CHAPTER NO.VIII

FINAL RUN OF THE TEST

The test has to be administered to a large sample of the population before the population norms can be determined. The different purposes for the final administration of the test are:

(1) To determine the norms,
(2) To determine the reliability of the test and
(3) To determine the validity of the test.

Further, the data obtained from a large sample are also useful to study the nature of the distribution of test-scores.

Before, the test could be administered to a large sample, the investigator considered the following points:

(1) Time limit,
(2) Directions and
(3) Sample
FIXING THE TIME LIMIT:

Regarding the time-limit for the final administration of tests Ruch suggests to fix the time-limit in such a way that 90 per cent can attempt all the items within their power. Cronbach supporting this view says, "The current trend in making new tests is to provide ample time for nearly everyone to finish." Accordingly, it has been decided to fix liberal time-limits for each sub-test in the final test-form. The time-limits have been fixed on the basis of number of test items in each sub-test and the time given to each sub-test at the tryout stage. The table given below gives the time-limit fixed for each sub-test for the final run.

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### TABLE NO. IX

**TIME-LIMITS FOR THE FINAL RUN**

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-test</th>
<th>Tryout</th>
<th>Final administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of items</td>
<td>Time-limit in minutes</td>
</tr>
<tr>
<td>1</td>
<td>Scientific information</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Scientific comprehension</td>
<td>41</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>Mechanical comprehension</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Space relation</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Numerical ability</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>131</td>
<td>70</td>
</tr>
</tbody>
</table>

**DIRECTIONS:**

As a result of the tryout, it was found that the general directions and instructions of each sub-test were quite clear and satisfactory. Hence, the same directions that were fixed at the time of tryout were retained in the final form.

**SAMPLE:**

The most theoretical answer to the question 'To whom the test should be administered?' is that it should be administered to all the individuals for whom the test is
constructed. The present test is constructed for the S.S.C. pupils of Gujarat, hence it should be administered to all the S.S.C. Class pupils of all the schools situated in Gujarat. This is rarely, if ever, possible. Hence, it is essential to deal with the 'sample' drawn from the given population. No doubt, the sample must be 'sufficiently large' and should be thoroughly representative of the parent population.

Regarding the selection of sample, Lindquist remarks that:

"It is a common mistake to judge the adequacy of a sample solely in terms of the number of pupils tested. However, the school as well as the pupil must be taken into account." 3

It was, therefore, decided to administer this final test to the S.S.C. pupils covering a large number of schools situated in different districts of Gujarat State. To select the sample of schools, the following dimensions were considered:

(a) Rural-urban
(b) Boys - Girls
(c) Regions.

As far as the definitions of 'Rural' and 'Urban' are concerned, the census data formed the basis of the classification. Regarding the 'Regions' of the state, the whole state has been split-up into two broad regions viz., the former Saurashtra State and the territory of Kutch forming one region and the remaining part of the state forming the second region. The sample is thus both stratified and random. Based on the above dimensions, a 3 per cent sample of schools was selected. The test was administered to the S.S.C. pupils of these schools. The following table gives a classified list of schools according to the criteria stratification:

**TABLE NO.X**
CLASSIFICATION OF SAMPLE TESTED DURING THE FINAL RUN

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Category</th>
<th>No. of schools</th>
<th>No. of pupils tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Urban</td>
<td>16</td>
<td>688</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>18</td>
<td>530</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>1218</strong></td>
</tr>
<tr>
<td>2</td>
<td>Boys</td>
<td>30</td>
<td>931</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>4</td>
<td>287*</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>1218</strong></td>
</tr>
<tr>
<td>3</td>
<td>Saurastra &amp; Kutch</td>
<td>7</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>Remaining State</td>
<td>27</td>
<td>883</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>1218</strong></td>
</tr>
</tbody>
</table>

* This number includes the girls from boy's schools also.
The application of chi-square test technique, discussed on page No. 107 also proves that the sample selected represents the parent population.

CONDUCTING THE FINAL ADMINISTRATION:

It was decided to administer the final test to a large sample of about 1500 S.S.C. pupils covering almost all districts of Gujarat within a limited time. Hence, it was not possible for the investigator to administer the test all alone. The help of trained and experienced teachers was freely taken to administer the test. The investigator gave the following instructions to the test administrators:

1. Environmental conditions:
   a. Administer the test to one class at a time with the help of the class-teacher.
   b. Arrange pupils properly to prevent copying by pupils.

2. Establish report:
   Try to win the confidence of the pupils by a friendly talk for a minute or two.

3. Oral instructions:
   Give the following instructions orally to the pupils before distributing the test material:

   (a) Observe complete silence during the test period.
(b) Don't leave your place or disturb others during the period.

(c) You will be supplied with a test-booklet and an answer sheet.

(d) Don't open the test-booklet until you are told to do so.

(e) Insert the particulars demanded at the top of the answer sheet.

(f) When I say 'begin', start with the sub-test 1 and when I say 'switch over', start with the next sub-test immediately.

4. Distributing the test:
   Ask the class-teacher to distribute the test-booklets and the answer sheets to the pupils.

5. Starting the test:
   (a) Ask the pupils to read the instructions given on the front-page of the test-booklet and ensure that all pupils have followed the instructions.

   (b) Ask the pupils to open the test-booklet and 'start' the work.

   (c) After 7, 13, 9, 6 and 20 minutes respectively, instruct the pupils to 'switch over' the next sub-test.
6. Collecting the test:

(a) Ask the class-teacher to collect the test-booklets and answersheets separately.

(b) No test booklet or answersheet should be left out with the pupils.

SCORING THE TEST:

Scoring was done by the investigator with the help of three experienced and trained teachers who also helped the investigator at the time of tryout scoring. The perforated scoring key prepared for making the scoring easy was used for scoring. The perforated scoring key used for the present work is attached at the end of this work (Appendix C).

TREATMENT OF THE DATA:

The statistical treatment of the data thus obtained is discussed in the following chapters.


