

1.3 PURPOSES OF ASSESSMENT AND APPRAISAL

It is important to know what purposes assessment data serves as used by counsellors. Assessment and appraisal are basic to the work of the counsellor and are required at different stages of guidance and counselling. Assessments and appraisals are undertaken to achieve the ultimate goal of counselling i.e., to understand the individual or client and to facilitate the individual's understanding of himself or herself, allowing, them to make better decisions and solve problems. In this sense, assessment and appraisal serve as means to fulfill the goals of counselling and hence is basic to the work of a counsellor.

Understanding individual differences is the fundamental assumption underlying assessment and appraisal. Assessment and appraisal become necessary to know the extent of individual differences. Through the assessment and appraisal processes, counsellors can make comparisons between individuals and also measure the changes taking place over a period of time. For example, human characteristics, abilities, personalities, needs, and goals, etc. are constantly changing.

The purposes of assessment and appraisal are:

- *Self-understanding*

Fostering an understanding of the individual about himself/herself is the basic purpose of carrying out an assessment. Gaining an insight helps the clients to understand themselves better, helping them to know what they can do and can do

well, what are their strengths and limitations, which in turn enables them to be self confident, achieve goals, and to have more control over life.

- *To diagnose students' problems*

Diagnosing students' problems is one of the important purposes of assessment data. By using the data properly, you can interpret causal factors. Assessment data can sometimes be used to identify certain client characteristics when the problem is intensified by such factors as values, interests, poor habitual methods, personal problem solving, and patterns of relating to others. The assessment data also helps in identifying variables like environmental background and experiences, physical health and health history, academic performance and educational history of an individual and his work experience. You will learn more about it in the practicum.

- *To assist in educational and career planning*

Assessments made through using different tools can help in guiding the student in making education and career choices. For example, a student who has been consistently performing well in a science subject may be guided to choose a science stream after his tenth standard. This may also lead to making career choices also related to science. However, it will not be done in isolation. Although excelling in a particular subject area may not be really an indicator as there may be inclinations for different careers. Nevertheless, assessment data provide useful insights into career planning.

- *To help predict future performance*

Counsellors may use assessment data to estimate student abilities, personality, qualities, attitudes and habits etc., that have implications for his/her success and adjustment or lack thereof. This can help to predict the future performance of the individual as well. A trained counsellor will not only assess the basis of previous year exam results or on the student's current performance in the class but will keep in mind other related factors like motivation and study habits etc. to assess and predict the student's future performance.

- *To evaluate the outcome of counselling*

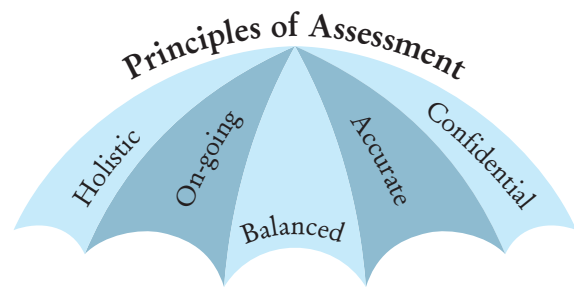
Assessment is required prior to counselling and also at the end of it. Assessment prior to counselling may involve testing, interviewing, etc. Assessment after counselling is primarily aimed at assessing the effects of counselling in addressing the student's problem. The assessment data if required, thus can provide valuable insights to the counsellor about the areas of further intervention, as well as the progress achieved in terms of expected outcome.

1.4 PRINCIPLES OF ASSESSMENT

The processes and procedures of assessment and appraisal rests on certain fundamental assumptions and principles which are important for you to understand. (Shertzer & Linden, 1979) Understanding of these principles provides you insights into the theory and practice of the various procedures. The principles would also throw light on the factors that must be kept in mind while using and interpreting assessment and appraisal data. Principles



indicate what kind of precautions you should take into account. Counsellors, who have insight into these principles, are aware about the potentials and pitfalls of assessment procedures for their appropriate use. Below are some of the salient principles of assessment which are grouped into five over-riding principles with some caveats. These are (1) holistic, (2) on-going, (3) balanced, (4) accurate and (5) confidential.



1.4.1 Assessment should be Holistic

Assessment is not based on small bits of information obtained on some aspects of the client but integrates all aspects of the client's life. It also involves the use of multiple methods in collecting information. Using a combination of assessment techniques increases the likelihood of positive intervention which help in achieving the set goals.

The following are the holistic principles of assessment :

- *Assessment is a systematic process, arriving at an understanding of the individual*
To make the assessment process systematic, a counsellor needs to plan what to assess, when to assess and in which settings to assess. You should keep in mind these three important factors. Information should be obtained from multiple sources and perspectives in order to have a total and a complete perspective of the client. Assessment should not be based on small bits of information obtained on some aspects of the client but should integrate all aspects of the client's life.
- *Assessments should be made within the context of life pattern of the individual*
The assessment of the characteristics of the client may give you the facts but they may not provide a complete picture of the problem. It is important that the counsellor takes into consideration a variety of supporting information regarding other facets of the person to understand the problem better. For example, a student may experience difficulty in school due to limited academic preparation, but it may not be the sole factor. Other factors that might not show up but become more evident in due course are characteristics such as lack of self-esteem or self-confidence which could influence the academic achievement of the student.
- *Assessment measures and procedures must be based on the demands of the situation*
No single method or procedure can be universally recommended. The selection of the tool and procedure to be used will depend on the demands of the presented situation. First the preliminary data should be collected and examined before obtaining information on supporting factors or undertaking large scale testing procedure. For example, if the student's grades are low, a counsellor must first consider his or her health, family background before factors like testing the students' abilities, motivations, attitude to school etc., which might have contributed to his obtaining a low grade. There are tools available for collecting information about students and their family background.

- *Special conditions and situations contributing to the understanding of the clients behaviour must be given due consideration in assessment*

It has been generally observed that frequency of a particular behaviour is considered important in assessment of clients behaviour but this may not be true in certain situations. For example, when a very motivated student becomes irregular in the class, teachers often attribute this to a decline of interest in studies. The student might have become irregular because she might be spending time in preparing for some competitive exams for which coaching classes are held during the school time. In this situation, assessment must take care of special conditions that might have contributed to the problem.

- *In any appraisal, three major aspects of behaviour: capacity, motivation, and control of expression must be considered singly and in relation to each other*

The client's problem can be the result of any one of these characteristics or a combination of any of them. For example, one student may not perform well because of low intellectual ability, another student may have ability but still not perform well because of low motivation and yet another student may have ability as well as motivation but still may not perform well because of lack of emotional control. It is important to focus on these three aspects which may contribute to the problem.

- *Assessment must take into consideration subtle expressions in the behaviour of the client*

The counsellor should be alert to behaviour which is observable through non-verbal cues. Moreover, clients sometimes find it difficult to communicate with the counsellor. Non-verbal cues like facial expression, and mannerisms such as nervous hand movements or eyelid flutters as well as verbal cues such as tone of voice, hesitations in speech, and erratic responses to questions or other stimuli, lead to forming a more complete impression of the person. Such behaviours noted in a client file can be an invaluable supplement to the recorded data of formal assessments for holistic appraisal.

- *Assessment should take into account the culture and social context of the clients*

An assessment may vary in its significance for respondents coming from different cultures or living in different social contexts. Understanding the cultural context in which individuals function may lead to an enriched and holistic understanding of clients' behaviour. For example, a generally passive, dependent, and agreeable person may be prone to adjustment difficulties in a cultural context that values autonomy, self-reliance, assertiveness, and competitiveness. Conversely, an independent and highly competitive person might feel comfortable and flourish psychologically in a sub-culture that values assertiveness, but might feel alienated and adapt poorly in a society that subordinates individual needs and gives preference to the wishes and welfare of the group, and in which a passive and mild person would get along very well.

1.4.2 Assessment should be On-going

Assessment in counselling should be viewed not as a one-time activity but rather as a continuous process throughout the counselling. Psychological assessment can be done prior to, during and as a follow-up to counselling/intervention depending upon the requirement. On-going assessment allows comparisons between the clients initial presenting problems and the client's current functioning. The following are the principles of on-going assessment:





- *Psychological assessments must take into account the dynamic nature of human behaviours*

Understanding of the individual involves assessment of his characteristics, abilities, needs, goals, and ways of behaving. While making an assessment you should keep in mind that the assessment of a human being, his/her behaviours, characteristics, needs, goal are liable to change and are not static. So the assessment should be made in different situations and by using a variety of assessment techniques to be sure of the accuracy of the assessed data.

- *Conceptualisation of an individual must be continuous*

When you meet the client for the first time, as a counsellor you begin to get a sense of what an individual is like. As counselling progresses, your preliminary conceptualisation of the individual may change or may remain uncertain. It is important that the counsellor make refinements in conceptualising the individual as more and more information is collected and interactions take place.

- *Assessment needs to be considered as on-going and not episodic*

You may at times find or come across a striking factor or an episode about an individual client. For example, a person complains that he is having problem of adjustment and the counsellor also has the information that he lost his father when he was twelve years old. This information is meaningful only if the client was well adjusted prior to the death of the father but is showing constantly poor adjustment after his death. If the effect of an episode is viewed as consistent over a long period of time, only then may it be considered a significant factor.

- *As far as possible assessment should be based on longitudinal data*

Understanding of individual's behaviour is better and more meaningful if the data is collected over a period of time rather than relying simply on current information. For example, a student's problem is caused by a sudden personality clash with a particular teacher. The counsellor's interpretation that this problem is the result of inappropriate handling by the teacher may not be true. If the student in the past has shown similar problems in interaction with other teachers it cannot be inferred that inappropriate handling by the teacher causes that problem but it may be attributed to some characteristics of the client that needs to be examined and dealt with. Longitudinal data is particularly helpful for diagnosing problems of maladaptive behaviours.

1.4.3 Assessment should be Balanced

- *Assessment should be balanced in a manner to provide individualised as well as normative information*

Assessment makes use of normative data as well as individualised data. It is the purpose and situation that decide which type of assessment data is required. For example, in a classroom setting if a child/student is being assessed for counselling then individual data is collected, while on the other hand if a student is being assessed for awarding positions in class then it is a normative or group assessment where he is evaluated in comparison to other students of his/her class. Another example is when we have to select one candidate among many, for a particular position and try to see his/her standing in that particular group, normative assessment

is being used. However, when we want to know a student's relative strength to decide which course he/she should pursue, individualised assessment is needed. There are situations, which demand normative assessment, and there are situations where individualised assessment is preferred and in many situations both types of assessment are used. Neither kind of information is inherently superior to the other. They often compliment each other and a balanced emphasis on both promote the fullest possible understanding of a person being examined.

1.4.4 Assessment should be Accurate

- *Assessment must be accurate as far as possible*

For assessment to be accurate, it is essential that the assessment device used is accurate and the counsellor has the skill for interpreting the data. Accuracy of the assessment device depends on its reliability and validity. Reliable assessment techniques provide dependable and consistent information. Valid assessment techniques provide information for the desired specific purpose. In unit 2 of this module you will learn more about these aspects.

For example, when a client's response to any concern or issue or problem is assessed by a specific assessment technique and is the same at different times, it is said to be reliable. A test result is considered to be valid when it measures as precisely as possible the behavioural characteristics it purports to measure. Hence validity includes consistency as well as precision. All tools may not be hundred per cent accurate. Counsellors must keep in mind the possibility of errors and also try to minimise the errors by using reliable and valid tools following standardised procedure.

- *Information about the client must be assessed fully and economically*

For a full assessment, it is essential that information is collected from all those individuals who are involved with the client. When all those who are directly involved with the client are involved in assessment, information is not only exhaustive but also more accurate and appraisal more effective. For example, if one person involved with the client does not provide needed information or is not aware of it, the others may provide it. If particular information is provided consistently by all those involved with the client it further increases the accuracy of the assessed data.

Many times counsellors collect large amount of data about the client that is not even used for appraising the client. This generally occurs when the counsellor collects data without giving much thought to the client's problem or why they are collecting the information in the first place. The assessed data can be collected more economically if the counsellor critically thinks about the client's problem and uses the appropriate technique focused on the problems or situation. This would save time and effort of both the client and the counsellor.

- *Prediction of future behaviour should always be stated in terms of probability*

Human behaviour is too complex and dynamic. You as counsellor need to remember that no prediction of behaviour can be absolute and guaranteed. Prediction of behaviour should be stated in terms of probabilities, not absolutes. The needs of the individual and circumstances keep changing and so also do behaviours. It is important that any prediction should be made with great caution in terms of probabilities only as psychological characteristics interact in a complex way and are liable to change. Assessment, therefore, can only provide useful insights to derive inferences rather than making predictions in absolute terms.



1.4.5 Assessment should be Confidential

Clients need to be assured of confidentiality of their personal information. A much more open and frank discussion is likely when the client is assured that the assessment is confidential. This client assurance is achieved by building proper rapport based on mutual trust and respect and clarifying the nature and limits of confidentiality with the client prior to assessment.

- *Assessment data should be kept confidential*

Clients need to be assured of confidentiality of their personal information. A much more open and frank discussion is likely when the client is assured that the assessment is confidential. This client assurance is achieved by building proper rapport based on mutual trust and respect. It involves (a) communicating information about the persons being evaluated only for appropriate scientific and professional purposes, (b) Securely storing and preserving client records and (c) revealing information only to a person designated by the client or other duly authorised persons, except when otherwise permitted.

The principles of assessment if observed dutifully would increase the likelihood of carrying out accurate assessment and effective appraisal.



Self-check Exercise 2

Indicate if the following statements are True or False

| | True | False |
|---|------|-------|
| 1. Assessment should be on-going and should not be based on one episode in an individual's life. | () | () |
| 2. Prediction of future behaviour using assessment techniques is always correct. | () | () |
| 3. Social and cultural variables have an insignificant role to play in assessment. | () | () |
| 4. Human behaviour is dynamic therefore prediction should always be stated in terms of probability. | () | () |
| 5. Longitudinal assessment gives greater insight for assessment. | () | () |

1.5 PROCESS OF ASSESSMENT

In this unit we have been discussing assessment process that is systematised and planned. Now you will study the various steps involved in assessment process. The steps in process of assessment are depicted in Fig. 1.1.

1.5.1 Formulating Goals

The first necessary step in the assessment process is to define goals for counselling. When goals are clearly stated and are relevant, they guide the counsellor in determining what kind of assessment data to collect, what considerations to address in examining these data, and what implications of their findings are to be emphasised in their reports. Assessment in the absence of a specific goal can result in a futile exercise.

1.5.2 Identifying Tools and Techniques

Once the goals have been stated appropriately for which assessment has to be carried out, it is important that assessment techniques are chosen in a manner that they seek to provide information on each of the desired dimensions. There are multiple sources of information for which a variety of tools can be used to gather different kinds of information.

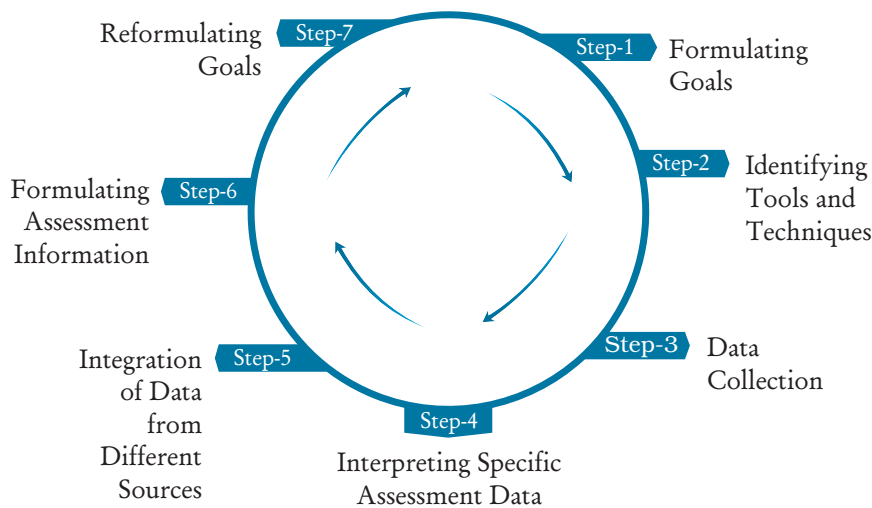


Fig. 1.1 : *Steps in the Process of Assessment*

For example, there could be data of formal psychological testing, data gathered on the basis of interviews, observational recording, data about individual’s previous life history, current characteristics, information gathered through medical records, school records, and written reports of earlier assessments, if any.

The assessment techniques mentioned above have been explained in the subsequent modules.


1.5.3 Data Collection

After the goal has been formulated and relevant tools and techniques identified, the next step is collection of data. The data collected may include background information, results of psychological tests, observation report an interview record, a medical report etc.

1.5.4 Interpreting Specific Assessment Data

The process of assessment continues with the step of evaluation in which these data are interpreted. It consists of drawing inferences and forming impressions about a





client's psychological characteristics. Making accurate and adequately focused interpretations help to get a summary description.

1.5.5 Integrating Data from Different Sources

Data obtained from multiple sources sometimes may differ. This requires integration of data for better understanding. For example, a student who has poor grades in class performance may suggest limited ability. But the psychological test indicates her/his considerable ability. This gives the counsellor a basis to infer the likelihood of social psychological factors that may be affecting her/his performance.

1.5.6 Formulating Assessment Information

The assessment process culminates in the utilisation of information regarding psychological characteristics and behavioural tendencies to arrive at conclusions and recommendations. This helps the counsellor to make decisions regarding strategies and interventions. In this output phase, however, it must be kept in mind that assessment data and its interpretation may have different implications for different kinds of people living in different circumstances. Most important in this regard are possible sources of bias resulting due to the tools being used, criteria being used for assessment of test results, the cultural background and social context of the person being evaluated. Good assessment decisions depend on recognising these considerations.

1.5.7 Reformulating Goals

If at the time of evaluation it is observed that the goals set for the counsellor are not achieved or partially achieved, it is important for the counsellor to reformulate them in light of the new information. The counsellor in reformulating the goals needs to be very careful in his assessment about the factors that are likely to contribute or interfere in achieving the goals.

All the above-mentioned steps may not be present in any given assessment situation. It is not essential that they are followed in sequence. They are neither clearly separable from one another nor can they be carried out and completed without their reference to one or the other.

Activity 1




As a teacher which steps do you follow in planning an achievement test or any other assessment programme. Compare the above steps with the steps that you have learned about process of assessment.

1.6 Summary



Though the words assessment and appraisal are sometimes used interchangeably, this unit has given clarity on differences between them and some of the other related concepts like measurement and evaluation. In this unit you gained knowledge about the meaning,




purpose and principles of assessment and appraisal in guidance and counselling.

The purposes of assessment are diagnosing the problems of students, providing assistance in educational and career planning, in predicting future performance and evaluating the outcome of counselling.

The principles of assessment provide valuable insights about theory as well as practice of the assessment and appraisal procedures.

Finally, the unit also describes the steps involved in the process of assessment and appraisal.

Self-Evaluation Exercises

- 
1. Compare the terms assessment and appraisal.
 2. Explain the purpose of assessment and appraisal.
 3. Describe the principles of assessment with examples.
 4. Discuss the seven steps in the assessment process. How does one step facilitate and lead to the next step.

Answer Key to Self-evaluation Exercises

1. Elaborate on the following
 - Assessment is the process of collecting information about an individual through formal or informal means.
 - Appraisal is the process of giving meaning to the information collected through an assessment.
2. Elaborate on the following
 - To diagnose a student's problem.
 - To assist in education and career planning.
 - To predict future performance.
 - To evaluate the process of counselling.
3. Elaborate on the following
 - To gain complete understanding of an individual.
 - To take into account the dynamic nature of human behaviour and assess him/her in different situations, several times, and by using different assessment techniques.
 - Depending on the problem presented, the assessment measures and procedures should be carefully decided upon.
 - To take into account special conditions and situations which might be affecting a client's behaviour.
 - To provide a holistic picture of the client.
 - Conceptualisation of a client should be continuous as more and more information and interactions are held.



- Assessment should be on-going and not episodic.
 - May utilise both individualised and normative information.
 - Should be accurate to the extent possible.
 - To give due importance to three aspects of behaviour: capacity, motivation and emotional control.
 - To take into consideration subtleties in client's behaviour like nonverbal cues.
 - To use longitudinal data wherever required.
 - To take into account cultural and social context of client's behaviour.
 - Assessment of human behaviour in terms of probability and not absolutes.
 - Should provide feedback to client.
 - Should be kept confidential.
4. Elaborate on the following points
- (i) Formulating goals
 - (ii) Identifying tools and techniques
 - (iii) Collection of data
 - (iv) Interpretation of specific assessment data
 - (v) Integration of data from different sources
 - (vi) Formulating assessment information
 - (vii) Reformulating goals

Answer Key to Self-check Exercises

Self-check Exercise 1

1. (iv)
2. (iii)
3. (ii)
4. (i)

Self-check Exercise 2

1. True
2. False
3. False
4. True
5. True



Reference

Shertzer, B. and Linden, J.D. 1979. *Fundamentals of Individual Appraisal: Assessment Techniques for Counsellors*. Houghton Mifflin, Boston.

Suggested Readings

- Anastasi, A. 2003. *Psychological Testing* (5th ed.). Macmillan, New York.
- Black, P. and William, D. 1998. Assessment of Classroom Learning. *Assessment in Education: Principles, Policy and Practice*, 5 (1),7-74.
- Hersen, M. 2004. *Comprehensive Handbook of Psychological Assessment*. John Wiley and Sons, New York.
- Hood A., B. and Johnson, R.W. 1997. *Assessment in Counselling* (2nd ed.). American Counselling Association, Alexandria, VA.
- Rowntree, D. 1988. *Assessing Students: How shall We Know Them?* Nichols Publishing Company, New York.
- Satterly, D. 1985. *Assessment in Schools*. Basil Blackwell Ltd., Oxford.
- Singh, A.K. 1998. *Tests, Measurement and Research Methods in Behavioural Sciences*. Bharti Bhawan Publication, Patna.
- Singh, P. 2005. *Handbook of Measurement and Evaluation*. Doaba House Booksellers and Publishers, New Delhi.
- Torrance, H. and Pryor, J. 1998. *Investigating Formative Assessment*. Open University Press, Buckingham, Philadelphia.



2

USING PSYCHOLOGICAL TESTS

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Psychological Tests
- 2.3 Types of Psychological Tests
 - 2.3.1 Individual and Group Tests
 - 2.3.2 Verbal, Non-verbal, and Performance Tests
- 2.4 Uses of Psychological Tests
 - 2.4.1 Counsellor's Use of Data
 - 2.4.2 Teacher's Use of Data
 - 2.4.3 Administrator's Use of Data
- 2.5 Essential Characteristics of a Psychological Test
 - 2.5.1 Objectivity
 - 2.5.2 Reliability
 - 2.5.3 Validity
 - 2.5.4 Norms
- 2.6 Testing Skills Required to be an Effective Counsellor
- 2.7 Problems and Issues in Psychological Testing
- 2.8 Cautions in the Use of Psychological Tests
- 2.9 Summary
 - Self-evaluation Exercise
 - Answer Key to Self-evaluation Exercises
 - Answer Key to Self-check Exercises
 - Reference
 - Suggested Readings





Using Psychological Tests 2

2.0 INTRODUCTION

In the previous unit, you have read about the meaning and uses of assessment and appraisal in counselling. You know by now that the goal of assessment is to help counsellors develop an understanding of the client or an individual. The techniques and procedures of psychological assessment serve as means to arrive at understanding of the individual. Counsellors therefore need to be familiar with the major tools and techniques of assessment, the purpose for which they are used, and how the information provided by these can be used in understanding the individual. Psychological testing is one of the ways of assessment.

You have also read in the previous unit that the selection of any tool whether quantitative or qualitative depends on the type of information the counsellor is interested in gathering. In most cases both are required to be used for holistic assessment and appraisal.

In this unit, you will read about psychological tests, which are the tools for quantitative assessment. This unit will build an understanding of the nature, use and essential characteristics of a psychological test, skills required in administration, scoring, interpretation and communication of test results. You would also be acquainted with the problems and issues related to testing so as to make an informed selection and judicious use of psychological tests with your client/student.

2.1 OBJECTIVES

After completion of this unit, you would be able to:

- *describe* the meaning and uses of psychological tests in guidance and counselling;
- *distinguish* between different types of psychological tests;
- *explain* the essential characteristics of psychological tests;
- *appreciate* the problems and issues in psychological testing;
- *apply* the knowledge of skills required for test selection, administration, scoring, and interpretation for effective assessment and appraisal.



2.2 PSYCHOLOGICAL TESTS

Psychological tests are designed to assess the characteristics of people such as their abilities, attitudes, motivations, interests, needs and values and so on. Psychological test can be defined as *'a sample of an individual's behaviour, obtained under standard conditions, and scored according to a fixed set of rules that provide a numeric score.'* (Anastasi, 2003)

In a standardised test, individual's scores are compared with a norm or standard arrived at on the basis of performance of sample of individuals of the same age or grade level from around the country who took the same test when it was first developed. Good standardised tests are the result of years of research. Tests may take many forms. Usually, they comprise of a series of items / questions with well-defined correct answers such as in case of tests of intelligence or achievement, while others such as personality inventories, do not have right or wrong answers, but are designed to assess person's predispositions, tendencies and preferences.

Tests can be used to compare the same individual on two or more traits and also compare two or more individuals on the same trait. Such an assessment is usually quantitative. Although most of the psychological tests provide relatively objective and quantifiable scores such as tests of intelligence abilities/aptitudes. Some other tests may also provide descriptive and qualitative interpretation. You will learn about these in unit 3 of this module.

A standardised test has a manual which provides complete information of how the test was developed, evidence of its consistency, accuracy and objectivity. You will learn more about these aspects in the preceding section. It also consists of detailed instructions for administering, scoring, interpreting the test, its uses and possible misuses. The test manual thus, provides you the requisite information to allow you to make an informed judgment as to whether the test is suitable for your use.

The following section will describe some type of tests and the purpose for which they are used.

2.3 TYPES OF PSYCHOLOGICAL TESTS

There are various ways of classifying tests into different categories depending upon their content as well as the way they are administered. Psychological tests vary in their content depending on the aspect of behaviour that is assessed, for example, some tests are designed to assess abilities, others assess motivation, personality characteristics etc. Psychological tests are also classified into individual and group tests depending upon their mode of administration.

2.3.1 Individual and Group Tests

Individual tests are administered to one person at a time. The main feature of individual test is that it allows the test administrator to establish proper rapport, give personal attention and observe many aspects of the individual behaviour, ways of working etc. specific to the client. One of the major limitations of individual tests however is that they are time consuming. Stanford Binet Test and Wechsler Tests, i.e., Wechsler Intelligence

Scale for Children Scales (WISC) and Wechsler Adult Intelligence Scale (WAIS) are examples of tests developed to be administered individually only. However group tests can also be administered individually depending upon the need.

Group tests are administered to a number of people simultaneously, i.e., they are more commonly used for mass testing and therefore are economical in terms of time. The examiner plays a role that is restricted to delivering the test instructions and ensuring completion by the group. Group tests usually have a specific time limit. Scoring is more objective for group tests and computerised scoring is possible in some tests. There are certain group tests that can also be administered individually depending upon the need.

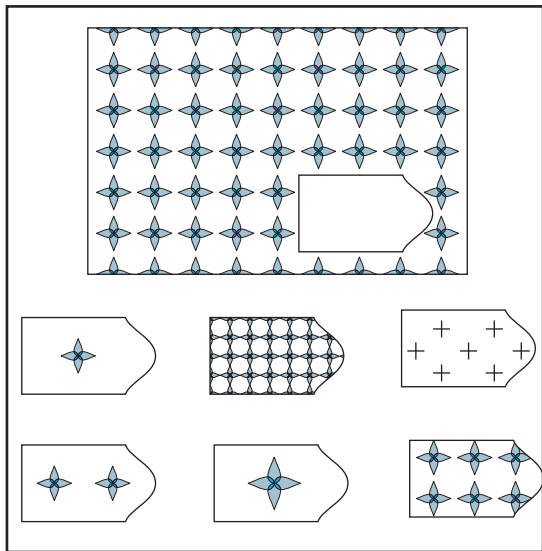


Fig. 2.1 : *A sample item of Raven's Progressive Matrices*

items in non-verbal tests are in the form of shapes, patterns, diagrams, and sequences. One such example is, Raven's Progressive Matrices (RPM). An incomplete pattern is given and students have to find out, the correct figure from the six alternatives, which will complete the pattern. An example of a sample item of RPM is given in Figure 2.1.

Performance tests are made up of certain concrete tasks. Here, the examinee is asked to perform a task rather than to answer questions. Koh's Block Design Test (Fig. 2.2) requires the

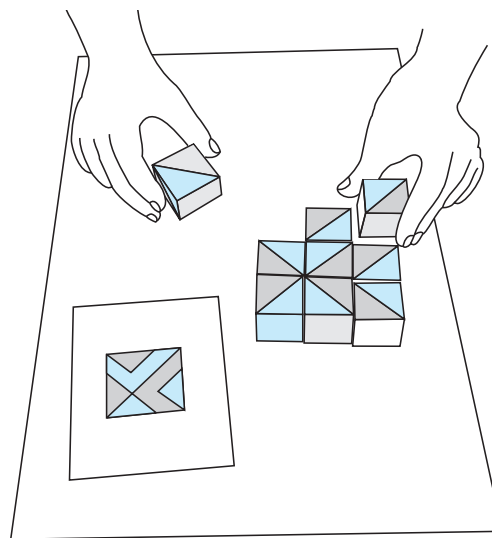


Fig. 2.2 : *A student taking an item of Koh's Block Design Test*

2.3.2 Verbal, Non-verbal, and Performance Tests

A verbal test demands understanding of written words. A verbal test poses questions to which the subject supplies answers in words or in numbers. Sample items of a verbal test would be of the kind: how many wings does a bird have? In what way are a lion and a tiger alike? What does robust mean? If two balls cost 15 rupees, what will be the cost of a dozen balls? Such tests can be administered only to a literate sample or population.

Non-verbal tests are also paper-and-pencil tests but do not involve use of language .The



examinee to arrange the given blocks of different shapes and colours according to a given pattern card.

Sources of Information about Tests

It is important for counsellors to keep themselves updated with new developments in psychological testing. Many sources of information are available for those interested in using psychological tests. The *Mental Measurement Year Books* by Buros is one such source which provides information on variety of tests along with critical reviews by experts as well as references on the construction, use and validity of specific tests. Another publication edited by Buros is a set of *Tests in Print* which contains list of available tests. It however, does not contain review of the tests.

Additional information about the tests can be found in the catalogue and manuals provided by tests publishers. Besides catalogues, other source of information is the journals. Some of the journals which contain information about the tests are Psychological Abstracts, Journal of Consulting Psychology, Educational and Psychological Measurement, Journal of Assessment and Appraisal in Counselling, Journal of Career Assessment, Journal of Personality Assessment, Journal of Counselling Psychology.

Activity 1



Locate the sources/agencies, which provide information on psychological tests in your city/town/state/country. Identify an area e.g., school adjustment or self-concept or aggression or isolation and make a list of tests available.

Self-check Exercise 1



State whether the following statements are true or false

| | |
|--|-----|
| 1. Psychological tests yield only quantitative measurements. | T/F |
| 2. Group tests can also be administered individually. | T/F |
| 3. Verbal test demands, an understanding of pictures or illustrations. | T/F |
| 4. Koh's Block Design Test is a type of non-verbal test. | T/F |

2.4 USES OF PSYCHOLOGICAL TESTS

The specific uses of psychological tests relate to the following four purposes:

- Selection
- Classification
- Diagnosis
- Prediction

- **Selection:** Tests are often used by institutions and organisations in selecting people for certain course/programme or jobs. These generally include mental ability/aptitude tests as well as personality tests.
- **Classification:** Tests are also used for classifying individuals into groups or categories. Simple example is classifying students into different streams on the basis of aptitude tests. Placement is often confused with classification which means assessing individuals to different levels of work within a particular type of work.
- **Diagnosis:** Assistance in providing remediation to different problems can only be done if proper diagnosis is made. Tests help us in diagnosing deficits and problems. For example, if a student has been diagnosed as a slow learner, She/he can be provided remediation services. Testing the child again can give insight on how much the remediation has helped him/her. Thus testing can also be helpful in gaining insight about the effectiveness of a remedial measure.
- **Prediction:** Tests help in predicting future performance of students or to what individual will do later in life, on the basis of measures of ability, achievement and other characteristics. Prediction is useful in selection of disciplines/subjects/streams, careers, etc. It helps in estimating an individual's educational promise and capability in a certain field. In the case of children with special needs, this is also helpful in using the diagnostic results for future prediction.

Besides, the general uses, psychological tests can yield useful information for counsellors, teachers, administrators. These are given below.

2.4.1 Counsellor's Use of Data

A counsellor can make use of test data for the following purposes:

- To determine client's abilities, aptitudes, interest, and other personal characteristics to understand the client as well as help the client foster self-understanding. It can also be used to improve the decision making by both the counsellor and the client regarding the problem faced.
- To predict future performance of the client in an educational setting or a workplace i.e., test whether an individual will achieve success or not in a certain endeavor.
- To assist the client in educational and vocational planning. For instance, a counsellor using various formal and informal techniques of assessment will help the client in choosing an appropriate educational programme and subsequently in making a right career decision.
- To study student problems such as deficits in studying skills, reading disabilities, or difficulty in relating to others, etc. The data obtained not only helps studying and diagnosing the problems but also in formulating solutions.
- To test the efficacy of a counselling programme. Usually data is collected before and after counselling in conjunction to data from a control group and with the help of various psychological tools such as achievement tests, social and emotional adjustment assessments, and interest inventories, etc.





2.4.2 Teacher's Use of Data

Teachers use test data to gain an understanding of a student's behaviour, especially the learning behaviour. This helps them in judging a student's capacity to learn, to monitor the progress, and to know about any learning difficulties and to organise remedial teaching sessions. Overall, the test results aid assessing the effectiveness of their teaching. Necessary steps can be taken by the teachers to bring about improvement in their teaching techniques.

2.4.3 Administrator's Use of Data

Administrators use test data to make important decisions regarding the functioning of an educational programme. Administrators can use test data in making decisions about grouping students, and identifying the areas where student requires assistance; in knowing a particular instructional programmes strengths and weaknesses, or seeing how well a school has progressed or has achieved its objectives.

You have read about the significance of test data and their use by different personnel. You know how counsellors make use of test data. As counsellors you would be required to use the test results to make some significant decisions regarding the client. It is therefore important that you learn about the distinctive features of psychological tests. The next section deals with these features of a test.

2.5 ESSENTIAL CHARACTERISTICS OF A PSYCHOLOGICAL TEST

You will need to make use of tests in your school or work place. It is important to be able to evaluate the usefulness of a particular test and ensure that your selection of a test is relevant to what you intended to measure. You need to consider if your test selection will yield accurate results. Each of these considerations can be answered using three qualities as guides for your test selection. The fundamental qualities of a psychological test that you should consider carefully in your selections are: the objectivity, reliability, validity, and norms of a test.

2.5.1 Objectivity

What makes a test objective? An objective test should be free from subjective elements. Thus, the administration, scoring and interpretation of scores should all be objective. They should all be independent of any subjective judgment of a particular examiner. This means any test taker should theoretically obtain the identical score on a test regardless of who the examiner is. Even though perfect standardisation and objectivity is difficult to achieve, such objectivity is the goal of the test construction. Most tests do reach a high level of objectivity.

Objectivity relates to two aspects of a test: (a) objectivity of items, where the language used in phrasing the items should be interpreted exactly in the same way by all the examinees, and (b) objectivity of scoring, which means that the scoring method of the test should be standardised in order to maintain complete uniformity of the scores obtained from test given on different occasions or when the test is scored by different experts at different times.

2.5.2 Reliability

Reliability is an important characteristic of a psychological test as it indicates how dependable the test scores are. Reliability refers to the accuracy or precision of the measure. Reliability refers to the consistency of scores obtained by the same persons when they are re-examined with the same test on different occasions, or with different sets of equivalent items, or under other variable examining conditions. A test is said to be consistent over a given period of time when all the subjects retain their ranks on two separate testing with the same test. In other words, examinees that obtain high scores on one set of items also score high on equivalent set of items and also those who obtain low score on one set of items also score low on equivalent set of items.

Since reliability is concerned with the degree of consistency or agreement between two independently derived sets of scores, it is expressed in term of a correlation coefficient. You have read about correlation coefficient in the module-VII on Basic Statistics in guidance and counselling. A correlation coefficient is a statistical index that provides an estimate of the relationship between distributions of test scores when a test is administered to a single sample on two or more occasions. If the test scores are reliable, the test and retest correlation coefficient should be high, i.e., high or low scores on one occasion should match with high or low scores on the second occasion. We may say reliability is basically a statistical measure.

There are different ways of estimating reliability of a test. Each method provides different information on consistency of test scores. The different types of computing test reliability are:


- Test-retest Reliability
- Equivalent Form Reliability

- *Test-retest Reliability*

The test-retest reliability method is the most obvious method of computing reliability. Here only one form of test is used. If the form of the test is say A, this model of reliability can be expressed as A-time-A. Since the same test is used no comparisons can be made on the quality of the test. Test score variations or error variance is a result of testing conditions like noise, distraction, broken pencil etc. or factors such as fatigue, worry, emotional strain of test taker. Retest reliability is an indicator of the extent to which scores on a test be generalised over different occasions. It is important to remember that higher the reliability of a test, less susceptible will be the scores to random daily changes in the condition of the test takers or of the testing environment. The reliability coefficient in this case is simply the correlation between the scores obtained by the same persons on the two administrations of the test. If the correlation is high the test is said to have high reliability and if the correlation is low the test is said to be low on reliability.

However, time interval over which retest reliability is measured effects the correlation coefficient. For example, an individual's scholastic aptitude, artistic judgement may drastically alter over a 10 year period because of intervening





experiences related to individual's home, school or community or circumstances such as illness or emotional disturbance resulting in extremely low coefficients. On the other hand, if time interval is too short, the subjects can recall most of the responses made in the first testing thereby resulting in high correlation coefficients. In case of children there are developmental changes even in six months. Therefore, these factors need to be kept in view while examining reliability information reported in the test manual.

- *Equivalent Form Reliability*

It is also called the parallel form or alternate form reliability. The same person is given one form on one occasion and another equivalent or parallel form on second occasion. If one form of the test is designated A and the equivalent, parallel form as B then the equivalent form reliability can be depicted, as A-Time-B. It is important to establish that the two forms are using truly equivalent or parallel forms of a test i.e., having same number of items, in the same form, covering the same content and having the same level of difficulty. The instructions, time limit, illustrative examples, format, and all other aspects of the test must be parallel. The correlation obtained on the two forms is the reliability coefficient of the test. Reliability coefficient of this kind is a measure of both temporal stability and consistency of response to different item samples. This type of coefficient thus combines two types of reliabilities, hence more robust. However, because of practical difficulties of constructing truly equivalent forms, such reliabilities estimates are often not reported in test manuals.

You have learnt that it is not easy to develop truly equivalent forms of a test, nor is it easy to gather same sample of subjects on two occasions for retesting. There are some substitutes of test-retest methods, which mainly report internal consistency of a test. You will now read about these.

Internal Consistency Reliability

Internal consistency reliability indicates the homogeneity of the test. These are of two types: split-half and odd-even reliability.

- (i) *Split-half Reliability*

Split-half method of estimating reliability uses one form of the test and splits it into two equal halves. Then the scores for the two halves of the test are correlated. The correlation coefficient obtained on the two halves provide a measure of consistency of scores. It important to know that this type of consistency is only with regard to the content of the test or items and the temporal stability is not part of this consistency. Since only one session is involved and is also therefore called coefficient of internal consistency.

A major limitation of this method is that in case of speed test (i.e., allotted time limit) or power tests (i.e., items are in increasing order of difficulty), the test taker due to limits of time or difficulty level may not be able to complete the latter half of the test items. In case of dividing the test into two halves the items answered in the second half would be comparatively less than the first half. This results in spuriously low estimates of equivalence reliability.

(ii) *Odd-Even Reliability*

Odd-even method of estimating reliability also uses one form of the test and splits it into two halves i.e., odd numbered items and the even numbered items. The scores of two tests i.e., odd numbered items and even numbered items are correlated which provides estimates of internal consistency. In case of power test both halves have easy to difficult items, hence provide reliable estimates of consistency. But in case of speed tests, even though the subjects are unable to answer questions at the end of the test (and questions not answered do not receive credits) correspondence would be inflated showing high correlation coefficients.

2.5.3 Validity

The term validity means truth or fidelity. The validity of a test concerns what the test measures and how well it measures what it intends to. A test may be reliable but it also needs to be valid to be of value. Theoretically, validity is related to reliability and relevance. A test must be reliable to be valid, but reliability, does not guarantee validity. It is only relevance, which renders a reliable test valid. Relevance means that the test measures what it intends to measure and predicts future behaviour efficiently. To determine the validity of a test, the test must be compared with some independent measure or criteria. The correlation coefficient computed between the test and the criteria is known as the validity coefficient. Independent criteria refer to some trait or a group of traits (outside the test) that the test itself claims to measure. When a test is valid, its result can be generalised to a population.

Different methods to measure the validity of tests provide information on different types of validity. Given below are four types of validity:

- **Face Validity:** A test is said to have face validity if the content of the test appears to be relevant to the subject taking the test. It also means that the test 'looks valid' to the examinees who take it or to other untrained persons. For example, a mathematical achievement test should not have reading comprehension passages. Face validity offers little evidence of actual validity, but is a desirable feature of tests. Since if the test content appears irrelevant, inappropriate, silly, the test takers may not fully cooperate or may attempt half-heartedly. Face validity helps the test to function effectively in practical situations.
- **Content Validity:** It involves systematic examination of the test items to see whether they cover a representative sample of behaviour to be measured. It also involves systematic analysis of the behaviour and whether all aspects of the domain are covered by the test items, and in correct proportions. For example, there is a likelihood that the test may be overloaded with items of those aspects on which items are easy to prepare.

Content validity is built into a test from the beginning of test development through choice of appropriate items. For educational tests this should be preceded by thorough and systematic examination of relevant syllabus, books and consultation with various experts, on the basis of information gathered test specification are drawn for test writers. This includes the content area,





number of items etc. If the test specifications are followed content validity is assured to a large extent.

- *Criterion Related Validity*: It indicates the effectiveness of a test in predicting an individual's performance in given activities. The criterion measure against which the test is validated could be an established test in the area, or teacher's ratings or cumulative grades etc. and these may be obtained at approximately the same time as the test scores or after a stated interval.

Criterion validity can be categorised into two types: (i) Concurrent Validity and (ii) Predictive Validity.

- *Concurrent Validity*: is established when the criterion measures are obtained at the same time as the test scores. Concurrent validity indicates the extent to which the test scores accurately estimate an individual's current level with regards to the criterion. This is a common method of developing validity evidence for employment tests: the test is administered to employees and then ratings by the employer is obtained.
- *Predictive Validity*: is the extent to which a test predicts scores on some criterion measure. Predictive validity is established when the criterion measures are obtained at a later date /time after the test scores. For example an aptitude test, if is helpful in determining who is likely to succeed or fail in certain subjects or relates to marks obtained in specific subjects that is correlates significantly can be said to demonstrate predictive validity.
- *Construct Validity*: It refers to how adequately the test measures the psychological construct or trait it intends to measure. A few examples of construct are anxiety, intelligence, verbal fluency, extroversion, dominance etc. Intelligence tests are one example of psychological tests that should have construct validity.

The process of validation involves the following steps:

- *To specify the possible different measures of the construct* – the construct is defined in clear words and the different measures of the construct are to be specified clearly e.g., if we want to specify different measures of construct of intelligence, it would require a clear definition of intelligence such as, it is defined as an overall ability to think in rational way, to act with a purpose and make adjustments according to the varying demands of the environment. Then different measures of the construct intelligence can be identified as ability to operate with symbols figures, ability to learn, verbal fluency, quick decisions even in complex and difficult situation/tasks etc.
- *To determine the correlation between all or some measures of construct* – this consists of determining whether or not the specified measures are actually leading to the measurement of the construct. It is done by establishing the correlation between various measures. A high correlation will show that they are measuring the same construct.
- *To determine whether or not some or all measures act as if they were measuring the construct* – this consists of determining how such measures act in reference to other related variables

of interest e.g., the correlating measures from the intelligence construct should show at least some moderate correlation with teachers rating, grades in class etc.



Self-check Exercise 2

Fill in the blanks with appropriate choices given below :

1. The essential characteristics of a psychological test are _____, reliability and validity.
2. Reliability refers to the _____ of the measure.
3. _____ reliability is an indicator of the extent to which scores on a test can be generalised over different occasion.
4. _____ and _____ reliabilities are forms of internal consistency measures.
5. _____ validity indicates the effectiveness of a test in predicting and individuals performance in an activity.
(a) Retest (b) Objectivity (c) Split-half, odd-even (d) Criterion related
(e) Accuracy.

2.5.4 Norms

Norms form an important criterion of a test and are derived during the standardisation process. Norms can be defined as the average score on a particular test made by a specified population. As a basis for determining the norms, the test is administered to a representative group of people for whom the test is identified. The scores obtained by this group of people provide a basis for interpreting any individuals' score i.e., they indicate how well or poorly an individual has performed.

Counsellors use scores on psychological tests by referring to norms. Norms are empirically established by determining what persons in representative group actually do on the text. As counsellors when you refer an individual's score to the distribution of scores obtained by the standardisation sample, you would know his/her position in that population.

Thus norms compare an individual students performance to that of his or her classmates or some other, larger group. All standardised tests provide norms. You will now read about some of the commonly used norms and the kind of information they provide about the relative position of the individual. The module VII on Basic Statistics in guidance and counselling will provide you the details on how to calculate percentiles and stanines.

- **Percentiles:** A percentile is a score that indicates the rank of the student as compared to others (same age or same grade), using a hypothetical group of 100 students. A percentile of 28, for example, indicates that the student's test performance equals or exceeds 28 out of 100 students on the same measure; a percentile of 85 indicates





that the student equals or surpasses 85 out of 100 (or 85% of) students. It is important for you to keep in mind that this is not the same, as a “per cent” -a percentile of 85 does not mean that the student answered 85% of the questions correctly. Percentiles are derived from obtained raw scores using the norms obtained from testing a large population when the test was first developed. In other words, percentile is score or point in a score distribution at or below which a given percentage of scores fall. For example, if 72 per cent of the students score at or below a score of 25 on a given test, then the score of 25 would be considered at the 72nd percentile.

It is important to note however, an individual’s percentile rank can vary depending on which group is used to determine the ranking. A student is simultaneously a member of many groups: classroom, grade, building, school district, state and nation. Test manuals have different sets of percentile ranks this would help you as counsellors to make the most relevant comparisons possible.

- **Stanines:** Stanine simply means “standard-nine” scale. Stanines are normalised standard scores, ranging in value from 1-9, whose distribution has a mean of 5 and a standard deviation of 2. Stanines can, more easily, be thought of as coarse groupings of percentile ranks and like percentile ranks they indicate the status or relative rank of a score within a particular group. Due to their coarseness, stanines are less precise indicators than percentile ranks. However, using stanines tends to minimise the apparent importance of minor score fluctuations, and are often helpful in the determination of areas of strength and weakness.
- **Standard scores:** Standard score is a type of derived score, which is a transformation of the raw score, and whose score distribution in a specified population has convenient, known values for the mean and standard deviation. This term is used to specifically denote z-scores. Standard scores permit direct comparison of the student/client by placement of the scores on a common scale and, for this reason, are useful for longitudinal comparisons.

Standard scores indicate how far above or below the average (the “mean”) an individual score falls, using a common scale, such as one with an “average” of 100. Standard scores also take “variance” into account, or the degree to which scores typically will deviate from the average score. Standard scores can be used to compare individuals from different grades or age groups because all scores are converted to the same numerical scale. Most intelligence tests and many achievement tests use some type of standard scores. For example, a standard score of 110 on a test with a mean of 100 indicates above average performance compared to the population of students for whom the test and norms were developed.

You have read above how qualities of a psychological test: the objectivity, reliability, validity, and norms help in judicious selection of tests. A counsellor besides having a good understanding of test information also requires competence in test use, which is the focus of the next section.

2.6 TESTING SKILLS REQUIRED TO BE AN EFFECTIVE COUNSELLOR

Besides the requirement to select the appropriate psychological test, a counsellor needs to develop various skills such as test administration, scoring, interpretation, and communicating results to clients. Few of the testing skills required to be an effective counsellor are given below.

Test Administration

- All procedures associated with administering the psychological test and scoring should be standardised. This is likely to increase accuracy and reliability. Creating of controlled environment for testing, may lead to more accurate results. Certainly, the more professional the administration of a test is, the better results will be.
- Test should be procured well in advance and all the materials needed during the actual testing should be procured well in advance.
- In the case of any disturbance at the place where testing is being conducted appropriate measures should be taken.
- The procedures of administering the test should be objective. In other words, the standard procedures should be followed for all administrations irrespective of the place and purpose.
- While administering the test, the instructions that is often given in the manual, should be slowly and clearly read. No improvisations or shortcuts should be employed because it may cause a change in the meaning thus affecting testing results.
- Any question from the students need to be clarified before starting the actual testing.
- Proper timing should be maintained. In many tests, accurate timing is the most important feature of the entire process of test administration. The test should be stopped immediately after the time is over and the booklets should be collected in systematic order.
- Instructions during the testing process should be made efficiently, slowly but clearly and with a professional attitude. Public address system, if available, can also be made use of if the group is large.

Scoring

Scoring is a very important part of testing. It can be done manually or automated. Manual scoring can produce some variation in test results due to human error, especially if several people are involved in the scoring. Manual scoring is often the only method available where answers are not predetermined as in a multiple-choice test. Electronic scoring machines and computers are used for accurate and quick scoring especially for large scale testing programmes. These battery tests usually require selection from predetermined multiple choice answers.

The scoring method and criteria is generally provided in the manual of the standardised tests. The manual also provides the normative data, which is used by the test user for interpreting the test results. While scoring it should be kept in mind that all the considerations given in the manual should be strictly adhered to.





Interpretation

The proper interpretation of test scores requires a thorough understanding of the objectives of the test, the content of the test, and the situation of the client. While interpreting scores, consideration should be given to factors that may have influenced the scores, such as the emotional state, physical state, and experience of the test taker. Scores are only clues and should be considered in light of what else is known about a client to provide a holistic combination of information to that person. For individual client testing, the counsellor will have to consider many details that are more personal in order to present a complete interpretation of results.

Communication of Test Results

Just like test administration, effective communication of test results has to be learned i.e., what to tell, how much to tell, and when to tell. Counsellors must explain the results of psychological tests of their clients to help them change behaviours. In either of the above, a skilled counsellor can encourage a positive outcome to the result just by the way they communicate to that individual.

Whenever an individual is given any information about his/her test results, counselling services may be needed as an individual might become emotionally disturbed on hearing his/her test results. For example, a student can be greatly discouraged on hearing about his poor performance on a particular test, a bright child may become careless when he learns that he is more advanced than others in the class. You would read in detail about interpretation and communication of test scores in the unit on Data Appraisal in Counselling (Module 13, Unit 4).

Some of the general considerations a counsellor must keep in mind are as follows:

- A counsellor must be in good psychological health. They should not be distracted by one's own problem as this leads to causing more anxiety in a person seeking help.
- A counsellor should have sensitivity for the client i.e., She/he should be very well aware of the client's strengths, limitations, and coping style to understand the problem from clients' perspective.
- A counsellor should show open mindedness i.e., they should not push clients to follow particular belief or value system. It suggests freedom from preconceived ideas. Open minded counsellors can distinguish their beliefs and values from those of their clients.
- The counsellor should have respect for the client and treat him/her with warmth and dignity. She/he should not mislead client by giving false or inaccurate information regarding the test scores or the problem faced by the client.
- The counsellor must have attentiveness. Examples of verbal attentiveness are allowing clients to complete sentences, using verbal encouragement like "I see", "go on", etc., changing the pitch and volume. Non-verbal attentiveness includes eye contact, head nods, facial expressions, body posture, and distance from the client. These cues can be applied according to the needs of the situation and the client.

- The counsellor should show empathy i.e., be able to see things the way client does, conveying to the client that his or her feelings are understood. Cultural sensitivity and knowledge of cultures different from the counsellors own are important to the effective use of empathy.

2.7 PROBLEMS AND ISSUES IN PSYCHOLOGICAL TESTING

Psychological tests play an important role in guidance and counselling. As you have read tests can be used for a number of purposes but testing has also been criticized because of its misuse or issues related to it. You will now read about some criticisms and problems related to the psychological testing.

- *Tests label students*

A long debated issue with testing has been that the test results often label students. The labels may range from bright to inferior, which continue during the entire school period. These label may affect the self esteem of the students which further harm their educational and career prospects like a student may get discouraged or totally give up or they may become careless if they are labeled as very bright or superior to others. You have also read about this issue in unit 1 of this module.

- *Tests are imperfect*

Tests are usually criticized because the reliability and validity reported in the test manual are not perfect. Some tests are more valid or reliable than others or report one kind of reliability or validity depending on the purpose for which the test is designed. No test measure is exact, infact the knowledge of how reliable or valid a test would decide how dependable the test scores are.


- *Cultural bias in tests*

Tests generally show a bias towards the culture in which they are developed. The bias generally shows up in items based on the experiences of a particular culture or group like urban class people. The norms of these tests are entirely based on these groups associated with a particular culture or group (culture in this sense refers to both broad ancestral aspects as well as small group culture). It is important to ensure that unintended biases will not be reflected in the group being tested. One example of a culturally biased test is a test that supposedly measures responses to television advertising using products that are marketed to urban teenagers. However, the test is administered to teenagers in a remote rural setting with little or no access to a television. You can see the discrepancies between the intended target audience and the real target groups are wide apart. The results from such a test would not be valid or very useful and obviously, the test should not be chosen.

- *Tests invade privacy*

Sometimes an individual may feel that testing is invading his/her privacy as test data is recorded and follows an individual through school and on to work. This is particularly significant in case of personality tests when individual has to reveal his feelings, emotions, likes, dislikes etc. Thus, it is very essential that the





client should be willing to accept the testing process otherwise it will hurt his/her sentiments. There are ways to ensure privacy of results like establishing proper rapport and ensuring confidentiality.

- *Testing may encourage competition*

Testing sometimes emphasises competition and success rather than co-operation. Communication is important to convey that results of psychological tests are for planning and individual growth and not to be used as a measure of individuals' position/rank or achievement.

Counsellors need to develop professional capability to ensure consistent results from psychological testing. These skills you will obtain through training and practice, which you will undertake as part a assessment practicum.

2.8 CAUTIONS IN THE USE OF PSYCHOLOGICAL TESTS

The value of psychological tests lies in their proper use. If these are not used properly or are misused, the consequences can be far reaching. Let us look into some of the safeguards in using psychological tests :

- Professional competence is required for the use of psychological tests particularly for guidance and counselling. Mere knowledge of test is not enough. Well trained personnel choose tests that are appropriate. They are cognizant of the latest trends and the newly developed tests. They are able to evaluate tests in terms of their technical merits like norms, reliability and validity. In administering tests, they are sensitive to the many conditions that may affect test performance. They interpret test scores in the light of other significant information about the individual. They also guard against over generalisation and over interpretation of test scores. Hence, adequately qualified persons must only use tests for decision making and guiding the individual. As counsellors, it is also important to create awareness among teachers, parents, students, administrators about the misuses of tests.
- Over reliance on test scores is another tendency one must guard against. Even if properly administered and scored, psychological tests can not be considered as fully accurate and perfect. Because test scores are in numbers, it is easy to make a mistake of thinking that a test score is like a scale. In case of intelligence test, the intelligence test score can not be treated as a measure of length or a weight. The psychological characteristics can not be measured in absolute terms. Many factors are likely to affect individual's performance on tests. For example, in some speed test, the time pressure may affect the test taker in different ways. The test performance may not be proportionate to the potential of the individual. The point is that test can not be considered as the ultimate truth of one's potentialities. The test scores have to be considered as probable. It is therefore important to supplement the test scores with data from other sources and non-testing techniques as well which you will learn in the next unit on Qualitative Assessment in Guidance and Counselling.
- You must understand that testing alone is not the goal for counselling. Testing is only an aid to counselling. Test scores must be integrated meaningfully to

meet the objective of counselling. Professionals and experts know how to use test scores for counselling. You will learn more about it in the module-II on Counselling Process and Skills.

You may at this point feel confused about the usefulness of psychological tests. If there are so many limitations, why should they be used at all? You must remember that some shortcomings of course are inherent with psychological tests because the objects of testing are human beings – their behaviour, characteristics, needs, goals, aspirations which are dynamic, changing and not static. It does not mean that psychological test should not be used. If cautions are observed, tests can yield valuable information. However, overdependence and obsession with test scores has to be avoided. Trained counsellors are often the personnel most qualified to use psychological tests. They have the responsibility to exercise sound practices of test administration, interpretation, reporting and integration of data.

Many professional groups and associations have developed ethical codes and standards for the use of psychological tests in the USA. American Psychological Association has developed APA ethical codes which provides standards and norms for test publishers as well as for users to resort to proper testing practices. It is important for the counsellors to adhere to the ethical norms in the use of test scores.

2.9 Summary

Psychological test is an objective and standardised measure of a sample of behaviour. Tests are classified into different types depending on their content and the way they are administered. Tests can be classified as Individual tests and Group tests, Verbal tests, Non-verbal tests, and Performance tests

Psychological tests are used for selection, classification, diagnosis, and prediction. School counsellors, teachers, and administrators use test data for different purposes. The essential characteristics of standardised psychological test are: objectivity, reliability, validity and norms. Counsellors need to develop skills in test administration, scoring, interpretation of test results, and communicating results to their clients. General considerations for counsellors in the appraisal process relate to being in good psychological health, developing sensitivity for the client, showing open mindedness, respecting the client, having attentiveness and showing empathy towards the client.

Tests and testing have been criticised because of their misuse and issues like, labelling, inaccuracy, culture bias, invading privacy, encouraging competition. There is a need for standardisation of all procedures and scoring of psychological tests for accuracy in results. Counsellors need to take cautions in using psychological tests. Ethical codes and standards have been developed for proper use of psychological tests.





1. Explain the meaning of a psychological test.
2. Describe the various types of psychological tests.
3. How does knowledge of the essential characteristics of a psychological test help counsellors in test selection?
4. Discuss any four testing skills required by counsellors?
5. Discuss the problems and issues in psychological testing?

Answer Key to Self-evaluation Exercises

1. Elaborate on the following points:
 - Define psychological test
 - Covers both the quantitative and qualitative aspects of measurements
2. Explain the following:
 - Individual and Group Tests
 - Verbal tests, Non verbal tests and Performance tests
3. Elaborate on the following factors:
 - Objectivity
 - Reliability
 - Validity
 - Norms
4. Elaborate on any four of the following:
 - Counsellors should have intensive training and experience in administering tests.
 - Counsellors should have sensitivity for the client.
 - Counsellors should be open-minded.
 - Counsellors should have respect for their clients.
 - Counsellors should have necessary attentiveness – verbal and non-verbal.
 - Counsellors should have the quality of empathising.
5. Elaborate on the following:
 - Labeling of students, which can harm their self-esteem.
 - No test measure is exact, different tests report different reliabilities and validity depending on the purpose for which the test was developed.
 - Biases shown by a test towards the culture in which they are developed.
 - Issues regarding invasion of privacy of subjects.
 - Too much emphasis on competition rather than fostering teamwork.
 - Issues regarding standardisation and administration of various tests used.

Answer Key to Self-check Exercises

Self-check Exercise 1

1. False
2. True

3. False
4. False

Self-check Exercise 2

1. b
2. e
3. a
4. c
5. d

Reference



Anastasi, A. 2003. *Psychological Testing* (5th ed.). Macmillan, New York.

Suggested Readings

- Barak, A., and English, N. 2002. *Prospects and Limitations of Psychological Testing on the Internet*. *Journal of Technology in Human Services*, 19 (2/3), 65-89.
- Chadha, N. K. 1996. *Theory and Practice of Psychometry*. New Age International Limited, New Delhi.
- Cronbach, L.J. 1970. *Essentials of Psychological Testing* (3rd ed.). Harper & Row, New York.
- Geisinger, K.F., Spies, R.A., Carlson, J.F., Plake, B. S. and Murphy, L. L. 2007. *The Seventeenth Mental Measurements Yearbook*. The University of Nebraska Press, Nebraska.
- Jackson, C. 2001. *Understanding Psychological Testing*. Jaico Publishing House, Mumbai.
- Kline, P. 1995. *The Handbook of Psychological Testing*. Routledge, London/ New York.
- Murphy, L. L., Spies, R. A. and Plake, B. S., 2006. *Tests in Print VII. An Index to Tests, Test Reviews and the Literature on Specific Tests*. The University of Nebraska Press, Nebraska .
- Shertzer, B. and Linden, J.D. 1979. *Fundamentals of Individual Appraisal*. Houghton Mifflin Company, Boston.
- Singh, A.K. 1997. *Tests, Measurements and Research Methods in Behavioural Sciences*. Bharati Bhawan Publication, Patna.



3

QUALITATIVE ASSESSMENT IN GUIDANCE AND COUNSELLING



- 3.0 Introduction
- 3.1 Objectives
- 3.2 The Nature of Qualitative Assessment
- 3.3 Differences between Qualitative and Quantitative Enquiry
- 3.4 Using Triangulation to Validate Qualitative Data
- 3.5 Types of Qualitative Techniques
 - 3.5.1 Observation
 - 3.5.1.1 Variations in Observation
 - 3.5.2 Methods of Recording Observation
 - 3.5.3 The Value of Observational Data
 - 3.5.4 Guidelines for Observation
 - 3.5.5 Interview
 - 3.5.5.1 Types of Interview
 - 3.5.5.2 Content of Interviews
 - 3.5.6 Sociometry
 - 3.5.7 Case Study Method
 - 3.5.7.1 What is a Case Study
 - 3.5.7.2 Characteristics of a Good Case Study
 - 3.5.7.3 Organisation of a Case Study
- 3.6 Summary
 - Self-evaluation Exercises
 - Answer Key to Self-evaluation Exercises
 - Answer Key to Self-check Exercises
 - Reference
 - Suggested readings



Qualitative Assessment in Guidance and Counselling 3

3.0 INTRODUCTION

You have read in the previous unit about the uses of psychological tests in the assessment of an individual/client. As you know tests provide a score related to a particular area of the individual. This score in itself does not tell everything about the individual. To enhance your understanding about an individual/ client, you will need to use other assessment techniques that provide explanations of both the why and how of a particular situation or incident. This is the basis of the qualitative assessment. The focus of qualitative enquiry is not on highlighting differences among individuals but on the uniqueness of individuals. Qualitative assessment helps to understand an individual's behaviour in relation to the context and situation.

In this unit, you will read about qualitative assessment. You will need to understand the distinction between qualitative and quantitative assessments. You will also learn how to substantiate qualitative assessments. There are a number of standard techniques used to form a qualitative assessment. Observation, interviews, sociometry, case study, analysis of documents, informal talks, artifacts, unobtrusive measures, rating scales, checklists, self-descriptions etc. are all sources of qualitative data. You will study in this unit how the techniques of observation, interviewing, case studies, and sociometry are used for qualitative assessment to develop a holistic view of the client (in this unit the use of the term "client" is generic and covers all ages from youth to adult).

3.1 OBJECTIVES

After completion of this unit, you will be able to:

- *describe* the nature of qualitative assessment.
- *differentiate* between qualitative and quantitative enquiry.
- *elaborate* the salient characteristics of qualitative assessment.
- *describe* the important characteristics of four qualitative methods: observation, interview, sociometry, and case study.
- *use* qualitative methods to develop a holistic understanding of the client.

3.2 THE NATURE OF QUALITATIVE ASSESSMENT

As a teacher, you may have encountered situations in your classrooms as depicted below.

Students of Class IV are working on a project in small groups and will exhibit their work later in the day for the school to view. One group is making a model on the conservation of solar energy; others are painting a hill, while other groups are conducting an experiment, arranging furniture for a display. You notice that they create humour, help each other, share work, and putting their efforts together. Still others you notice are misbehaving, creating tension, or loafing around. At the exhibition the teachers asked the students questions. Many exhibits receive praise and comments on the drawings, posters, models and experiments etc. Some students are seen congratulating each other and appreciating each other's efforts. Some are silently watching what is going on.

Such scenes display teamwork and cooperation while other behaviours tend to be more antisocial. Everyday you witness and evaluate similar interactions without using any quantifiable measures (quantitative data). You may not recognise this fact but qualitative techniques are frequently used in everyday life. Numerous qualitative approaches are used to try and elicit meaning or explain specific behaviours.

The basic premises of using qualitative enquiry are (1) that the behaviours or actions of individuals are best understood when they are studied in the setting or situation in which they occur. (2) the perspective of the client is important. (3) the client provides his or her own meaning to his/her experiences. Therefore qualitative enquiry seeks to understand the perspective of the client within the context of their everyday life.

No assessment is complete without the use of qualitative techniques. For example, if a student does not perform well in a particular subject, as a counsellor or a teacher it is important to know his/her score and the reasons for low scores. Teachers generally tend to think about the student as: how much the "student has scored", how She/he is performing in the class? Is She/he behaving according to her/his age? As counsellors you know by now that quantitative data or a score only indicates the positioning within a group, whereas qualitative data aims at providing an explanation for that score. It is important to have knowledge of the use of qualitative techniques for forming a complete picture of an individual.

3.3 DIFFERENCES BETWEEN QUALITATIVE AND QUANTITATIVE ENQUIRY

You have just learned about the importance of using qualitative assessments in understanding the client as a whole. You will need to know how to differentiate between qualitative and quantitative enquiries. Qualitative and quantitative approaches can be differentiated in terms of their various characteristics. Nine of these characteristics are summarised in this section to help you understand the features of both qualitative and quantitative enquiry and the differences between them.

(a) Goals

In *quantitative enquiry*, the goal is to establish facts, and show relationships between a set of variables. The aim is to give statistical differences between variables and to predict future behaviour. One example might be the relationship between the achievement level of the client vis-à-vis his socio-economic status (SES). You might select the variables to study, such as the education of parents or the SES, and how they affect the magnitude of the achievement of children and to what degree? Thus, a relationship may be established between these variables, and the achievement of children.

In *qualitative enquiry*, the goal is to describe the multiple realities in which the case exists. This develops a holistic understanding of the case/ client. For example, a qualitative focus would be to study in detail such factors as home, school, individual, and other contributing contextual factors leading to achievement of the client.

(b) Design

In a *quantitative approach*, the design is more structured, pre-determined, formal, and specific. Assumptions are made about the relationship that exists between variables before beginning the study or understanding a person. Specific tools are used to obtain responses on the variables being measured. One example might be to establish a direct link between parental education and scholastic achievement of their children. The appropriate measurement might be a questionnaire on parental educational background and an achievement test administered to the children.

In *qualitative enquiry*, the design is evolving, flexible and general. i.e., it is a hunch as to how you might proceed; approaching the field of study without pre-determined categories. This enables the counsellor/investigators to have depth, openness, and details. No assumptions are made beforehand; issues relevant to the situation or case become the focus of the study. Thus, the researcher or counsellor is open to any response that he would get while studying an individual. For example, children being referred for behavioural problems would require understanding of the nature of problem, the reasons for occurrence of problem, the context in which it occurs, consequences on children's parents, teachers, peers etc. Together these insights would help build a holistic understanding of the problem.

(c) Sample Size

In *quantitative approach*, the purpose is to generalise. Hence the data is gathered on a large sample or on one person on a number of characteristics so as to make comparisons and predictions. For example the counsellor may assess the behavioral problems of teenage boys and girls in a city. This would help develop insight for counselling.

On the other hand, *in qualitative enquiry* particularisation/uniqueness is the focus. Therefore, detailed information about individual client or a smaller number of cases is considered significant. Qualitative enquiry increases your understanding of the specific cases and situations but restricts your ability to generalise findings.





(d) Tools

In *quantitative enquiry* tests, questionnaires, structured interviews, schedules, etc., are used to collect data. These instruments or tools are administered in an appropriate and standardised condition according to prescribed procedures. *Qualitative enquiry* relies upon the techniques of observation, interviewing, case study and sociometry for collection of data.

(e) Role of the Investigator

In *quantitative enquiry*, the role of the counsellor as an investigator is limited to administering and scoring of the tools, to obtain averages, and hypothesise general trends.

In *qualitative enquiry*, various documents, artifacts, participant observation, and open-ended interviews are used as tools to collect data. The quality of data collected depends largely on the skill, competence, and rigour of the counsellor conducting the enquiry.

(f) Relationship between Investigator and Client or Student

In a *quantitative approach*, the relationship between the investigator and the client under study is generally circumscribed, short-termed and distant. The interaction is usually limited to the administration of the measurement tools. The focus is on the product of the test, i.e., the scores.

Qualitative enquiry emphasises trust, intense personal contact, and empathy for the client. The investigator builds a more involved and intricate relationship with the client. The focus in qualitative enquiry is on detailed description of the event or situation, description of the client's perceptions regarding their problem, and the client's experiences of how and why the problem occurred.

(g) Data

Quantitative research data results in numbers, counts, or measures. Questionnaires, tests, checklists, schedules, etc. are used which generally have closed ended questions with pre-determined probable responses. The responses are categorised to give a score.

In *qualitative approach*, the data are descriptive. They are in the form of verbal accounts as found in personal documents, field notes, photographs, official documents, artifacts, in a person's own words, through interviews, informal talks, etc. All are used to provide a holistic view of the case.

(h) Validity of Data

Validity of data collected by using quantitative enquiry depends on how well the instrument (test) has been constructed (its reliability, validity, norms, etc.). You have read about this in unit 2 of this module.

In a qualitative enquiry, validity of the observations made depends upon the skill, competence, and rigour of the investigator. Flexibility, insight, and ability to build on the implicit knowledge are the investigator strengths. Use of systematic observation, skillful interviewing and content analysis increase the validity of data that are built-in characteristics of any qualitative enquiry.

(i) Data Analysis

After data collection has been completed, a deductive and statistical analysis is used in the quantitative approach.

In the qualitative approach, the analysis of data is an on-going and inductive process. Data analysis is the process of systematically searching and arranging the interview transcripts, field notes, and other materials to increase an understanding of the client. Analysis involves organising the data, searching for patterns or themes, discovering what is important and what is to be learned, and deciding what to tell others. You will learn about this in your **practical training**.

Difference between Quantitative and Qualitative Enquiry

| | Characteristic Enquiry | Quantitative Enquiry | Qualitative |
|----|--|--|--|
| 1. | Goals | To show relationship between variables and to make predictions. | To describe multiple realities of the case, to develop a holistic understanding. |
| 2. | Design | Is structured, pre-determined, formal, specific and is given as detailed plan. | Is flexible, evolving and general i.e., it is a hunch as to how one might proceed. |
| 3. | Sample Size | Focus is on generalisation of the findings. Desirable to have large sample. | Focus is on particularisation, uniqueness. Individual cases, smaller number of cases. |
| 4. | Tools | Tests, structured interview schedules, questionnaires, etc. The focus is on perfecting the measuring instrument. | Participant observation, open-ended interview, artifacts, etc. The focus is on the skill, competence, and rigour of the person conducting. |
| 5. | Role of Investigator collection. | Administration of tools for data collection. | Skill, competence, and rigour of the person conducting the enquiry. |
| 6. | Relationship between Investigator and client | Is circumscribed, short-termed and distant. | Intense contact, trust based, and empathetic. |
| 7. | Data | Is in numbers, counts, or measures. Responses are categorised to give a total score. | Is descriptive, in the form of verbal accounts, field notes, photographs, official documents, etc. |



| | | | |
|----|------------------|--|---|
| 8. | Validity of Data | Depends on how well the instrument (test, questionnaire, etc.) is developed. | Depends on the skill of the counsellor/ investigator to use systematic observation, and skillful interviewing, etc. |
| 9. | Data Analysis | Deductive and statistical analysis is used at the end of data collection. | Is on-going, uses inductive analysis while data is being collected. |

You have read how the qualitative and quantitative enquiry differs in their approaches to the study of a client or a particular phenomenon. As counsellors, when you undertake qualitative enquiry to build the understanding of the client you will employ qualitative techniques that by their very nature and characteristics would give you a particular kind of data. It is important to remember that both approaches have their advantages and disadvantages. In qualitative enquiry, the individual is very important and it uses a holistic approach for understanding the client or phenomenon. The issues are not predicted but emerge as the investigator starts the investigation. Quantitative enquiry, in contrast, uses a piece meal approach, where traits are more important than the individual. In qualitative approach, the study of a client's behaviour or problem tends to take more time. As the data tends to be very extensive, reducing it to a more manageable size may create a problem. Reliability of the data is also a problem. However, qualitative and quantitative enquiry approaches need not be seen as opposites. In fact, they often complement each other providing different perspectives and answers to the related questions.

Activity 1



Identify a child in your neighbourhood school who has problems in learning. List the different sources of information that helped you to understand him/her. Based on the kind of information collected, categorise these into sources providing: (i) quantitative and (ii) qualitative information.

3.4 USING TRIANGULATION TO VALIDATE QUALITATIVE DATA

As a counsellor, you may observe something or interpret a situation depending on your biases, knowledge, beliefs, or values. How then is subjectivity in observations eliminated when each counsellor may have their own interpretation? How are observations made more valid? You need to be accurate in making measurements and in interpreting the meaning of those measurements. Some of these concerns are pertinent in qualitative investigations. One important way to strengthen your qualitative findings is through triangulation.

Triangulation involves the use of several methods to study the same phenomenon. Since different methods reveal different aspects of reality, no single

method provides a complete view. Use of different methods thereby, helps in counterbalancing the weaknesses of the other. There are four types of triangulation.

- *Data Triangulation*

It refers to collection of data using different sources. These sources could be of different categories of people (students, parents, teachers, community), at different times (in school, after school, after training). It would help you to know whether the client's problem/ phenomenon you are observing and reporting carry the same meaning or not in each of the different circumstances.

- *Investigator Triangulation*

This calls for employing more than one investigator to look at the client's problem or phenomenon, which reduces personal biases in the investigation. It also helps to bring different perspectives to the study of the same client.

- *Methodological Triangulation*

This refers to use of multiple methods to study a single problem. For example, an incident in the playground could be observed; later, the client could be interviewed, or the opinions of peers are documented, which provides a better view of the incident.

- *Theory Triangulation*

A client's problem can be looked at from different theoretical perspectives. For example, a child who is afraid to meet new people can be studied from a psychodynamic perspective, humanistic perspective, or psychosocial perspective. (You have read about these perspectives in the module-3, unit -2 on nature and development of personality.) All these would provide different explanations and help to understand the client better.

To sum up first type of triangulation procedure involves the convergence of multiple data sources, second is investigator triangulation, in which multiple researchers are involved in an investigation, third is methodological triangulation, which involves the convergence of data from multiple data collection sources and lastly is convergence of data from different theoretical perspectives. Thus triangulation is simply using different methods to investigate the same problem /issue, thus cross-checking one finding against another, and increasing the reliability of the findings or observations made.



Self-check Exercise 1

State whether the following statements are true or false

1. The focus of qualitative enquiry is on understanding the reasons of client/ student behaviour.
2. Assumptions made about the client's/students behaviour help in qualitative investigation.
3. Photographs, field notes, artifacts all of these are used to provide holistic view of the case.
4. Researchers skill, competence and rigour strengthen qualitative research.
5. The strength of qualitative research is its focus on uniqueness of the individual.



3.5 TYPES OF QUALITATIVE TECHNIQUES

You have learned by now what qualitative enquiry and its distinguishing characteristics are. It is also important to know what qualitative data looks like so that you will know what you are seeking. The data collection in qualitative methods mainly consists of (i) interviews, (ii) observations, and (iii) written documents. Besides these, use of peer appraisal techniques, undertaking a case study, or analysis of autobiographies, also provides qualitative data. While doing observations, data collected is in the form of descriptions of people's activities, behaviours, and actions, etc. The data from interviews consists of viewpoints from people about their experiences, opinions, and feelings. Analysis of documents such as clinical records, quotations, official reports, and open-ended written responses also form qualitative data. All of these techniques when used by counsellors help gain a better understanding of the client. Regardless of the type of information acquired, the counsellor's goal is to use the results to help the client. It is important to know how to employ qualitative techniques to gain a holistic understanding of the client. This section will help you understand the characteristics and use of some qualitative techniques such as observation, interview, sociometry, and case study.

3.5.1 Observation

Observation is a natural phenomenon. We all observe different things, events, and people everyday in our lives. Observation is the most direct method of learning about the development of children. Since it requires focus on the child's behaviour, observation allows the counsellor to know the child as a unique individual, rather than as a member of a group. Observation is important in case of young children who have not mastered language or the ability to read or write, as they are not able to express themselves through informal or formal measures or standardised tests. You can obtain evidence of how and why they behave as they do through on-the-spot recording of their actions. In fact, one of the most accurate ways to learn about children is to observe them in their daily activities. It requires systematic and rigorous observation, which involves far more than just being present and looking around. To understand fully the complexities of many situations, direct participation and observation of the student/client is considered one of the best approaches.

As a school counsellor, the systematic observation and recording of facts about the school children/clients becomes more important for the following reasons.

Observation helps to:

- make an initial assessment of the students abilities, to know student's areas of strengths and weaknesses,
- develop individual plans based on observed needs,
- conduct an on-going check on the progress of the client/student,
- resolve a particular problem, involving the client/student, and
- gather information for the cumulative record for use in on-going guidance of students.

Following the significance of observation, you should know what the focus of observation is and how to observe. You will read about this in the following section.

What to observe

Observation is a process that helps the counsellor learn incidentally or in a planned manner about the client. Observation is often used by teachers to understand the cognitive, affective, and motor development of children. What kind of individual actions are important for a counsellor to observe and record? What has to be observed would depend a lot on the problem faced by the client, no exclusive list of indicators can be given. While observing the client, some particular behaviours that a counsellor needs to observe and record include: verbal cues, facial expressions exhibited, kinds of gestures made with the hands, arms, and feet? etc. These are indicative of the clients' *emotional development*. *Social development* can be observed in the manner the client interacts and gets along with peers. Is She/he alone or part of the group? Does She/he appear popular with the others or often excluded? How does She/he respond to sharing or taking turns? Is She/he co-operative and helpful? To know about student's physical development, the counsellor needs to watch how the student walks, runs, climbs, jumps, and balances. Does She/he have eye-hand co-ordination in using tools? To know about the *cognitive development* the counsellor must rely on classroom performances, the examination reports, and the student's creative ability in approaching situations in a counselling setting, etc.

How to Observe

What happens when you enter your school everyday or when you go out to the market? We observe many things around us – happenings, people, gestures, speech and so on. But are we able to notice everything that is taking place? Would other people observe the same things as you do? Most likely, each person observes the same thing slightly differently. We ignore a large majority of things and notice only a few. This happens because human perception is highly selective. What we “see” depends to a large extent on our interests, backgrounds and biases. Also, our culture shapes our perception and makes us value certain things. If you ask different people to see the same scene, design, or object you will notice that they see different things. This means that there are individual variations in observation. However, this variation can be minimised by training people to observe. It also means observation is not mere “seeing”.

Training includes how to write descriptively, recording field notes, using methods for validating observations. Preparation for observation has mental, physical, intellectual and psychological dimensions. The quality of information gathered from observation can be increased with training in the observer's skills. The observer must know what to look for, how to record the desired information and how to explain the behaviour. The accuracy, validity and reliability of observations can be improved through rigorous training and careful preparation.

It is important to remember that the purpose of observational data is to describe:

- the setting that was observed,
- the activities/behaviour that took place in the given setting,



- the people who performed the behaviour or participated in the activities, and
- the meaning of what was observed from the perspective of those observed.

As counsellors you can make use of different sources for collection of observational data. These sources could be documents (such as personal diaries, registers, or memos, etc.), interviews, informal talks, physical settings (how space is used, lighting, etc.), social settings (communication pattern, how decisions are taken, etc.), non-verbal cues, or unobtrusive indicators (equipment in the laboratory, books used in the library, condition of carpets, etc.).

3.5.1.1 Variations in Observation

Counsellors can make observations in a number of settings such as homes, schools, classrooms, communities, and organisations depending on the needs of the student. Variations occur due to a number of factors associated with nature of counsellor's participation, extent of involvement, duration of observation and focus of observation (Patton, 1990). These five factors can cause variations in an observation:

- *Nature of Participation*

The counsellor can make observations by being part of the client's setting/actual situation (i.e., a full participant) or can observe from a distance/completely separated from the setting (i.e., as a spectator). The extent to which the counsellor as observer will be a participant in the setting/case being studied will influence the observations made. The involvement of counsellor as an observer can change from complete participation to that of spectator. The counsellor as participant observer tries to understand the client's setting through personal experience, observations, and by talking to others. The purpose of such participation is to develop an insider's view of what is happening and to describe the situation to others as an observer. You may start as a spectator and gradually become a complete participant. The extent of participation can change with time; it is not a one-time decision. The extent, to which the counsellor can become a participant observer, will depend on the nature of the situation or problem of the client.

- *Portrayal of Observer Role*

The observations made by you, as counsellor will be affected by the fact whether the client knows the purpose of making the observation or not. The observations made can be both covert (i.e., purpose of making observations is hidden from the client) and overt (i.e., the client knows the observations are being made). If covert observations are made, the client's behaviour is not likely to be effected, as She/he does not know the counsellor is observing her/him. Just as counsellor participation is not an either-or proposition in observation, the extent to which an individual is informed of that She/he is observed will vary from full disclosure (i.e., overt observations) to no disclosure (i.e., covert observations) continuum.

- *Duration of Observation*

Counsellors often are faced with the question; "How long should the duration of observations be?" The duration of observations will depend on the time and



resources available in relation to the purpose of studying the client. Observations should last long enough to get the answers related to the case or client’s problem. It could vary from one hour to a year.

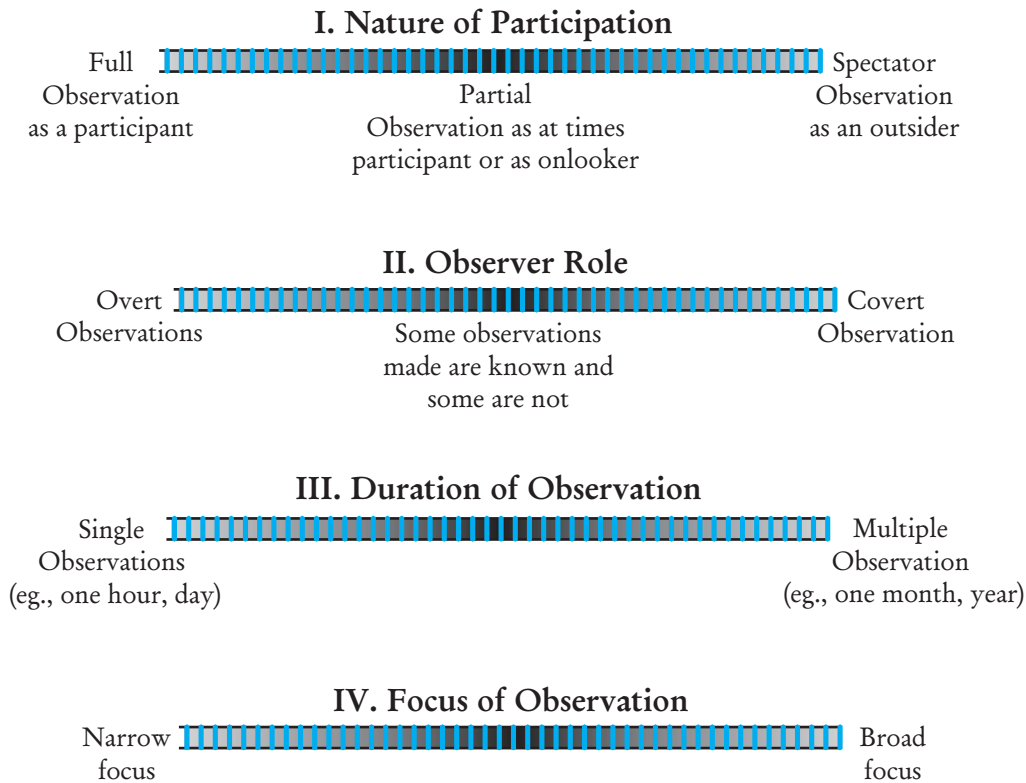


Fig. 3.1: *Dimensions of Variations in Observation*

- *Focus of Observation*

The focus of observations could be to provide a holistic view of the client and include all relevant aspects. On the other hand, one single aspect of behaviour/personality of the client can also be the focus of observations. For example, behaviour of a child can be observed in a particular set up (e.g., the play ground) or the focus could be, behaviour exhibited in all activities in which the client participates during the school hours or even outside the school. The extent to which the focus of the observation is broad or narrow will largely depend on the problem/needs of the client, as well as time and resources available.


3.5.2 Methods of Recording Observation

After having learned about what and how to observe, you now need to learn about the technique to record observations i.e., field note taking.

Field Note

Field notes contain the description of what has been observed. They are descriptive, should be dated, should contain basic information about when and where the





observation took place, who was present, what the physical setting was like, what activities took place, and what social interactions occurred. It should permit the counsellor, as observer, to experience the activity observed while reading the observation and analysing the data collected. The following example is an illustration of a field note.

The following example of a field note throws light on the nature of teacher-student interaction. Preparing field note includes features such as recording word-for-word conversations, ensuring facial expressions are noted, external distractions are noted where they affect the client interaction, etc. The following field note revealed that the teachers' role is that of a facilitator.

Example: Field Note

Group: Progress

Setting: Classroom

Age: 8 + yrs

Dated: 3.11.2006

During class assignment termed "self-evaluation" the teacher instructed the group to revise their answers on completion of the activity. As each child finished the work and took it to the teacher, they were reminded to strike out words that have been spelled wrongly and then correct them. A boy in the class was not interested in corrections and so quietly gave his answer sheet to the teacher.

Teacher: (Observes 3 - 4 words which have been struck off, calls the boy and asks.) How do you know these are wrongly spelt?

Child: I know.

Teacher: Then write the correct form.

Child: I don't know.

Teacher: Then look them up in the dictionary.

The child neither seems interested nor wants to make any effort (frowns). The teacher coaxes him to look it up in the dictionary. (The dictionary is kept in the class cupboard.) After spending sometime the boy gives the answer sheet back to the teacher, and says: "I have seen the dictionary and whatever I could find I have written."

The teacher looks at the answer sheet carefully and remarks, you'll have to look it up again. The teacher now stands by the child's side and helps him to look up the words. He makes the child recall the activity where they were taught the basics of looking up words in the dictionary and gives examples.

Child: (Has got interested now and starts looking up the words he need.)

Wow! I have got "Science" also.

(The student excitedly makes the spelling corrections in his answer sheet.)

Teacher: (Smilingly Remarks!) See you got it only after you made an effort to find the words.

There are a number of ways for developing field notes. Anecdotal records and Critical event records are two examples of field notes. These are explained below:

Anecdotal Records: *An anecdotal record is a written description of a person's behaviour. It is an objective account of an incident that tells what happened, when and where. The record may be used to understand one aspect of behaviour. For example, it may track the developmental pattern of the child or explain unusual behaviour of the child. The record is an objective narration of the incident and comments may be added to explain the incident. An example of the form of an anecdotal record is given below.*

Example

Name of the Child: _XXX_, **Age :** 10 yrs , **M/F:** Female
Location : Classroom **Observer:** Mr.XYZ

Incident

Shane was sitting with a group of boys and girls of his class and talking about an assignment that was given by the teacher. John came and sat with them. He tried to be a part of the conversation. Shane ignored him and continued talking to others. One of the girls Reema asked John if he had done the computer science worksheet given on the previous day. Shane interrupted and laughingly remarked "John will be the last person to submit it." Others joined in the laughter. John got up and shoved Shane, which made him fall off the chair. "This will teach you to mind your own business", he said. This led to both of them hitting each other and the teacher was called to stop the brawl.

Comments John felt left out of the class group and talk. Perhaps because of not so good grades his peers ridiculed him.

Signature

The main characteristics of the anecdotal record are summarised as:

- Anecdotal record is the result of direct observation.
- It is accurate and gives specific account of an event.
- It includes the context of the behaviour.
- It focuses on behaviour that is either typical (normal everyday behaviour) or unusual for the child being observed.
- Any remarks or specific observations are written separately after recording the incident.

Since a counsellor cannot deal personally with all the students, anecdotes prepared by teachers are very useful in finding out students who need professional help. The major limitation of these records is their subjectivity. However objective an observer may be, the chances for subjectivity are still there because of selective perceptions.

Critical Records: *These records help to preserve the essence of what is happening. The observer looks for specific instances, episodes that are considered illustrative of some aspects of behaviour. For example, constant antisocial behaviour exhibited when a rule is consistently broken, an aggressive act such as bullying in the school grounds, or an event that does not occur in a regular routine are all examples of where a critical record might be documented. The counsellor/observer writes describes the (i) context of the incident (ii) the*



actual incident in detail (iii) explains why the incident was critical or significant (iv) interviews the client / participants to explain their concerns at the time and describes their thinking and feeling during the incident and afterwards.

3.5.3 The Value of Observational Data

It is important to remember that the purpose of employing qualitative methods in guidance and counselling is to describe the behaviour of the child in the setting that was observed, the activities that took place, the people who participated in the activities and the meaning given to the happenings by the people who participated. The descriptions must be factual, accurate, and thorough without including irrelevant and trivial information. The basic criterion to apply in judging a recorded observation is whether the observation permits another reader to enter into (i.e., feel a part of) and understand the situation described.

The participant-observer has the opportunity to see things that may routinely escape the awareness of the participants. The participant-observer can also discover things no one else has paid attention to. The participant-observer may learn about things normally people do not want to talk about in interviews or about sensitive topics. Through direct experience with and observation of children, the observer can gain information that otherwise would not be available. First hand experience permits the observer to access personal knowledge and direct experience and resources, which aid in understanding and interpreting the case or child.

3.5.4 Guidelines for Observation

What a counsellor observes depends on the situation, the nature of setting, and his/her skills, needs, and views. No matter what the situation there are a few rules to follow when making observations as part of a qualitative enquiry.

- Be descriptive in taking field notes (anecdotal records, critical incidents).
- Gather information from different perspectives (client, peers, parents, and teachers, etc.).
- Cross-validate and triangulate by using data from different sources: observation, interview, and documents, etc., and using more than one investigator.
- Present the views of the people, their experiences in their own words.
- Separate description from interpretation and judgement.

Here you have learned about observation as a technique. The technique of observation is subsumed in the entire process of guidance and counselling such as in establishing rapport in assessing clients problems, in assessing clients progress through the counselling sessions, in planning of guidance program and so on. You will be trained to develop observation skills for using in guidance and counselling during the assessment and counselling practica. Observations of the counsellor help in gathering first hand information about the client from various sources. This helps to supplement and corroborate the information received about the client during the process of counselling. However, authenticity of observation depend on observational skills used by the counsellor.

3.5.5 Interview

The purpose of interviewing is to know what is going on in a person's mind. You interview people to find out from them those things you cannot directly observe such as feelings, intentions, and thoughts. You cannot observe things that happened in the past, or the meanings attached to things or incidents going on around. To obtain information about these you have to ask questions. This helps you to know client's perspective.

In-depth, open-ended interviewing aims to capture the clients' experiences and perspectives on their problem in their own terms. Open-ended interviewing is based on the assumption that others' perspective is meaningful. It is important to remember that skilful interviewing involves much more than asking questions. Besides, developing the skill and technique of interviewing, it is also important to have a genuine interest in and care for the perspectives of others. In the following section, you will learn about the types of interviews, content of an interview, and guidelines on how to question to conduct an interview with the client. You have also read about interviewing in a counselling set up in the Unit on 'Basic Counselling Skills' in Module 2.

3.5.5.1 Types of Interviews


There are four basic approaches to collecting qualitative data through open-ended interviews. These are: the informal conversation, the interview guide approach, the standardised open-ended interview and the focus group interview. You will now read about the different types of interviews.

Informal Conversational Interview: It relies on spontaneous questioning which may take place as part of the counsellor's participant-observation. Over the course of an informal talk, the client may not even realise that She/he is being interviewed. In such interviews, the data gathered would be on aspects that differ for each client depending on the issues that emerge from the conversation. It may require time to collect systematic information and several conversations with the client. Some clients are more open in revealing their thoughts about problems and the conversation may progress rapidly. Other clients may have difficulty expressing themselves and so progress is slow and may take several conversations to relax a client to the point where they open up to the counsellor. Therefore it is useful if the counsellor is in the setting to be studied for some period before carrying out the interview.

The major advantage is that the interview is highly individualised to the client and produces information or insights that the counsellor /interviewer may not have anticipated. This type of interview requires the counsellor to be experienced in the content area and strong in interpersonal skills, since the direction of the interview will depend largely on him/ her. Since different information is collected from different people, such interviews are not systematic or comprehensive and require time to analyse the data.

Interview Guide Approach: This involves deciding before the interview, the issue(s) that are to be explored with the client i.e., identifies topics, but not actual wording of





questions, thereby offering flexibility. These identified issues are used to guide the interview and keep it on track and ensure that they are covered. This kind of interview is focused and hence the data collected are more systematic and comprehensive.

The major advantage is that the data are more systematic and comprehensive than in the informal conversational interview. This type of interview like the conversational interview also requires the counsellor/interviewer to be skilled and experienced to probe for more in-depth responses or guide the conversation in order to cover the topics outlined. One disadvantage is that outlined topics will prevent other important topics from being raised by the client.

Standardised Open-ended Interview: This interview consists of set of questions arranged in a sequence, which are asked to each client. It minimises the variation in the questions posed to the client at the same time provides scope to the client to give responses that are open-ended. This reduces the possibility of biases that come from having different types of interviews with different people. Data obtained from such interviews are systematic and thorough for each client but it reduces flexibility and spontaneity because the questions are predetermined thus leaving little scope for issues that may emerge during the course of the interview.

The advantage of this type of interview is that it is the most structured and efficient of the qualitative interviewing techniques. Especially for reducing bias when more than one-counsellor/ interviewers are involved, less experienced or knowledgeable, or when it is important to be able to compare the responses of different clients/respondents. The major disadvantage is that the counsellor/interviewer has little flexibility to respond to the particular concerns of the individual.

Focus Group Interview: In this type of interview the counsellor becomes a facilitator among the interviewees in a group setting where they hear and react to one another's responses. Focus group interviews enable the counsellor to obtain perceptions of a small group on very specific questions, in a defined area of interest, in a permissive, and non-threatening environment. Focus groups can be used by counsellors to assess the needs of a student group, obtain general background information about a topic or diagnose the potential problems of a group of students. The group interview is essentially a qualitative data gathering technique in which the counsellor's role is of a moderator, directing the interaction and inquiry in a manner that the purpose of interview is served. While formulating questions for the interview, the counsellor can start with general questions, move to specific questions and then back to a set of more general questions. This approach (from general to specific) is one way of engaging the interest of the participants. Tape recorders can be used for focus group discussions as the chances of losing data are minimised.

The main advantage of using focus group in counselling is that it is relatively inexpensive, individuals are likely to give candid responses, provides opportunity to build on other people's ideas and to explore on people's unique perspectives. The main disadvantage is that large quantities of data are generated which may be difficult to analyse and the direction of the group discussion is dependent on the skill of the facilitator.

The common characteristic of all types of interviewing is that the people being interviewed respond in their own words and provide their own personal perspectives. The main advantage of using open ended interviewing is that it allows the client to describe what is meaningful or important to him/her using his/her own words. Counsellors have the flexibility to use their knowledge, expertise, and interpersonal skills to explore interesting or unexpected ideas or themes raised by clients. On the other hand the disadvantages are that conducting interviews can be expensive and time-consuming, because open-ended interviewing requires considerable skill and experience. You will undertake experiential exercises to develop the skill of interviewing during the counselling practicum.

3.5.5.2 Content of Interviews

Before an interview is conducted, it is important to plan the type of interview whether it will be the informal conversation, the interview guide approach, the standardised open-ended interview or the focus group. You will now learn about the different kinds of questions that could be asked while interviewing the client.

What Kinds of Questions to Ask

The way a question is worded is very important as each response will vary depending upon the type and way in which a question is posed. Some examples of questions which could be asked and the purpose they serve are given here. The counsellor must decide what questions are to be asked, the sequence of questions, the details required, time of the interview and how to word the actual questions. These factors affect the quality of questions and the responses.

Behavioural/Experiential Questions

These questions relate to what a client does or has done. They are aimed at eliciting a description of experiences, behaviours, actions, and activities that the client has had. For example, you were reported hitting a girl in the schoolyard at recess. Would you like to tell me about why this occurred? What are your experiences of participating in the theatre workshop?

Opinion/Values Questions

These questions provide information on what the client thinks about an issue. Such questions inform about the client's goals, intentions, desires, and values. Questions such as, "What do you think about _____?" "What are your opinions about _____"?

Feeling Questions

These questions are aimed at understanding the emotional background to a client's experiences. For example, how do you feel about the new teacher taking over your Science class? How did you feel when your father was transferred to his new job in another city? Notice the use of the "feel" word to elicit the emotion response.

Knowledge Questions

Knowledge questions are very direct and factual in the information they request of the client. They are useful to find out background information to a situation or behaviour. For example the question, "How many hours do you watch television in a day?" might determine the role TV plays in the client not completing their homework.





Sensory Questions

These questions are about what is seen, heard, touched, tasted, and smelled. It is an attempt to make the client describe the stimuli to which s/he is subjected – they capture the experience of senses. What did you see when you entered the room? What did the teacher actually say when you were late? Sensory inputs are the building blocks of learning and relating to one's environment and the people in it. These questions provide information on how a person views/deals with the world, how She/he perceives the environment and the people and physical objects in it.

Demographic Questions

These are concerned with the identifying characteristics of the client. Questions concerning age, education, occupation, residence, etc., are standard questions, which provide information on the background of the client. These questions will often form part of a standard record sheet. The information collected is used in a number of ways. One possible way is to organise individual records according to standard data, i.e., the year collected, or by particular problem category. This will allow easier group data to be analysed. These types of questions are used in an interview – possibly as simple starter questions to ease the client's temperament, to form the basis of starting a conversation by referencing a particular piece of information or possibly asking questions to draw out more in-depth information.

How to Question

The way the question is worded is important. There are no fixed rules of sequencing questions for an interview. Informal conversational interviews are flexible and, therefore, fixed schedule is not required. However, standardised open-ended interviews must have a sequence because of their structured format. Some hints for asking questions are given here.

- The wording of the questions should be open-ended. Clients should be provided the opportunity to answer in their own terms when answering questions.
- As far as possible neutral questions should be asked. Wording that might influence answers, e.g., evocative, judgmental should be avoided.
- Questions should be asked one at a time.
- Questions should be worded clearly for the client to understand. This requires the cultural context of the client to be kept in mind.
- Be careful asking “why” questions. This type of question infers a cause-effect relationship that may not truly exist. These questions may also cause respondents to feel defensive, e.g., that they have to justify their response, which may inhibit their responses to this and future questions.
- Begin the interview with non-controversial questions concerning behaviours, activities and experiences. They focus on descriptions and are easy to answer.
- Next, questions concerning interpretations, opinions, and feelings may be asked. Descriptions given earlier provide a context to the client for expressing feelings and opinions.
- This could be followed by knowledge questions, as they also need a context. Enquiring about the knowledge and skills the client possesses is best when rapport and trust is built.

- Knowledge questions about the client’s current situation should be asked followed by questions about past history and then future perspectives. Background questions at times are uncomfortable to answer depending on how personal they are. These should not be asked at the beginning of the interview.
- “Who”, “where”, “what”, “when”, and “how” questions are often used to obtain a complete and detailed picture of activity or experience of the client. These type of probing questions aim to better understand a client’s situation and clarify a vague or general response. For example: “Can you tell me more about that?”, “Can you give me an example of when that happens?”, or “What do you mean by that?”
- Besides sequencing, it is also important to state the question clearly and precisely using appropriate speed and tone so that the client understands the meaning of the question.

Interviewing is an art and a skill that is developed with practice.

Cultural Influences on Interviewing

Interviews conducted between people from different cultural backgrounds have a chance of misinterpretation. There is more of a chance that miscommunication may occur due to use of language during the interview process and also the interpretation of the written word that comes out of the interview. The data from interviews are words, and they may have different meaning in other cultures.

Norms of interaction may also differ with different cultures. It is important that interviewers do not judge or change the values or norms as represented by their clients. The counsellor’s job is simply to understand the perspective of the client. To obtain valid, reliable and meaningful information in a cross-cultural environment requires special sensitivity and respect for differences.

You will learn more about interview and the professional skills required for counselling in module 2 “The counselling process and strategies”. You will learn how interviewing skills are subsumed in the counselling skills like active listening and responding, communicating, effective questioning etc. You will also learn to apply these skills during the counselling practicum for information gathering, rapport building goal setting, problem solving etc. while dealing with counselling cases.



Self-check Exercise 2

Fill in the blanks with appropriate answers given below:

1. Information on what people think about issues are covered in _____ question.
2. Affective domain can be covered through _____ questions.
3. Factual information can be obtained through _____ questions.
4. Identifying characteristics of a person are covered through _____ questions.
5. _____ questions capture the experience of senses.
(a) knowledge (b) sensory (c) opinion (d) feeling (e) demographic



3.5.6 Sociometry

You have read how to use qualitative techniques like observation, and how an interview helps in the assessment of an individual. There are some areas of development of the client in which information gathered through observations would need to be supplemented and complemented by peer judgments and reports. Various aspects of personal-social development of the client can be more effectively evaluated by using techniques such as sociometry. You too may have observed that in certain areas like leadership ability, concern for others, or effectiveness in doing group work, etc., peers often know each other's strengths and weaknesses better than the teacher or the counsellor. The intimate interactions that occur in the give-and-take of peer relations are seldom fully visible to an outside observer. Hence peer appraisal is important to build an understanding of the client. You shall now learn about sociometry which can be effectively used with clients and their peers.

Sociometry is a technique for evaluating the social acceptance of the client or individual student. It also provides information on the social structure of a group or class of which the client is a part. It provides information relating to how each individual is perceived by the group/class. Students are required to give their choices of companions for some group situation or activity. A typical sociometric test is shown in figure 3.0. In the example given below children's acceptance is assessed for choice of seating companions, work companions and play companions.

Example

Name _____ Date _____

Some new arrangements will be made for sitting, working in small groups, and playing group games. I would like to know the names of those children you would like to sit with, to play with you and to work with you. You may choose anyone in your class you wish, including those students who are absent. Your choices will not be seen by anyone else. Make the choices carefully so that the groups can be arranged the way you really want them.

At times it is not possible to give everyone their first choice so make sure you give three choices for each question.

I would choose to sit with these children.

1. _____ 2. _____ 3. _____

I would choose to work with these children.

1. _____ 2. _____ 3. _____

I would choose to play with these children.

1. _____ 2. _____ 3. _____

As you may have observed, that given example illustrates some important principles of sociometric choice. These are:

- (i) The choices should be real choices that are natural part of classroom activities.
- (ii) The basis of choice and restrictions on the choices made should be indicated clearly.
- (iii) All students should be equally free to participate in the activity.
- (iv) Choices made by the students should be kept confidential.

Although some differences in choice can be expected from one situation to another, a large element of social acceptance runs through all the choices. It is suggested by sociometric experts that negative choices should be avoided unless absolutely essential. Questions such as ‘whom they would not want as companion’ may disturb both the group morale and the emotional development of students/client.

It is important to keep in mind that the number of choices made by the students is restricted. Two or three choices for each activity is considered as a suitable number for children otherwise they find it difficult to discriminate when number of choices is large.

Tabulating Sociometric Results


You have just learnt how to measure the social acceptance of a student by using sociometry as a technique. It is important for you to know that the students’ sociometric choices must be organised in some manner in order to interpret and use its results to understand the client. How to organise the data? It is important to tabulate the choices in a matrix like table, like the one given in the example shown in figure 3. You will now learn how to tabulate data in a matrix table. As you can see the names of the students in the stated example, are listed on one side and are numbered from 1 to 12. These same numbers, corresponding to the student’s names, are placed across the top of the table in that order so that each students’ choices can be recorded in the appropriate column. Let us now tabulate the data in the matrix. If the choices of Kapil were: 1. Raja 2. Bob 3. Sagar.

Table 3 : Matrix Table showing choices of companions

| S.No. | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------|--------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1. | Kapil | | | 1 | | 2 | 3 | | | | | | |
| 2. | Harry | | | 3 | | 1 | | | | | | | |
| 3. | Raja | | | | | 1 | | | | | | | |
| 4. | Dinesh | 3 | | 1 | | 2 | | | | | | | |
| 5. | Bob | | | | | | | | | | | | |
| 6. | Sagar | | | 3 | | | | | | | | | |
| 7. | Susan | | | | | 3 | | | | | | | |
| 8. | Divya | | | | | 1 | | | | 2 | | 3 | |
| 9. | Rina | | | | | 3 | | | | | | 2 | |
| 10. | Ann | | | | | | | | | | | | |
| 11. | Sonia | | | | | | | | | 2 | | | |
| 12. | Mary | | | | | | | | | | | 2 | |

These choices, as you must have observed, are recorded to the right of Kapil’s name by placing number 1 in column three to indicate Raja as his first choice, number 2 in column five to indicate Bob as his second choice and number 3 in column six to indicate Sagar as his third choice. In this manner the choices of all the students are to be tabulated in the matrix.





In this example given, the boys and girls are listed separately. This divides the main part of the table into four quarters. The boys' choices of boys fall into the upper-left hand quarter of the table, and the girls' choices of girls' falls into the lower right-hand quarter. The diagonal time, which you see going across the empty cells that are unused because students do not choose themselves, cuts through these quarters. The upper right-hand quarter and the lower left hand quarter, then contains only cross-sex choices. The choices given to the opposite sex are readily apparent and easy to summarise.

Interpreting Sociometric data

In totaling the number of choices received, (see Table 3), each choice was given a value of one, regardless of level of choice. The number of choices students receive on a sociometric question is used as an indication of their social acceptance by peers. The students who receive maximum number of choices are called stars. Those who receive one choice are isolates and those who receive no choices are neglectees. When students choose each other, they are called mutual choice.

The remaining students, who fall somewhere above or below average, are given no special name. It is important to keep in mind that in the given example the data of only 12 students are given which sets limits on the range of choices made. Can you identify the star, isolate and neglectee from Table 3? The table indicates that Bob is a star, Kapil is an isolate, and Susan is a neglectee.

Uses of Sociometric Results

In order to help students it is important to know how the sociometric results can be used in the school. Counsellors and teachers can use sociometric results for:

- Organising classroom groups,
- Improving individual student's social adjustment,
- Improving groups' social structure, and
- Evaluating the influence of school practices on students' social relations.



Self-check Exercise 3

Fill in the blanks with appropriate answers given below:

1. Peer appraisal technique like sociometric procedures are especially useful in evaluating _____ development.
2. Sociometry is a method for evaluating the _____ of an individual and the _____ of a group.
3. Sociometry is based on students' _____ of companions for some activity.
4. Those students who receive no choices are called _____ .
5. When students choose each other, they are called _____ .
6. Student receiving the maximum choice is called a _____ .
7. In order to organise classroom groups, teachers can make use of _____ technique to know the group structure.
(a) social acceptance, social structure, (b) sociometric (c) personal-social
(d) star (e) choices (f) isolate (g) mutual choice

3.5.7 Case Study Method

You have learnt by now how to gather data on the client by use of tests as well as qualitative techniques like observation, interview and sociometry. It is not enough to gather data, but it is necessary to integrate information in order to be able to draw coherent inferences about the client. As counsellors, you would have an wide array of information of the client which needs to be put in order to be validated, to draw inferences, determine their meaning and communicate this meaning to the client. In fact, the process of integrating data does not take place at the end of data collection but occurs simultaneously while providing assistance to clients. We may say, the process of integrating data is a basic function of counselling. You will also read about integration of appraisal data for counselling in Unit 7 of this module. Case study is one such method used for summarising and integrating assessment and appraisal information. You shall now learn about the Case Study method in the following section.


3.5.7.1 What is a Case Study

You know that it is important to integrate the appraisal data of an individual to draw inference/meaning. Use of qualitative techniques like the case study, helps to better understand any individual or client or phenomenon about which little is known. A case study is an in-depth, intensive and detailed study of an individual or the client. The focus in case study is on factors contributing to the development of particular personality patterns and/or problems. The case study employs all possible tools and techniques that seem appropriate to understand an individual (e.g., observation, interview, self-reports, teacher's ratings, checklist, sociometry, document analysis, autobiographies, etc.). It gives detailed information regarding different perspectives that cannot be attained by any other methods. Case study is the most comprehensive of all analytical techniques because it makes use of all other assessment techniques.

Case study as an assessment technique is used by counsellors to provide a means of integrating and summarising all available information about the client in order to determine what further steps should be taken to enhance his or her development. Remember that collection of case study data is not simple stockpiling of information. Rather, the purpose of a case study is to present the client as a 'fully functioning totality' within his or her environment. Therefore, a case may be selected to understand the mechanism by which problems accrue or a case study may attempt to achieve a better understanding of the problems of a child. For example, a case study may be conducted on a student who has a problem in reading or in arithmetic. We employ case study method to study the whole individual (in his dynamic developmental process) so that we may better understand his concerns, the reasons for his actions and behaviours and plan the course of action, which is appropriate for him.

To counsellors the advantages of case study method are that it (1) provides detailed, realistic, and concrete description and explanation for each and every pertinent aspect of the client. (2) considers each individual to be unique. (3) lays emphasis on accuracy and adequacy of data collected through various sources. (4) helps to understand the complexities of the case/client under study and (5) useful in isolating key factors in situations in which





conflicting accounts confuse the case. However, the disadvantages of case study are (1) it is a very long and time-consuming process. (2) it is very difficult to know the whole history of any client and to observe it objectively. (3) The use of insights – direct and indirect observations, personal interpretations, etc., may be subjective and prejudiced. (4) it is also possible that the parents might not have observed something about the history of their children, which would have been very important for the case study. (5) there is a tendency on the part of investigators to generalise facts about certain behaviour. But every individual is unique and (6) if the investigator is not properly trained, She/he can cause more harm to the client using the case study method.

To sum up, we may say case study is a synthesis and interpretation of information about the client and his/her relationship to his/her environment. As counsellors it would help you to understand the nature and causes of the client's behaviour, personality trends and difficulties in adjustment. The question then arises: how to conduct a good case study? You will now learn about the characteristics of a good case study, types of information used, in case study how case study is organised, how to report a case study and its advantages and disadvantages.

3.5.7.2 Characteristics of a Good Case Study

Case studies of children were devised originally for use in child guidance clinics for the investigation of maladjusted children and exhibiting other behavioural problems. As counsellors, however, you can also develop case studies of students who are high performers or creative or exhibiting socially desirable behaviour. The following are the characteristics of a good case study:

1. A good case study is concerned with the individuals' past, present and future.
The data collected from different sources, at different times through various tools and techniques, should be analysed, synthesised and presented in a manner to present a complete view of the individual/ client's life.
The continuum of his or her development, the inter relationships among factors affecting the growth and development of the individual (e.g., relationship with parents, peers, teachers, parenting styles, schools, etc), the current status and future outlook should be portrayed.
2. A good case study is dynamic and longitudinal and not static and cross-sectional. It is designed to understand a student so as to help him or her by planning remedial steps for development.
Data relevant to the problem are presented in the case study, its interpretation, recommendation for future action, and plans for reviewing the effects of remediation programme are also included.
3. Focus of a case study may be the whole individual or a small part.
A case study may focus on entire life, such as, the student/client as a whole (all aspects of the student/client) or a selected segment, such as aggressive behaviour of the child. The focus of the case study varies widely and depends on the age of the client, the purpose of assessment, the working situation and the experience of the counsellor.

Types of Information Used in a Case Study

You have learnt that the aim of gathering/ information about a person is to develop a holistic perspective, to be able to understand him/her and provide proper guidance and counselling. The various kinds of information used in a case study are:

Observational Information: This information is obtained through counsellors/ researcher's observation of the client or case. It may also be based on information of teachers, family members, peers who may have observed the case in different settings.

Quantitative data: This is related to the results obtained through the use of different tests and other techniques.

Historical Information: Historical information is about the client's past life, cultural, personal, social and economic factors which influence a person's behaviour. This information is obtained through records, documents or interviews. Both personal and family history is obtained. An outline for history taking has been given in Unit-4 in module-2. This helps to build a longitudinal perspective of the client/case and helps to know the genesis of the problem.

Sources of Information: The primary source of gathering data is the client himself. Generally client's are able to give reliable account of their past history, likes and dislikes, reactions to certain aspects of their life. The other sources of information could be the parents, teacher's, friends, relatives, records (school and clinical) and so on.

3.5.7.3 Organisation of a Case Study

The organisation of a case study depends on two major factors:

- The purpose for which the case study is being prepared. This depends on the needs of the client, counsellor, parents, referral agency or purpose of study.
- The competencies and skills of the counsellor/researcher in collecting, organising and using information.

Organisation involves providing an outline or format and developing and executing a logical plan such as to present the information in an integrated manner. You may keep in mind that there is no set criterion for identifying, which data is important and which is not, nor there is a pattern that dictates the order, or suggests for emphasis or form of the case study. The question then arises how do we classify the various types of information? In case of a client, generally the information is classified under two categories:

Identifying Data – This includes name, age, sex, height, weight, place of residence, data and place of birth and referral sources.

Personal Data – This includes developmental history, family background, school and work experiences, school activities, interests and hobbies, test and other observational data, interview data personal and social adjustment data and goals. Refer to unit 4 module 2 for more details.

It may be remembered that both data serve to identify and help in understanding background and personal history of the client.





An Outline for a Case Study Report

You have learned that information may be collected from school records, teacher ratings, questionnaires, checklists, test scores and other sources such as observations, informal talks and interviews. This information has to be organised and categorised for preparing reports. An exemplar performa for reporting a case study of a client is given below:

- (i) Identification data: (should consist of)
 - Name of client
 - Sex M/F
 - Father's name
 - Father's occupation
 - Date of Birth
 - Class
 - School
 - Language used at home
 - Present and permanent address
- (ii) Referral Source
 - Personal History
 - Date of assessment Duration
 - Nature of problem Opinion of parents
 - Onset & teachers
 - Seriousness
 - Frequency of occurrence of problem
- (iii) Educational History and Record
 - Cumulative record card/ Anecdotal record
 - Is there any change of school with reason
- (iv) Health Background
- (v) Home and family background and neighbourhood
- (vi) Friends and acquaintance

The following steps are followed in developing a case study.

Step 1: Determine the Status of the Situation

Problems can be identified in areas of physical disabilities (i.e., hearing, sight, speech) special talents, or slow learners. Determine the degree of the problem. Use various instruments and procedures including records, tests, questionnaires, checklists, rating scales, interviews and clinical and laboratory techniques to determine the degree. The facts should be obtained in an accurate and objective manner. Even if other teachers or parents refer the client to you, it is important to maintain an objective view. A student who is disruptive in class or is weak in solving arithmetic problems may not have a learning disability, but was referred based on opinion rather than fact.

Step 2: Collection of Data, Examination and History

Collection of data is connected with the investigation (step 1) stage, but the emphasis is on searching for facts that may later serve as a basis for diagnosis or identification of the causal factors, which operate on the context of the client. Many procedures and instruments listed in previous step can be helpful in collecting factual information. Life history, writings, letters, and diaries can also be used for collecting background information and knowing context to a client's problem.

Step 3: Identification of Causal Factors and Diagnosis

The pattern of diagnosis leads to the formulation of hypothesis of causation. After causation, diagnosis helps to identify possibilities for growth and adjustment of the client. For example, mentally, physically challenged, under achievers, etc. need broad type of diagnosis, which is to be followed by remedial instructions or educational experiences for the development of the individual. Diagnosis is the first step in treatment of any problem. Successful diagnosis should provide:

- Evidence of strengths and weaknesses related to the client's problem.
- Techniques of diagnosis can be: tests, observation, and analysis of the pupil's written reports, interviews, informal talks, and peer appraisal etc.
- Must provide comparable data so that measurement of progress can be done.
- Must be reliable so that other data can also be associated.

Causation may be of varying degrees. For example, a seventh class delinquent student may reveal a marked deficiency in reading ability as the primary cause of maladjustment leading to failure which is secondary cause. His truant behaviour is a result of learning difficulties, which leads to deficiencies in the course work and hence, the tertiary cause of maladjustment.

Step 4: Treatment, Therapy and Adjustment

The focus of treatment and therapy aims at developing self-understanding. Self-realisation occurs as the problem is perceived as one's own rather than of the environment. Thus the aim of therapy is that the person can be helped in developing an understanding of his problem and then following through with an action plan to adjust.

Step 5: Follow-up Programme

To complete the cycle of case study, it is necessary to check on the validity of the remedial treatment. This tells you how effective your treatment was. If you find any gaps, then the cycle can be repeated.

The steps in the cycle of case study are summed up below:

- Recognition and determination of the status of the problem to be investigated.
- Collection of data relating to the factors and circumstances associated with the given problem.
- Diagnosis or identification of causal factors as a basis for remedial or developmental treatment.
- Applications of remedial or adjustment measures.
- Subsequent follow-up to determine the effectiveness of the treatment.



The case study method learned above would help in collecting, analysing and integrating data from different sources for holistic understanding of the client. It will help in preparing counselling case records as well as for evaluating outcomes of counselling interventions. You will be trained to use this method during counselling practicum.

3.6 Summary

Qualitative assessment provides an in-depth understanding and a holistic perspective about a client.

The qualitative approach differs from a quantitative approach in its methodology of studying people. In fact, they provide answers to different questions.

Qualitative approach is known to be descriptive, flexible, subjective, in-depth, interpretive, and holistic in nature. The focus is on the uniqueness of an individual. One way to strengthen qualitative analysis is to use triangulation i.e., use of several methods to study the same behaviour/phenomena.

Content analysis of data involves searching patterns and themes for classification of data. Use of triangulation approach helps to validate the interpretations.

Observation and open-ended interview are two important tools of qualitative inquiry. Systematic and objective observation requires preparation and training. The observer must know what to look for, how to record the obtained information and how to explain the behaviour.

Interviews help to obtain the client's perspective. These are different approaches to collecting qualitative data through open-ended interviewing. Before conducting interview, it is important to decide the kind of questions to be asked, their sequence, thinking, and wording them.

Sociometry is a technique for evaluating the social acceptance of individual students and the social structure of a group i.e., how each individual in a group is perceived.

Case study is an in-depth, intensive, and detailed study of each and every pertinent aspect of an individual or phenomenon. Case study method is used for summarising and integrating appraisal information. The information used in a case study is gathered from all reliable sources: cumulative records, observations, interviews, self-reports, tests, peer appraisal data, and a teacher's perceptions, etc.

Self-Evaluation Exercises

1. List three most important characteristics of qualitative approach.
2. State the differences between qualitative and quantitative approach.
3. In what ways do variations occur in observation?
4. How can the inaccuracies in observations be reduced?
5. What are the strengths and weaknesses of the different interviewing methods: informal conversational interview, interview guide approach and standardised open-ended interview.



6. What are the characteristics of a good case study?
7. List the steps to be followed for undertaking a case study.
8. State three advantages and three disadvantages of the case study method?

Answer Key to Self-evaluation Exercises

1. The three most important characteristics of qualitative approach are:
 - Qualitative enquiry focuses on uniqueness of an individual i.e., their strengths and weaknesses.
 - The client or the client's problem is studied in relation to his/her context or environment.
 - Qualitative enquiry is descriptive. Data is collected in the form of episodes, personal narrations, stories, words, or pictures , etc.
2. The differences between qualitative and quantitative approaches are:
 - Qualitative and quantitative enquiry can be differentiated in terms of:
 - *Goals*
In qualitative enquiry the aim is to gain a holistic understanding of an individual i.e., to understand all the factors/events contributing to the problem whereas quantitative enquiry aims to give statistical differences between variables and make predictions.
 - *Design*
In qualitative enquiry the design is flexible, evolving and general, one approaches the field of study without any predetermined categories whereas in quantitative enquiry, the design is more structured, predetermined, formal and specific.
 - *Sample*
In qualitative enquiry the emphasis is on uniqueness of an individual. It gives detailed information of individual cases or smaller number of people and restricts generalisation whereas in quantitative approach it is desirable to have large sample randomly drawn; focus is on generalisation of the findings.
 - *Tools*
In qualitative enquiry the tools that can be used are observation, case study, sociometry, unstructured interviews whereas in quantitative enquiry the tools used are tests, structured interviews, questionnaires etc.
 - *Data*
In qualitative approach the data are descriptive. They may be in the form of used reports, field notes, photographs, official documents, artifacts, informal talk etc. whereas in quantitative research, data are in numbers, counts or measures.
 - *Relation with clients /participants*
In qualitative research there is more emphasis on trust and empathy, participant/client is treated as a friend or equal whereas in quantitative enquiry the relationship with the client is short termed and distant.





- *Validity of data*

In qualitative enquiry the validity of data collected or observations made depend on the skill or competence of the researcher whereas in quantitative approach the validity of data will depend on how well the instrument used for collecting data is developed.

- *Data analysis*

In qualitative approach the data analysis is on-going and inductive in process (general principles are inferred from specific cases) whereas quantitative enquiry is more deductive (proceeds from general to the particular) and uses statistical analysis.

3. *Elaborate on the following points*

- *Nature of Participation*

Observations can be made by being part of client's setting i.e., full participant or it can be made by observing from distance i.e., as a spectator. The extent to which the counsellor or observer participates in the setting/case being studied can also cause variations in observation. A counsellor can start as a spectator and gradually become a full participant or vice versa.

- *Portrayal of Observer Role*

The observations made can be overt i.e., purpose of making observation is not revealed to the client or it can be covert i.e., clients know that observations are being made.

- *Duration of observation*

Observations can vary from one hour to one year. However, all the observations should last long enough to get the answers to client's problem.

- *Focus of observation*

The focus of observation could be to gain holistic view of the client, therefore, all the necessary aspects have to be considered, or on the other hand, one single aspect can be studied.

4. *Elaborate on the following points*

- By being descriptive in taking field notes (anecdotal records, critical incidents).
- By gathering information from different perspectives (client, peers, parents, teachers etc.).
- By cross validating and triangulating data from different sources such as observation, interview, documents etc. and by using more than one investigator.
- By presenting the views of the people, their experiences in their own words.
- By separating description from interpretation and judgement.

5. *Examine the merits and demerits of each type of interview as discussed in the unit.*

6. *Elaborate on the following points*

- A good case study is always concerned with the individual's past, present and future i.e., it should provide complete view of an client's life.

- A case study should be dynamic and longitudinal and not static or cross-sectional. It should provide all the necessary information to plan remediation and it should provide scope to review the effects of remediation programme.
- The focus of case study should vary widely i.e., it may focus on whole individual or small selected segment of an individual or client such as aggressive behaviour of the individual or client.

7. *Elaborate on the following points*

- Step 1: status of a situation: to identify the degree of the problem by using various instruments and procedures.
- Step 2: collection of data, examination, and history: emphasis is on searching for facts that help in identifying the causal factors in the context of the client. Different instruments and procedures can be used along with life history, writings, letters and diaries.
- Step 3: Diagnosis and identification of causal factors: after causation, diagnosis helps in identifying possibilities for growth and adjustment of clients.
- Step 4: Adjustment, treatment, and therapy: the therapy aims to help an individual client to develop an understanding of the problem. To accept the problem as one's own rather than of the environment.
- Step 5: Follow up programme: it is necessary to check on the validity of the remedial treatment to know how effective the treatment was.

The answer should include the following points:

Advantages

- Case study provides detailed and realistic (holistic) description of an individual client and emphasizes on the uniqueness of an individual client. There is greater importance given to accuracy and adequacy of data collected.
- It is helpful in understanding the complexities of the case or client and which further helps in developing interpretive attitude.
- It is very helpful in identifying key or important factors in complex/confusing situations.

Disadvantages

- Long and time consuming; more use of insights, direct and indirect observations, therefore, may lack objectivity.
- There is always a risk on the part of investigator to generalise about certain behaviour if he/she is not properly trained.

Answer Key to Self-check Exercises

Self-check Exercise 1

1. True
2. False
3. True



4. True
5. True

Self-check Exercise 2

1. c
2. d
3. a
4. c
5. b

Self-check Exercise 3

1. c
2. a
3. e
4. f
5. g
6. d
7. b

Reference



Patton, M.Q. 1990. *Qualitative Evaluation and Research Methods*. Sage, London

Suggested Readings

- Eisner, E. and Peshkin, A. (Eds.). 1990. *Qualitative Inquiry in Education: Teachers College Press, New York.*
- Glesne, C. and Peshkin, A. 1992. *Becoming Qualitative Researchers*. Longman, White Plains, NY.
- Silverman, D. 2000. *Doing Qualitative Research: A Practical Handbook*. Sage, London.
- Adler, P. and Adler, P. 1994. Observational Techniques. In N. Denzin and Y. Lincoln (Eds.), *Handbook of Qualitative Research* (pp.377-392). Sage, Thousand Oaks, CA.
- Hamel, J., Dufour, S. and Fortin, D. 1993. *Case Study Methods*. Sage, Newbury Park, CA .
- Stake, R.E. 1995. *The Art of Case Study Research*. Sage, London.
- Wragg, E.C. 1994. *An Introduction to Classroom Observations*. Routledge, London.

4

UNDERSTANDING INTELLIGENCE AND ITS ASSESSMENT

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Understanding Intelligence
 - 4.2.1 Different Perspectives on Intelligence
 - 4.2.2 Traditional Theories of Intelligence
 - 4.2.3 Contemporary Views on Intelligence
 - 4.2.3.1 Theory of Multiple Intelligences
 - 4.2.3.2 Triarchic Theory of Intelligence
 - 4.2.4 Emotional Intelligence
- 4.3 Assessment of Intelligence
 - 4.3.1 Some Issues and Concerns in Intelligence Testing
 - 4.3.2 Culture and Intelligence Testing
 - 4.3.3 Holistic Approach to Assessment of Intelligence
- 4.4 Summary
 - Self-evaluation Exercises
 - Answer Key to Self-evaluation Exercises
 - Answer Key to Self-check Exercises
 - References and Suggested Readings





Understanding Intelligence and Its Assessment 4

4.0 INTRODUCTION

Intelligence has been one of the most popular psychological terms used in identifying individual differences. It has helped to explain why people differ from each other in their ability to understand complex ideas, to learn from experience and so on. Based on these characteristics, judgments are made of an individual's intellectual capacity.

Even though intelligence is considered a very important human characteristic, very few people understand what it really means to be intelligent. When one is asked to consider the question "What makes a person intelligent?" the most common responses will often note a person's ability to solve problems, use logic, think critically, memorise and so on.

Different approaches have been put forward in understanding and assessing intelligence. Many tests have been developed to assess different aspects of intelligence. In earlier units, you learned about psychological assessments, both quantitative (psychological testing) as well as qualitative techniques of assessment. In this unit, you will learn how intelligence is currently understood and how the traditional notion of intelligence has changed over time. You will also learn that there are certain problems and issues involved in the use of intelligence tests. It is important to guard against the erroneous practices associated with intelligence testing.

4.1 OBJECTIVES

After going through this unit, you will be able to:

- *understand* the nature and concept of intelligence.
- *describe* the changing perspectives in understanding intelligence.
- *analyse* the implications of the changing notion of intelligence for assessment.
- *explain* the issues and concerns involved in the assessment of intelligence.

4.2 UNDERSTANDING INTELLIGENCE

Most of us have our own ideas about what it means to be intelligent. We also recognise that intelligence has different meanings in different contexts. The psychological notion

of intelligence is different from the common sense notion. If you watch an intelligent person, you are likely to see attributes like mental alertness, ready wit, quickness in learning and grasping of concepts and so on.

Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to changing situations, to learn from experience, to engage in various forms of reasoning, and to overcome obstacles etc. Although these individual differences can be substantial, they are never entirely consistent. A given person's intellectual performance may vary on different occasions.

Intelligence encompasses many related abilities, such as the capacity to reason, plan, solve problems, think abstractly, comprehend ideas, learn from experience and adapt to situations.

In the next section you will read about the changing perspectives on intelligence. Traditional theories consider intelligence as an aggregate of abilities whereas contemporary theories talk of multiple intelligences, information processing and emotional intelligence. As counsellor these would help you in developing a holistic view of intelligence.

4.2.1 Different Perspectives on Intelligence

Traditionally, intelligence has been viewed as mental abilities, but there is more to this concept of intelligence. The Oxford English Dictionary explains intelligence as the power of perceiving, learning, understanding and knowing. Binet was the first psychologist who explained the concept of intelligence as the "ability to judge well, understand well and reason well." His theory is called *unifactor theory of intelligence*. Weschler, whose intelligence tests are widely used, defined intelligence as the "global and aggregate capacity of an individual to think rationally, act purposefully and deal effectively with his/her environment".


4.2.2 Traditional Theories of Intelligence

Spearman (1927) put forth the two-factor theory of intelligence. He showed that different mental abilities co-related positively with each other and there was a general factor "g" of intelligence. According to Spearman, the g-factor is composed of general mental abilities such as reasoning, comprehension, ability to retain and recall, ability to group things, ability to perceive relationships and clear thinking. The g-factor is the major determinant of performance on intelligence test items. The special factors or s-factors are specific to particular abilities or test items. For example, tests of arithmetic or spatial relations would tap a separate specific ability "s".

Later in 1937, Thorndike and Stein proposed the concept of three types of thinking: (i) abstract thinking; (ii) concrete thinking, and (iii) social thinking. For the first time, social aspect was considered a part of intelligence. This was a novel and revolutionary concept and apart from academic-oriented intelligence, the ability to have good interpersonal skills and the ability to adjust to the environment was considered important.

Louis Thurstone's (1938) theory of primary mental abilities states that intelligence consists of seven primary abilities, each relatively independent of the other. These primary mental abilities are: (i) Verbal Comprehension (ability to group meaning of words, concepts on ideas),





(ii) Numerical Speed and Accuracy (ability in numerical and computational skills), (iii) Spatial Relations (visualising patterns and forms), (iv) Perceptual Speed (ability to group, perceive visual details such as similarities and differences), (v) Word Fluency (ability to use words fluently and flexibly), (vi) Memory (ability to recall information) and (vii) Inductive Reasoning (ability to derive general rules from presented facts).

Guilford (1967) explained intelligence in terms of “systematic collection of abilities for processing different kinds of information in different ways”. His structure of intellect model is based on three faces of intelligence. His theory has merit in its own right but is so complex and vast that it has not been illustrated here. Most of the books on psychological testing have details about it. The important point to remember is that with the development in research on intelligence, it was largely felt that neither a single global measure of intelligence is adequate to identify intelligence nor it is meaningful to attempt to fractionate human ability into too many narrow segments.

Another researcher, Cattell (1971) concluded that there are two major clusters of mental abilities, Fluid and Crystallised intelligence. Fluid intelligence refers to inherent, genetically based abilities to think and reason. Fluid intelligence increases in the early twenties and then gradually declines. Crystallised intelligence refers to cumulated knowledge information that we store over a lifetime of experiences, plus the application of skills and knowledge to solving specific problems.

4.2.3 Contemporary Views on Intelligence

If you look at the professional literature in the area, you will find that each theorist has tried to explain intelligence in different ways following different approaches. All of the above theories are based on the psychometric approach where intelligence is considered as an aggregate of abilities, however, contemporary theories have refuted the single measure of intelligence.

4.2.3.1 Theory of Multiple Intelligences

Howard Gardner (1983) proposed a theory of multiple intelligences. Gardner’s theory is based on three principles. First, intelligence is not a single entity and there exists multiple intelligences each distinct from others. Second, there are nine distinct intelligences that are relatively independent of each other. This means, that if a person exhibits one type of intelligence it does not necessarily indicate being high or low on other types of intelligences. Lastly, these different types of intelligences interact and work together to provide a solution of a problem. The nine types of intelligences proposed by Gardner are briefly discussed below:

- *Linguistic Intelligence*: The capacity to use language fluently and flexibly, to express one’s thinking and understand others. Used in reading a book; writing a paper, a novel or a poem; and understanding spoken words. Poets and writers exhibit this ability .
- *Logical-mathematical Intelligence*: Thinking logically, critically, using abstract reasoning to manipulate symbols and solve mathematical problems. Used in solving math problems, in balancing a checkbook, in solving a mathematical proof and in logical reasoning. Scientists, mathematicians exhibit this ability.

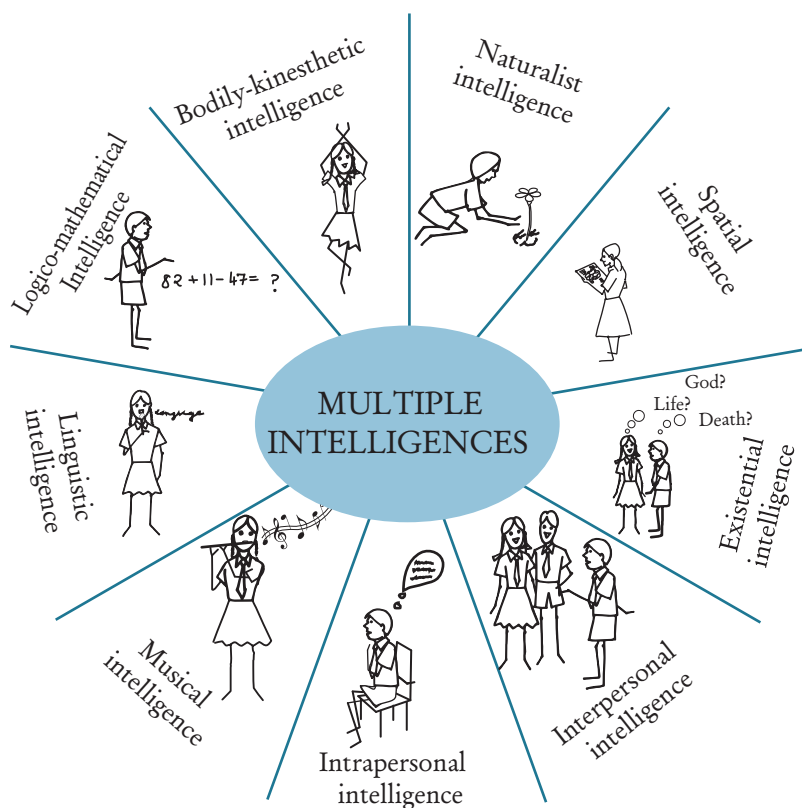


Fig: 4.1 : Gardner's Theory of Multiple Intelligences

- *Spatial Intelligence:* Abilities involved in forming, using, and transforming mental images. Used in getting from one place to another, in reading a map, and in packing suitcases in the trunk of a car so that they all fit into a compact space. Pilots, sailors, interior decorators, surgeons, fashion designers generally exhibit this ability.
- *Musical Intelligence:* Capacity to produce, create and manipulate musical patterns. Used in singing a song, composing a sonata, playing a trumpet, or even appreciating the structure of a piece of music. Musicians, composers have this ability.
- *Bodily-kinesthetic intelligence:* Ability to use one's body and muscle structure in a coordinated planned way. Used in dancing, playing basketball, running a mile or throwing a javelin. Athletes, dancers, actors, gymnasts, sports persons, surgeons exhibit this more than others.
- *Interpersonal Intelligence:* Used in relating to other people, such as when we try to understand another person's behavior, motives or emotions. Counsellors, psychologists, politicians, social workers, religious leaders are shown to be high on this ability.
- *Intrapersonal Intelligence:* Knowledge of one's internal strengths and limitations, and using that knowledge to relate to others. Used in understanding ourselves—the basis for understanding who we are, what makes us tick, and how we can change ourselves, given our existing constraints on our abilities and our interests. Philosophers, spiritual leaders exhibit this ability.
- *Naturalist Intelligence:* Complete awareness to our relationship with the natural world,





useful in recognising the beauty of different species of flora and fauna and making a distinction in the natural world. Used in understanding patterns in nature. Hunters, farmers, botanists have this ability.

- *Existential Intelligence*: Can be defined as the ability to be sensitive to, or have the capacity for, conceptualising or tackling deeper or larger questions about human existence, such as the meaning of life, why are we born, why do we die, what is consciousness, or how did we get here. According to Gardner, existential intelligence might manifest in someone who is concerned with fundamental questions about existence, or who questions the intricacies of existence.

Gardner has argued that there is no single intelligence. When a person is evaluated on only one measure of intelligence, they are “cheated of recognition that they are good at other things”. Gardner has given importance to the role of culture in valuing a particular type of intelligence. For example, in a hunting society, naturalistic intelligence and spatial intelligence are more important whereas in some other cultures, for example, in Japan, the ability to work cooperatively in groups and to arrive at joint decisions (interpersonal intelligence) is highly valued. So Gardner’s argument is that we need to be sensitive to the fact that what is valued as intelligence is changeable depending on the context or culture.

The multiple intelligences approach focuses on ways in which people can be intelligent. Theorists have tried to explain intelligence in terms of how an intelligent person thinks, acts and solves problems. This is the information processing approach that focuses on how solutions are arrived at. One such information processing approach, which has made the greatest impression in recent years, is that of Sternberg (1985), which is explained in the next section.

4.2.3.2 *Triarchic Theory of Intelligence*

Robert J. Sternberg (1985) proposed the triarchic theory of intelligence. According to this theory, there are three types of intelligences: Componential Intelligence, Experiential Intelligence and Contextual Intelligence.

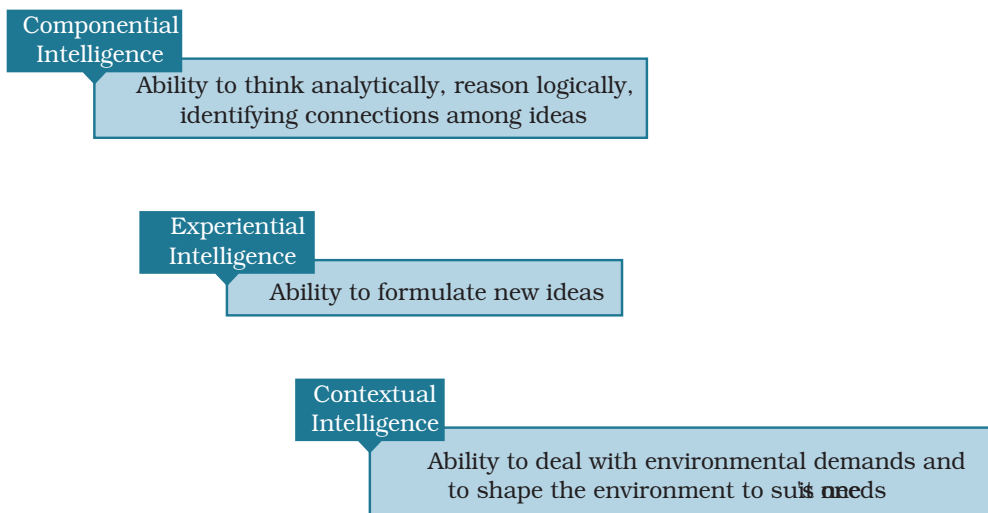


Fig.4.2 : *Triarchic theory of intelligence*

- *Componential intelligence* is that facet of people’s mental ability that enables them to reason logically, to think analytically, to identify connections among ideas, and to see various aspects or “components” of a problem. It is the type of intelligence typically associated with people who can do well on achievement and IQ tests. People with high componential intelligence might do quite well on multiple-choice or true-false tests, and might be especially skilled at critiquing and analysing arguments. This is one kind of intelligence, but not the only one. As observed by Sternberg, “A lot of people are very good analytically, but they just don’t have good ideas of their own.”
- *Experiential intelligence* is a facet of mental ability associated with a person’s capacity to combine different experiences in original ways. People high in this type of intelligence may not have the best test scores, but they are able to come up with creative and ingenious ways for seeing new combinations and possibilities in the world around them.
- *Contextual intelligence* is a type of practical intelligence which involves the ability of the individual to deal with the environmental demands. Such people adapt easily to their environment or modify their environment to suit their needs. This is also referred to as “situationally smart” or “street smartness”. In Sternberg’s view, there are a lot of people who don’t do particularly well on tests, but who are extremely intelligent in a practical sense. Although this kind of intelligence does not fit the usual academic world, it is intelligence, and as such, Sternberg feels it should be considered along with all other expressions of human mental abilities.

According to Sternberg, the critical aspect of what constitutes intelligence is not necessarily the speed with which one arrives at a solution but the processes one uses. Processing information quickly does not mean it was done accurately or correctly. A reflective rather than an impulsive style of problem solving has been associated with higher ability to solve problems. Jumping to conclusions without adequate reflection can lead to erroneous thinking. Sternberg, therefore, questions the common assumption that “smart is fast”.

Developments in the area have stressed upon the importance of emotion in rational thinking. Research has shown that emotional thought is a part of, and contributor to, logical thought. This led to the development of the concept of emotional intelligence which is explained in the next section.


4.2.4 Emotional Intelligence

Recent researches have shown that emotions are organising processes that enable people to think and behave adaptively.

Emotions are increasingly being viewed as signals that direct attention, facilitate attainment of goals and help people adapt to different situations.

There is no single definition of Emotional Intelligence (EI) but one that is sufficiently close to how you might think of it within the counselling profession is: “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and





to use this information to guide one's thinking and actions". (Salovey and Mayer, 1990). It has been found that people who manage their own feelings well and deal effectively with others' emotions are more likely to be content in their own lives. These people are also more likely to retain information better and more effectively.

The notion of emotional intelligence broadens the concept of intelligence. It is argued that a good IQ and scholastic record is not enough to be successful in life. You may find many people who are academically talented but not so successful in their own lives. They experience problems in interpersonal relationships whether in the family or at work place. What do they lack? Some psychologists believe that the source of their difficulty may be lack of emotional intelligence. The key set of abilities that make up emotional intelligence are —

- *Perception, appraisal and expression of emotion* — ability to identify, express, and discriminate emotion in one self and others.
- *Emotional facilitation of thinking* — emotions prioritise thinking by directing attention to important information, encouraging consideration of multiple points of view, and encouraging specific problem-solving approaches.
- *Understanding and analysing emotions; employing emotional knowledge* — ability to label, interpret, understand, recognise transitions in emotions.
- *Reflective regulation of emotions to promote emotional and intellectual growth* — ability to stay open, reflectively engage or detach from feelings, monitor and manage emotions in oneself and others.

Emotional intelligence thus involves: (i) perceiving or sensing emotions, (ii) using emotions to assist thought, (iii) understanding emotions, and (iv) managing emotions. This view of intelligence as you have read in the earlier section, subsumes Gardner's interpersonal and intrapersonal intelligence. Sternberg's contextual intelligence overlaps with emotional intelligence as it is concerned with the management of our ability to handle everyday life affairs in an efficient and practical way.

You have read in the preceding section about the developments in the notion of intelligence. You know that intelligence does not refer only to the mental abilities needed to select and adapt to the environment. It also means emotional stability, competencies to deal with effective interpersonal relations and the ability to adapt to the surrounding environment. It may vary within and across different social and cultural contexts. All this is discussed later in this unit. As counsellors this will help you in understanding your client.

Activity 1



Talk to lay people and professionals and ask them: "What are the characteristics of an intelligent person?" Identify the similarities and differences in their understanding of intelligence and compare it with professional literature.



Self-check Exercise 1

1. Learning from past experience is a characteristic of an intelligent person T/F
2. The focus of contemporary approaches to intelligence is on processes people use in intellectual functioning. T/F
3. Situational smart people are high on experiential intelligence. T/F
4. Componential intelligence covers aspects of intelligence measured by standardised intelligence tests. T/F
5. Emotional intelligence is the ability to manage one's own emotions. T/F
6. Culture-fair tests can be administered only to individuals of a particular culture. T/F


4.3 ASSESSMENT OF INTELLIGENCE

The first successful attempt to measure intelligence was made by Binet and Simon in 1905. They also gave the concept of Mental Age (MA), which is a measure of a person's intellectual development relative to people of his/her age group. They compared MA with Chronological Age (CA) or biological age from birth. A bright child has a MA above his CA, and a dull child has a MA below CA. In other words, it is an expression of the individual's level of intelligence at a given point of time in relation to the average age norms. (Information as to how IQ is calculated on the basis of performance on intelligence tests like Stanford Binet Test, Wescheler Scale and the like, are available in the majority of books on Psychological Testing.) The intelligence tests produce a mental ability score based on a test taker's performance relative to the average performance of others of the same age.

The term "IQ" still lingers in everyday vocabulary as a shorthand expression for "intelligence test scores". In 1912 William Stern devised the concept of Intelligence Quotient (IQ) which refers to a child's mental age divided by chronological age, multiplied by 100 ($IQ = MA/CA \times 100$). The concept of IQ dominated intelligence testing for a long time. It also has its basis in the earlier theories of intelligence which considered intelligence as an aggregate of abilities.

The concept of IQ, however, has been found to be misleading. With the emerging view of intelligence as being multifaceted in nature, the concept of intelligence as a single unitary ability or a composite of scores on different abilities is not considered valid. Most of the typical intelligence tests cover verbal abilities as well as, to some extent, numerical abilities and abstract thinking, yielding IQ scores. IQ in the form of a single score does not give differential information about an individual's strengths or deficiencies. For example, two students have an IQ score of 110. One student might have higher score on verbal abilities and less on numerical abilities, whereas the second student has high scores on numerical abilities test and lesser on verbal abilities though both have an equal IQ. Thus when all the scores are combined into a





single condensed score in the form of IQ, information is lost about the individual's strengths and deficiencies in the specific abilities, and thus the single score might be misleading. It also does not fulfill the goal of psychological testing in the context of guidance and counselling, that is to help and facilitate understanding of the client/student.

As counsellors you need to keep in mind that IQ testing is still prevalent. As a qualified professional, you may be expected to undertake IQ testing of students/clients to know the level of their intellectual capability. Remember that IQ tests do not provide a complete view of the strengths of the client. Indiscriminate use of such tests should be avoided. IQ tests may be helpful in diagnosing children who are mentally challenged. In school, overdependence on IQ test scores to explain low academic achievement of a student may erroneously lead to categorising/stigmatising the student, as the reasons for low achievement could be many, besides level of intellectual functioning. In the next section you will read about these concerns in intelligence testing.

4.3.1 Some Issues and Concerns in Intelligence Testing

Even though tests of intelligence assist counsellors and other personnel in providing a view of the client's abilities, the scores of these tests need to be used with caution. The reasons for caution are—

- More often counsellors, special educators and school teachers tend to label individuals as poor, good, superior or retarded based on scores on intelligence tests. Instead, the scores need to be used to develop a better understanding of individuals. Assessment of an individual's performance on intelligence tests, along with other information, needs to be the starting point for developing the means for helping them achieve their maximum potential.
- Some intelligence tests emphasise the speed of the responses. Some people may not be fast in responding but may generate responses which are creative and unique in nature, implying that the person is highly intelligent. Most of the intelligence tests measure speed of response plus accuracy. This, in itself, is not a sufficient criterion for assessing one's intelligence. Intelligence tests should also try to assess intellectual potential and not just intellectual functioning. You must have noticed that certain individuals, even though they perform poorly on certain tests, yet when given sufficient exposure, stimulation and understanding of the required concepts, are quite capable of performing much better.
- Intelligence tests may be measuring only the analytic and reasoning abilities. What about the creative, practical and social aspects of intelligence? They are generally not being tapped by such tests.
- To many people it seems as if IQ is a stable trait. Longitudinal studies have revealed that IQ scores of children tend to rise and fall, sometimes dramatically. Such rises and falls appear to be related to environmental events. The emotional climate at home, parental concern about their children's educational accomplishments, the

experienced stress levels— all these factors influence the IQ scores. No doubt there is a strong influence of genetic factors on IQ. This has been confirmed by several studies on monozygotic twins who share 100 percent of their genetic makeup. The IQ scores of children over time are likely to increase with increasing exposure to television, computers and other technological advancements.

- The narrow concept of intelligence in terms of logical, analytical and linguistic skills still continues to dominate the testing industry. Results of such tests determine who will be admitted into academic settings at school level and who will be more suited for police work or for teaching. Majority of children who are selected to participate in specialised programs such as those for the gifted and talented are still being admitted on the basis of IQ. A child who gets a score of 129 might be kept out while another child who gets a score of 130 is allowed in for a specialised programme meant for the gifted.
- A crucial question often raised is about differences in scores of intelligence tests between students of low and high Socio-Economic Status (SES). There is enormous research data which indicate that intelligence test scores are positively co-related with socio-economic status i.e., those who are of high socio-economic status, score high on intelligence tests. The question then is whether these differences reflect the innate differences between low and high SES groups or whether they reflect the working of other mechanisms. As indicated by the research, children of lower SES suffer a cumulative deficit due to lack of exposure or environmental stimulation whereas children coming from high SES background have by and large better stimulating opportunities. Their getting high test scores seems to be greatly facilitated by their willingness to work fast, willingness to be tested, a positive attitude to test situations, a positive self-image, expectations of success and the alike. What these indicate is that the intelligence test score alone is inadequate as an indicator of intellectual potential. In other words, intelligence test scores may not be the true measure of one's intellectual potential.

You have understood that intelligence is much more than what the traditional tests of intelligence could assess. Hence, you should be extremely cautious in the selection or use of any intelligence test. You should not label any student as high or low on intelligence, and especially on the basis of a single score, as intelligence is much more complex to be captured in terms of a single score. There are many expressions of intelligent behaviour. It is far more than the ability to pass a test. Because students are slow in maths or reading does not necessarily mean that they are not intelligent. It could mean that they have not had as many opportunities for learning in those areas or they have deficits in maths and/or reading.




Self-check Exercise 2

Fill in the blanks with appropriate choices given below.

1. The emphasis of the intelligence test is on _____ and _____ of the response.
2. Holistic assessment focuses on the _____ and _____ of the client.



- 
3. Culturally sensitive tests employ _____ and _____ related to the test taker's experiences.
 4. The multiple intelligences approach to assessment emphasises variety of _____ and _____.
 5. Intelligence tests generally measure only _____ and _____ abilities.
(a) analytic, reasoning (b) strengths, weaknesses (c) speed, accuracy (d) abilities, skills (e) skills, knowledge

4.3.2 Culture and Intelligence Testing

Can we assess intelligence of a person without taking into account the cultural context? No, it is simply not possible. We cannot realistically assess intelligence in isolation without considering the entire environmental context within which the person acts intelligently.

The context of intelligence may be viewed at any level of analysis: the home and family environment, or the entire culture. You can think of many examples from your own culture in which people from rural and urban areas may respond differently to certain tasks assessing intelligence because of the relevance of the test items to their cultural context. Such observations make us recognise the importance of considering cultural context when assessing intelligence.

It is very difficult to come up with a test that everyone would consider culture-fair i.e., equally appropriate and fair for members of all cultures. If members of different cultures have different ideas of what it means to be intelligent, then the very behaviours that may be considered intelligent in one culture may not be considered intelligent in another. Take, for example, the concept of mental quickness. In mainstream U.S. culture, quickness usually is associated with intelligence. Indeed most individual and group tests of intelligence are strictly timed. Many theorists focus on the study of intelligence as a function of mental speed. In many cultures of the world, however, quickness is not considered a premium quality. In these cultures, people may believe that more intelligent people do not rush into things.

Designing culture-relevant tests requires creativity and effort. Research has shown that rural Kenyan school children have substantial knowledge about natural herbal medicines which they believe fight infection while Western children, of course, would not be able to identify any of these medicines. In short, making a test culturally relevant appears to involve much more than just removing specific linguistic barriers to understanding.

Many researchers have showed effect of socio-cultural context on children's and adults' performance on a variety of tasks. The social context (e.g., whether a task is considered masculine or feminine), the mental context (e.g., whether a visual-spatial task involves buying a home or burgling it), and the physical context (e.g., whether a task is presented at the beach or in a laboratory) all affect performance.

It is important that one uses culture relevant tests only, as tests developed elsewhere might not be applicable in one's cultural setting. You have read about culture—fair and

culture—biased tests in the Unit 2 on Using Psychological Tests in this module. To ensure tests are culturally responsive to the client’s context, it is important that those tests that employ skills and knowledge that relate to the cultural experiences of the test taker need to be used. In case these are not available, the tests developed and standardised elsewhere can be adapted to a particular culture, and local norms may be developed for the use of the test. One such example is of Wechsler’s Intelligence Scale for Children (WISC). In this test under ‘information’ test one of the question is—what is the significance of 4th July in America? This question is not relevant in the Indian context or may also not be relevant elsewhere. Hence in its adaptation it has been reframed as — what is the significance of 26th January? Using culture-relevant tests is possible.

4.3.3 Holistic Approach to Assessment of Intelligence

As counsellors, the focus should be on holistic assessment of the student, focusing on strengths and weaknesses of the client. This would help to plan both stimulation of strengths and remedial measures for intervention. You have already read about some approaches to assessment of intelligence which have been developed for holistic assessment. Their advantages over traditional IQ testing have been highlighted below.

- The multiple intelligences approach is a holistic and process based assessment rather than confined to a formal testing session or a couple of sessions. The assessment is done with enjoyable materials and activities in each of the eight domains of intelligence, in classroom settings, which helps the teacher to observe a particular child’s strengths and interests as well as provide opportunities to maximise the opportunities for developing the capabilities in different domains. In this sense the assessment is on going and part of the natural learning environment.
- The multiple intelligences approach to assessment is considered “intelligence–fair.” The assessment tools aim at looking at intelligence in operation. For instance, the child is asked to play a game in which she could demonstrate her skill and understanding of numbers and number concepts.
- The multiple intelligences approach to assessment also considers students’ working style in each domain. For example, the level of persistence, involvement in work, distractibility etc. Such information helps to know why some students are more likely than others to develop in a given domain. This gives additional information to the teacher for further interventions. The information arrived at from the multiple intelligence approach to assessment differs from the standardised psychological tests. Whereas in the latter it is in the form of IQ score, a single score or series of scores on intelligence tests, in the multiple intelligences approach, it is done in terms of narrative profiles. Such profiles present a holistic view of a student’s intelligence in different domains. This then provides a guide to nurture and support a particular set of capabilities exhibited by the individual. Overall, the multiple intelligences approach to assessment is more humane and holistic in that it allows children to explore their special strengths and capabilities. It also allows parents and teachers to






support those special strengths and develop plans to mediate the weaknesses. This approach can identify many more children “at promise” than the traditional methods of testing intelligence.

- Sternberg’s (1985) Triarchic ability test provides separate scores for different abilities like analytic, creative and practical abilities as well as separate scores for verbal, quantitative and figural processing. There are seven sub scores rather than just one global score or just two or three sub scores. The idea is that someone may be intelligent with respect to some aspects but not others. The advantage of Triarchic ability test is that it provides a broader view of the person with regard to his/her abilities as it gives separate scores for different types of abilities. Second, it focuses on how the information is processed rather than the product in terms of a right or wrong answer. Third, only one sub test is a timed test, which is kept separate. It does not confound speed with the quality of information processing. Fourth, test items are related to contexts and the situation. For example, practical abilities are measured by a variety of item types asking questions like recognising inferential fallacies in advertisements, political slogans, everyday statements etc. The idea is that students can show their skill in reasoning with everyday situations and materials rather than academic formal reasoning material. The figural test consists of maps and diagrams, for example, a map of the city, and subjects must use the information in the maps to plan efficient routes. Again the idea is to assess the application of reasoning to practical settings.

From the above, it is clear that the latest approach to assessment of intelligence emphasises a variety of abilities and skills (and not just an aggregate of mental abilities), which are required for success in life situations.

4.4 Summary

Intelligence has been one of the most popular psychological terms used in identifying individual differences. It has helped to explain that people differ from each other in their ability to understand complex ideas or to learn from experience. Different theorists have tried to explain intelligence in different ways following different approaches. Theories by Binet, Spearman and Thurstone are based on the psychometric approach where intelligence is considered as an aggregate of abilities. It is expressed in terms of a single index of abilities. Howard Gardner’s theory of multiple intelligences puts forth that intelligence is not a single entity and there exists multiple intelligences, each distinct from others. Theorists have also tried to explain intelligence in terms of information processing approach wherein the focus is on how an intelligent person thinks, acts and solves problems. Sternberg’s information processing approach focuses on how solutions are arrived



at. The notion of emotional intelligence broadens the concept of intelligence and involves

(i) perceiving or sensing emotions, (ii) using emotions to assist thought, (iii) understanding emotions, and (iv) managing emotions.

The concept of IQ dominated intelligence testing for a long time. With the emerging view of intelligence as multifaceted, the concept of intelligence as a single unitary ability or a composite of scores on different abilities is not considered valid. The concept of IQ has been found to be misleading. As counsellors, the focus should be on a holistic assessment focusing on strengths and weaknesses of the client. This would help to plan remedial measures for intervention. The multiple intelligences approach is an alternative approach to assessment of intelligence. It emphasises a variety of abilities and skills (and not just an aggregate of mental abilities), which are required for success in life situations.

As the meaning of intelligence differs from one culture to another there is a need to understand the cultural context for measuring intelligence. Even though tests of intelligence assist counsellors and other personnel in providing a view of the clients' abilities, the scores of these tests need to be used with caution.



Self-Evaluation Exercises

1. How has the notion of intelligence changed over the years?
2. Why is the concept of IQ scores misleading in the context of guidance and counselling?
3. Discuss the issues related to intelligence testing.
4. Discuss the distinct features of Multiple Intelligences approach to assessment.
5. State the four key abilities of Emotional Intelligence?

Answer Key to Self-evaluation Exercises

1. Elaborate on the fact that a good IQ and scholastic record are not the only indicators of intelligence in a student, but the concept today has broadened to include multiple and emotional intelligence. As is sometimes seen, an academically bright person may be facing a lot of problems in interpersonal relationships.
2. Use an example to explain how the concept of IQ does not yield a holistic assessment of the student.
3. Elaborate on the following points:
 - Intelligence tests label individuals.



- Intelligence tests may give undue importance to the speed with which an individual can respond.
 - Intelligence tests may only be measuring analytic and reasoning abilities ignoring the creative, practical and social aspects.
 - IQ is not a stable attribute.
 - The narrow conception of intelligence in terms of logical, analytical and linguistic skills.
 - High IQ scores of children from high socio-economic status as compared to children from low socio-economic status.
4. Elaborate on the following points:
- Intelligence is not a single entity and there exists multiple intelligences, each distinct from others.
 - There are nine distinct intelligences that are relatively independent of each other.
 - These nine different types of intelligences interact and work together to provide.
 - It focuses on ways people can be intelligent.
 - Culture plays an important role in valuing a particular type of intelligence.
5. Elaborate on the following points:
- Perception, appraisal and expression of emotion.
 - Emotional facilitation of thinking.
 - Understanding and analysing emotions; employing emotional knowledge.
 - Reflective regulation of emotions to promote emotional and intellectual growth.

Answer Key to Self-check Exercises

Self-check Exercise 1

1. True
2. True
3. False
4. True
5. False
6. False

Self-check Exercise 2

1. c
2. b
3. e
4. a
5. d

Reference



- Cattell, R.B. 1971. *Abilities. Their Structure, Growth and Action*. Houghton Mifflin, Boston.
- Flanagan, D. P. and Harrison, P. L. 2005. *Contemporary Intellectual Assessment: Theories, Test and Issues*. Guilford Press, New York.
- Guilford, J.R. 1967. *The Nature of Human Intelligence*. McGraw- Hill, New York.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- Spearman, C. 1927. *The Abilities of Man*. Macmillan, New York.
- Sternberg, R.J. 1985. *Beyond IQ: A Triarchic Theory of Human Intelligence*. Cambridge University Press, New York.
- Thorn dike, R. L., and Stein, S. (1937). *An Evaluation of the Attempts to Measure Social Intelligence*. *Psychological Bulletin*, 34, 275-285.
- Thurstone, L.I. 1938. *Primary Mental Abilities*. University of Chicago Press, Chicago.

Suggested Readings

- Gardner, H. 1983. *Frames of mind: The theory of multiple intelligences*. Basic Books, New York.
- Kaufman, A.S. and Kaufman, N.L. 1993. *Kaufman adolescent and adult intelligence test*. MN: American Guidance, Circle Pines.
- Mayer, J.D., Caruso, D.R. and Salovey, P. 2000. Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298.
- Sternberg, R.J. 2007. *Cognitive psychology* (4th ed.). Yale University, Indian Edition.
- John McLeod and A.J. Cropley, 1989. *Fostering academic excellence*, University of Saskatchewan, Canada and Arthur Cropley, University of Hamburg, Federal Republic of Germany, Pergamon.



NOTES



List of Course Material

1. Course Guide

Major inputs include objectives, scope, rules, syllabi as well as procedures for admission, transaction and evaluation for all the three phases of the course.

2. Course Modules*

- i. Module- I : Introduction to Guidance
- ii. Module-II : Counselling Process and Strategies
- iii. Module-III : Guidance for Human Development and Adjustment
- iv. Module-IV : Career Development-I
- v. Module V : Career Information in Guidance and Counselling-I
- vi. Module VI : Assessment and Appraisal in Guidance and Counselling-I
- vii. Module VII : Basic Statistics in Guidance and Counselling-I
- viii. Module VIII : Guidance in Action
- ix. Module IX : Special Concerns in Counselling
- x. Module X : Developing Mental Health and Coping Skills
- xi. Module-XI : Career Development-II
- xii. Module XII : Career Information in Guidance and Counselling-II
- xiii. Module XIII : Assessment and Appraisal in Guidance and Counselling-II
- xiv. Module XIV : Basic Statistics in Guidance and Counselling-II

* Each module consists of number of self-learning units.

3. Practical Handbook

Provides areas and strategies for conducting and undergoing practicum, field experience and internship.

4. Tutor Guide

Lists guidelines for tutors, supervisors for course transaction and evaluation during all the three phases of the course.





2355

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

ISBN 978-81-7450-909-3