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## APTITUDE, INTEREST AND JOB REQUIREMENTS

One of the important areas of psychology is to study individual differences in various attributes. We differ not only in physical appearance but also in our habits, feelings, personality, thoughts, and behaviours. Some persons are very friendly, others are shy, some are outgoing, others are reserved. Some like to watch cricket, others want to watch some movie or listen to some music or enjoy dancing. Some want to become doctors and some engineers/teachers/craftsmen/tailors and so on.

Thus it is clear that there are several ways in which we differ. In this lesson we are concerned with the ways in which people differ in their aptitudes, interests and abilities and how these determine our important decisions in life such as selection of courses of study or choice of a job.

Effective educational, personal and vocational decisions demand knowledge of individual differences. Psychologists use various assessment procedures to measure psychological traits to help persons choose careers according to their aptitudes and interests, keeping in mind the requirements of specific job.



### OBJECTIVES

After studying this lesson, you would be able to:

- explain the concept of aptitude and its role in making educational and vocational choices;
- describe interest and its role in making choices;
- explain the different approaches for understanding ability; and
- describe various tests and techniques to assess psychological attributes.

**20.1 APTITUDE**

We often hear people remark that a particular child has a talent or gift for music, art or painting. This is what is implied by aptitude. An aptitude therefore is a special potential in a certain field of performance. It indicates a special ability, acquired or innate, to learn or develop knowledge of a skill in some specific area. It involves prediction of the probability of success of a person with training in a certain type of work/job/vocation. The aptitude of an individual is the result of both inherent and the environmental factors. An aptitude is more than mere potential ability. It involves the following:

- Readiness to acquire some skill or knowledge.
- Ability to acquire those skills/knowledge.
- Ability to derive satisfaction from those activities.

So aptitude refers to a combination of characteristics that indicate an individual's capacity to acquire some specific knowledge or skill after learning. Knowledge of aptitude can help us to predict an individual's future performance. With proper training these abilities can be enhanced. Aptitude can be assessed. Aptitude tests are available in two forms – specialized aptitude tests and general aptitude tests. Example of specialized aptitude tests are Mechanical Aptitude Test and Musical Aptitude Test. Multiple aptitude tests exist in the form of Test Batteries, which measure aptitude in several separate but homogeneous areas. Differential Aptitude Tests (DAT) and General Aptitude Tests Batteries (GATB) are well known Test Batteries.

**INTEXT QUESTION 20.1**

1. What do you understand by the term 'aptitude'?

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**20.2 INTEREST**

Interest may be defined as a tendency to choose one activity in preference to another, or to seek out an activity or object. It implies preferences or likes and dislikes for specific activity or a group of specific activities such as lawyer, physician, engineer, musician, artist etc. Interest is generally manifested in the way one likes to spend one's leisure time. Interest is a preference for a particular activity. Interest provides emotional pleasure. Hobbies are based on interests. In a broad sense interests can be classified in two categories: Extrinsic interests and Intrinsic interests.



If the emotional pleasure of the interest area is attached to the activity, it is intrinsic interest. Liking an activity without any reward is intrinsic. If the emotional pleasure is attached to some reward and praise, it implies extrinsic interest. Liking or doing any activity for some reward or money implies extrinsic interest.

Various techniques have been developed to measure interests. They include self ratings, interviews, questionnaires, checklists and inventories. Interest inventories have been primarily used in vocational and educational guidance. They are more satisfactory in some ways than interviews because a large number of specific questions representing a broad range of careers or subject areas are used. A typical interest inventory consists of a list of activities to each of which an individual responds by indicating whether he or she likes/dislikes or is indifferent by indicating preferences. Strong Vocational Interest Blank (SVIB) and Kuder Preferences Record are some well known inventories/records for measuring interest.



### INTEXT QUESTION 20.2

1. Why do you think that intrinsic interest will lead to a better match between job and an applicant's personality?

## 20.3 ABILITY

Ability, commonly known as intelligence, represents one of the most important sources of individual differences. Ability is the innate capacity to act and helps in the solution of a problem. Environment can develop abilities but cannot produce them within the person. Abilities help to accumulate knowledge but those should not be confused with knowledge itself. These abilities increase efficiency in the person.

Intelligence is an important ability. A great deal of research has been done in constructing tests and techniques to assess intelligence. There are various approaches to conceptualize intelligence. Initially it was limited to cognitive or intellectual domain only. The contemporary view, such as given by Gardner, is that there are multiple intelligences and people can have intelligence in cognitive, musical, kinesthetic (bodily) interpersonal and other areas.

## 20.4 MENTAL AGE AND IQ

Mental ability is developmental in nature. It increases with age. Therefore, psychologists have developed age related scales. Each scale comprises a series of



**Notes**

questions which are normally answered correctly by a majority of children of that age. For example, the five year old scale is what most five year olds could pass comfortably (as well as all children over five), but which most four year olds could not. Hence a child passing the five year old scale would have mental age of five. The concept of mental age by itself it does not tell us how bright, average or dull the child is. To establish this, we must compare the child’s mental age with his actual or chronological age. For this purpose the concept of IQ is introduced. Intelligence Quotient (IQ) is a ratio of mental age and chronological age multiplied by 100.

$$IQ = \frac{\text{Mental Age (MA)}}{\text{Chronological Age (CA)}} \times 100$$

It may be noted here that where MA and CA are the same, IQ is 100 (which by definition is average), where MA is greater than CA, IQ is over 100 or above average, and where CA is greater than MA; IQ is below 100 or below average. However, the concept of MA does not apply beyond 18 years, since mental ability is usually fully developed by that time. Therefore the concept of IQ is not meaningful beyond the age of 18 years. The current practice is to create a profile of a person in different types of abilities and tasks instead of one single assessment score.



**INTEXT QUESTIONS 20.3**

1. What is the difference between mental age and IQ?  
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2. What do you understand by ability?  
\_\_\_\_\_

**20.5 IMPORTANCE AND RELATIONSHIP AMONG APTITUDE, INTEREST AND ABILITY**

It is important to make job decisions consistent with one’s abilities, aptitudes and interests. These concepts are also related to choices of study in different grades or different stages of education, co-curricular activities, hobbies, learning some special skills and so on. Choice of career is a very important decision for a person. The right career decision brings happiness and job satisfaction. Therefore job decisions need to be made in the light of accurate, reliable and up to date information, regarding the requirements of the job and about the individuals intelligence, aptitudes, and interests.

**20.6 ANALYZING AND COMMUNICATING JOB REQUIREMENTS**

Job descriptions serve several purposes. A job description aims to inform the



applicants about what an employer wants them to do and the knowledge and skills that they will need to bring to the job in terms of aptitudes, interests and abilities to perform a job. It serves its purpose when it attracts the right applicants with right aptitude. The job descriptions mainly provide information on the nature of work, the salary and other benefits, work timings and holidays, as well as the kind of intelligence level, aptitude and interest required. For example, the job of a school teacher would require good communication skills, patience, aptitude in teaching and managing the class and certain educational qualifications. The job description would also include details of school timings, holidays and salary. If an applicant finds that he or she has the required qualifications, aptitude and interest, he/she could take the decision to become a teacher.

In the next chapter you will learn more about how to decide on a career path.



### INTEXT QUESTIONS 20.4

1. What is the outcome of right career decision?  
\_\_\_\_\_
2. What is the purpose of job description?  
\_\_\_\_\_



### WHAT YOU HAVE LEARNT

- It is important to understand the individual's aptitudes, interests and abilities and to match them with job requirements.
- The knowledge of individual differences can be gained through the assessment of aptitudes interests and abilities.
- An aptitude is a special ability in a certain field of performance. It is the result of inherent and environmental factors.
- Aptitude tests results are useful in the educational and vocational guidance.
- Interest may be defined as a tendency to choose one activity in preference to another.
- Intrinsic interests are real and natural interests while extrinsic interests are acquired and outward interests.
- Interest helps in educational and vocational guidance in the selection of subject areas or streams or courses.
- The data from interest inventories should be supplemented by ability and aptitude tests as well as with individual's attitude towards occupational experiences, co-curricular activities or recreational pursuits.



- Ability is commonly known as intelligence. It represents one of the most important sources of information about an applicant's suitability for a particular job.
- Job requirements include information about the nature of work, salary, work conditions, timings, and also about the abilities, aptitude and interest required for success in the job.

**TERMINAL QUESTIONS**

1. What is an aptitude? Describe one aptitude test and indicate its use.
4. What is an interest? How does interest help in selection of proper subjects and career?
3. Briefly discuss the concept of ability and describe the current view of intelligence.
4. Describe the role of aptitudes, interests and abilities in making educational and vocational choices.

**ANSWERS TO INTEXT QUESTIONS****20.1**

1. It is a special ability and helps predicting future performance.

**20.2**

1. It involves liking for specific activity itself.

**20.3**

1. Mental age refers to age related mental maturity in a normative sense whereas IQ refers to the ratio of mental age and chronological age.
2. Innate capacity to act.

**20.4**

1. Happiness and job satisfaction.
2. It provides the information about nature of job, salary and working conditions etc.

**Hints for Terminal Questions**

1. Refer to section 20.1
2. Refer to section 20.2
3. Refer to section 20.3
4. Refer to section 20.5