20

ADMINISTRATION OF TESTS

INTRODUCTION

It is very easy to administer some tests : but to administer other tests, extensive training is required. Generally speaking, administration of group tests requires less skill than that of individual tests. A test-user is required to know not only directions, but many other things such as rapport, explanation, observation of behaviour, etc. The same has to be uniformly applied over a wide area. Some tests are simultaneously applied in many countries and the standard of examinees is compared. So, examinees at one centre should not be given any extra advantage at the expense of others. Every examinee should be tested in an identical manner. No unfair aid has to be given. The responsibility of test administrator is heavy indeed.

Some of the important problems of administration are discussed here in brief.

CONDITIONS OF TESTING

The following points may be of some help in this regard :

(1) Ventilation and lighting should not be poor, otherwise the subjects would be handicapped.

(2) There should be sufficient place to write, as also to spread material, so that the subjects may write conveniently.

(3) Rooms should not be very large; otherwise subjects will not be able to hear directions and see demonstrations. Group tests cannot be efficiently administered in large-sized rooms, where the number of invigilators or test administrators is very large.

(4) Rooms, where tests are administered, should be quiet and free from any outside interference. They should be provided with comfortable seats, desks, writing space, etc.

(5) The test should not be given when the examinees are fatigued, or when they are emotionally disturbed, because scores obtained by them in such conditions would not be a true measure of their achievement or personality. Home-sickness and distraction also affect scores.

TIME SCHEDULE

(1) In order to avoid fatigue, tests should be spaced and adequate rest may be given on the night before tests. The administration should be with the minimum hustle and confusion.

(2) Time of day is an important factor. Since fatigue onsets into afternoon, afternoon testing should be avoided, as far as possible.

(3) Time-limit and the hour of day should be decided by the requirements of practical administration itself. Except for unusual circumstances, the testee should be examined when he is easy and fresh.

(4) If there are more than one test, meals be provided between two or more tests. Short tests may be alternated with longer tests.

(5) Provision may be made for variety, from the viewpoint of maintaining effort and interest on the part of examinees.

(6) If speed is an important factor in the tests, the time allowed should be short enough, so that most of the individuals appearing in the test may not be able to finish up within the prescribed time limit.

(7) Time given should be liberal in planning, the measure of factual knowledge. No arbitrary rule, can, however, be made in this regard.

(8) Items requiring association of historical events should be given less time.

(9) Some other factors determining time-limit are :

(a) Average length of questions.

(b) Nature of items.

(c) Reading speed of the individual.

(d) Kind of mental process required.

SECURITY OF TESTS AND TESTING MATERIAL

(1) Test material should be kept under lock and key and also sealed. Only authorised persons should be allowed an access.

(2) New test forms should be developed from time to time, in order to prevent previous acquaintance with the already used forms.

(3) Test booklets, that are no more useful, should be destroyed.

(4) Subjects should not be allowed to take any books or papers inside the examination room.

(5) An accurate inventory of all test material should be prepared and kept. Only that number of test-papers which is required should be taken out and accounted for at the end of the test.

DIRECTIONS GIVEN TO EXAMINEES

Instructions or directions are aid to testees, as well as the test administrator. So, they should be handled carefully. The following points may be useful :

(1) The test administrators should have a thorough familiarity with instructions; they should possess a good speaking voice and a degree of dominance.

(2) They should see that subjects turn pages only when they are told to do so and work fully according to instructions.

(3) Instructions should be straightforward, *e.g.*, 'Take the answer-book. Turn the first page. Write your name, address and date at the top, etc. The administrator should demonstrate each step by doing himself.

(4) Instructions should be very clear. If a point is not understood, it may be repeated in a simple language; but it should not be unduly explained.

(5) Basic instructions should be printed in the test booklet itself.

(6) If subjects ask querries after directions have been given, the administrator should answer these querries; but should not add anything by way of explanation.

(7) Separate instructions should be given, if necessary, for answering different types of questions. Sample questions may be given and explained. Elaborate instructions, however, may not be necessary.

(8) Educational level of the examinees must be kept in mind while planning the time-limits, as well as in phrasing instructions, particularly if they are very complex.

CONTROL OF THE GROUP

In group-testing, adequate control over the group is very desirable. This control should not however, be in a military-like manner, because that will bring an unnatural element in the test situation. Effective control or command may be established by rapport and other such methods. If the examiner avoids an antagonistic attitude and establishes a friendly one, his job would be easy. He may assume an air of dignity, calm and strictness, but may relax later on. There is no rigid rule however. The problems of control would be more if the group becomes larger. Effective test-administration has two basic goals. The first of these is efficiency of operation. This means readiness with which test results are available for use, for research and reference. The second goal is uniformity of procedure, scoring interpretation, etc. Both these goals can be fulfilled only when the group appearing in the test is adequately controlled.

CONTROL AND ELIMINATION OF CHEATING

Cheating is mainly a motivational problem and so, proper motivation and rapport should help minimise cheating. In some specific testing situations, say in case of examining criminal offenders, no amount of rapport or motivation would do. And therefore, other precautionary measures have to be taken. Cheating may be studied under two broad headings : (1) Cheating to raise scores in achievement and intelligent tests, and (2) Falsifying of responses in personality tests and questionnaires. Let us discuss them.

(1) Cheating to Raise Scores. Some of the examples of this type o cheating are : copying from a neighbour, acquisition of prior knowledge and extensio of time.

(a) *Copying from a neighbour :* This is more possible in group examinatio and so, preventive measures may be adequate, such as proctoring, proper seating arrangement, use of alternate test forms, etc.

(b) *Acquisition of prior knowledge :* It is possible in group examination and been tested earlier. This type of cheating can be minimised by giving proper orientation regarding the purpose of test, safeguarding of testing material and minimising inter-communication.

(c) *Extension of time-limit :* The examinee may start before the signal to begin or may continue even after the end. Proper supervision is, therefore, essential.

(2) Faking of Responses. Subjects may give faked or wrong responses, so that they may appear to be in more favourable light. In self-report inventories or questionnaires, for example, the subjects make an attempt to give socially approved answers, rather than responses corresponding to their own typical behaviour. They may try to create an impression deliberately, which is favourable to them. Such type of faking, however, requires a higher level of intelligence, and persons with lower educational or intellectual level, may not, therefore, be successful. In some situations, subjects may deliberately try to appear in a more unfavourable light by giving 'poor' answers. In military testing, the subject may give poor answers to get a desirable job or assignment. Some of the solutions to prevent or eliminate faking are :

(a) *To disguise the purpose of test.* This is possible in projective or to some extent, in semi-projective techniques, but not in questionnaires or self-report inventories.

(b) *Use of forced-choice technique.* In this, the subject may choose one of the two answers which appear to be equally acceptable or unacceptable, but not actually so.

(c) *Constructing a special key.* Such a key can be devised by comparing the responses of the group of subjects instructed to appear stupid with the responses of bonafide feeble-minded cases.

INFLUENCE OF COACHING, PRACTICE AND TEST-SOPHISTICATION

Coaching of examinees before they appear in tests has become a general practice these days. This includes practice in tests used in the past or the practice of reasoning problems, etc. It sometimes includes training in the solution of problems with speed. Results show that coaching does help examinees, but the short duration coaching is as useful as a long duration one. Some early studies on Stanford-Binet tests clearly indicated that coaching on specific items does not increase scores; greater the resemblance between the test items and instructional material, greater was the increase in scores, *i.e.*, improvement in I.Q.

Repetition of practice also effects test-performance favourably. Practice effects can be readily seen in the retesting with the same form of the test, as also in retesting with parallel forms. The average gain in intelligence tests is generally from 8 to 12 I.Q. points. Therefore, if in a testing situation, initial scores are compared with final scores, some margin should be left for practice gains.

Some students have been done to know the effect of 'test sophistication', *i.e.*, experience with taking psychological tests. It does help persons who have not taken psychological tests previously are decidedly at a disadvantage. This is because of the fact that test-sophistication helps overcoming an initial feeling of strangeness with the test material and increases self-confidence.

MOTIVATING THE EXAMINEE

If the purpose of testing is selection for some job or assignment in which the examinees themselves have a stake, motivation is not a problem. But a need for motivation really arises in some situations, particularly when tests are used for classification, investigation, evaluation or research purpose. Something, therefore, has to be done to motivate subjects. The task may be made more charming or preferable by the subject by changing the phraseology, introducing prefacing statements and convincing the subject of the importance of the test. Some more important motivating factors are as follows :

(1) Ego-Involvement : The desire to maintain self-respect and the respect for others or interest stimulates effort in the task. But, for the purpose of ego-involvement, the subject must have a stake in the task. Simple incentives, such as monetary payment, prizes, etc., may not be very useful.

(2) Praise and Reproof : Some studies, notably by Hurlock Elizabeth, show that both, praise and reproof help improvement of scores of school-children on arithmetic and intelligence tests, but praise was more effective. Some verbal incentives, such as sarcasm, encouragement, discouragement and ridicule were also effective. Group rivalry, knowledge of results, presence of co-workers or observers, monetary rewards were also useful to some extent.

(3) Advance Information : Examinee may be motivated by preparing him for the test by appropriate advance information. The problem may be defined and explained. This will help him in having a realistic understanding and so, his anxiety would be reduced. This technique is now used in some tests, for example, by the College Entrance Examination Board.

(4) Tension and Threats : Tensions and threats reduce motivation. They interfere with good performance and lead to poor co-ordination. Tension may be caused due to attitude of teachers and parents or due to threats given by other children. There are some threats, inherent in the testing situation itself. For instance, a delinquent may fear that if test-results are not good, he may be punished or a child may fear that poor results will disappoint or even frustrate his parents.

(5) Nature of the Group Taking Test : Children with normal mentality are normally motivated for the test. But emotionally mal-adjusted individuals, ethnic

minority groups, very young children, juvenile delinquents or persons with very low socio-economic standard, may pose special problems. This may affect their performance on tests. These individuals may develop some kind of inferiority feelings and a consequent hostility towards academic materials.

(6) Cultural Background. If there is low verbalisation due to backward cultural background, test-performance would be effected. A study of Puerto Rican school children by Anastasi showed that motivation in test is different with different ethnic and socio-economic groups.

ESTABLISHING RAPPORT

Maintaining of rapport is a must. The subject should be made to do his best. The technique used to maintain rapport depends upon the specific testing situation. The test-administrator should, however, be cautious of his own behaviour. Standing over the subject, uttering some words criticising or appreciating the subject or making other remarks, may adversely affect motivation. Maintaining of rapport also depends upon the nature and composition of the group appearing in the test. If children are very young, studying in first, second or third grades or so, the most surprise element may be eliminated to reduce anxiety and necessary explanations may be given to create self-confidence and assurance. In case of pre-school children, the main hindrances are distraction, shyness before strangers and negativism, procedure should be made flexible to fulfil the needs of individual testees and they should be kept cheerful and gay. In case of older children or college and university students, the examinees may, anyhow, be convinced that the test is in their own interest. The purpose of the test may be explained.

GUESSING

The questions of a test can generally be categorised in two categories—(i) Those whose answers the examinee knows, and (ii) those whose answers the examinee does not know. If there are two choices in the questions, then the examinee will answer several such questions whose answer he does not know. He will do this on the basis of guessing. In case of two alternative choices, he will generally select 50% correct alternative and 50% wrong. In questions having four alternatives, he will select 25% correct alternatives. Thus, theoretically, it is essential to adopt such method, by which the effect of guessing can be removed and examinee may not be able to increase his scores on the basis of guessing. For this, the following formula is adopted :

$$\text{Score} = \text{Right} - \frac{\text{Wrong}}{\text{Choices} - 1} \text{ or } S = R - \frac{W}{N-1}$$

Why a correction formula is required, can be clarified with the help of an example. Suppose, there are 40 questions in a test. Examinee knows correct answer of only 20 questions from it. Thus, he will give correct responses for these 20 questions, but answer 12 more questions. But, due to guessing, he can answer only 6 questions correctly and 6 questions are answered wrongly. If each question

is of one mark, then without applying the correction formula, 26 marks will be awarded to him, which is wrong, because he knows only 20 correct answers. But if we award him after applying the correction formula, then his score will be $S = R - W$ or $26 - 6 = 20$, which is justified. In this way, this formula destroys the effect of guessing. There are some errors of it :

(1) Correction formula is based on the assumption that examinee will attempt equal number of correct and wrong answers. But, this assumption, generally, is appropriate of a whole group, but not for each examinee. Question items cannot only be categorized in this manner, *i.e.*, one which examinee knows and others which he does not know. There may be such questions the answer of which examinee knows, but not with confidence. He will guess on these questions. Some such questions whose answers he does not know, he will guess, and there is possibility that they may be right.

(2) Some individuals are more expert in guessing some less. We cannot assure that all of them are equals and give 50% correct answers by guessing and 50% wrong. Some students answer only those questions about which they are 50% confident, some answer those questions which they know well and some answer such questions about which they do not know anything. With the help of a common formula, justice cannot be done with all individuals. The individual, who will answer all doubtful questions, will be in advantage.

(3) The tendency of guessing reduces the accuracy of actual measurement. That is why, rather than given several alternatives in answering a question, open-ended questions are given. Examinees themselves answer these questions.

To reduce or finish the effect of guessing, certain measures are suggested. One method is to ask the examinee to guess in the instruction, and wherever there is doubt, he must try to answer the most logical answer. In this way, some students will not be at more advantaged compare to others. According to Thurston, marks should be deducted for wrong answers on the basis of experience, rather than on the basis of correction formula. The number of alternatives can also be increased, which reduces the percentage of guessing. In 5 alternatives, guessing remains only 20%. Instead of recognition items, completion items can be given, so that examinee himself answers.

DECISIONS LEFT AT THE DISCRETION OF THE ADMINISTRATOR

Howsoever standardized a test may be, there are many things that are never mentioned in the manual and the administrator has to take his own decisions. Some situations requiring such discretions are as follows :

(1) When no time-limit is stated, it is necessary to stop the painfully conscientious subject, who works long after he has done his best.

(2) Sometimes, credit in the shape of marks is allowed only when the task is done within a certain time-limit. But, the manual does not specify whether the tester should stop the subject after that time, so the tester has to take decisions in this respect.

(3) In tests, such as the Stanford-Binet Test of 1937, the adminstrator has to take a decision with regard to the sequence of items, particularly in case of pre-school children.

(4) When the subject is upset and confused, the best decision would be to terminate the problem and ask the subject to do afresh, as to let him continue would be to make him hopelessly discouraged.

(5) The tester should avoid dragging out a response by cross-questioning or too much urging.

(6) Administrator requires a high degree of intelligence, judgement and sensitivity with regard to scientific methods.

(7) The examinee, particularly child, should be encouraged by methods such as a smile, exclamation of appreciation, etc. This should not, however, be done in a stereotyped manner.

QUESTIONS FOR EXERCISE

1. What points should be kept in mind for testing conditions ?
2. Why is the time schedule important ?
3. How can guessing effect be reduced ?
4. What is the influence of coaching on test score ?
5. How should the examinees be motivated ?
6. What sort of decisions are at the discretion of the administrator ?

■■