

CHAPTER VII
FINAL RUN OF THE TEST

Having determined the difficulty level and discriminating index of each item in the first seven sub-tests, it was found that all of them i.e. 148 items should be retained in the final test.

In the Pilot form of the test, the items in each sub-test were arranged according to their difficulty level in the order of lowest to highest. Also, the multiple choices for each item were arranged so as to act as distractors as far as possible and thus the tests were ready for the print in the final form.

This chapter on final run is divided into two parts. Part I deals with the problem of selecting the sample. Part II deals with the other aspects of test administration.

I. Sample

A psychological test has a particular meaning only with the sample of the population on which it is standardised. The problem of selecting an unbiased representative sample is of great importance in standardizing a good test. Every test is designed and intended for use with a specified population. A test of intelligence, for example, may be standardized for use with children for age group 12 plus to 16 plus; another may be standardized for adults only and so on. All intelligence tests are valid when used with the population for which they are standardized. It is necessary that the population for which a test is meant to be used should be defined before the actual work of standardization is undertaken. Not only is the definition of the population necessary but also the determination of the size of the sample from the population is needed for standardization of the test. In short it means that the author of the test must decide at the outset with which group or with what segment of the population his instrument is to be used. Secondly he has to select properly the size of the sample. There are two conditions governing the adequacy of the sample. The first condition is that sample should be representative of the population for which the test is designed. The second condition is that the sample should be numerically adequate to give statistically valid and reliable results.

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According to Parten,¹ "A optimum sample in a survey is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility".

The sample should be small enough to avoid unnecessary expenses and large enough to avoid intolerable sample errors. It should be also large enough to yield statistically representative and significant results.

In the present work the test is designed to be used for the children of age group 12 plus to 16 plus for Kashmir State.

Size of the Sample

The size of the sample generally depends upon the available number of the pupils. According to Parten,² "It is better to have a small sample without bias than a large sample which is the unrepresentative of the universe". At the same time, it should not be forgotten that the power of the test depends upon the size of the sample. The larger the sample, the more powerful the test".³ Before the size of the sample is decided it would be better to have an idea of population from which the sample is to be drawn.

¹ M. Parten : Surveys, Polls, and Samples. New York, Harper and Brothers. p.293

² Ibid., p. 299.

³ Senders V.L.: Measurement and Statistics. New York, Oxford University Press. p.374.

It is reported by the Directorate in its Report for the year 1957-1958 that the school-going population is 452,000 and the population of Kashmir children of 12 years to 16 years irrespective of the fact they go to school is 93,486. Using the tables of Random numbers 39 high schools from different districts were selected for administering the test to the pupils. The distribution of these schools according to districts is given in the following table.

TABLE //

Number of Schools District-wise where the Final Run of the Test as Administered and the number of Students selected from each of them

S.No.	No. of school	Place	District	No. of Boys	No. of Girls	Total
1	12	Srinagar City	Srinagar	2250	750	3000
2	8	Anantnag	Anantnag	1400	200	1600
3	11	Baramulla & Surroundings	Baramulla	1000	400	1400
Total	31			4650	1350	6000

Map of Kashmir

SHOWING PLACE WHERE THE
PRESENT TESTS WERE
ADMINISTERED.

DIST ANANTNAG

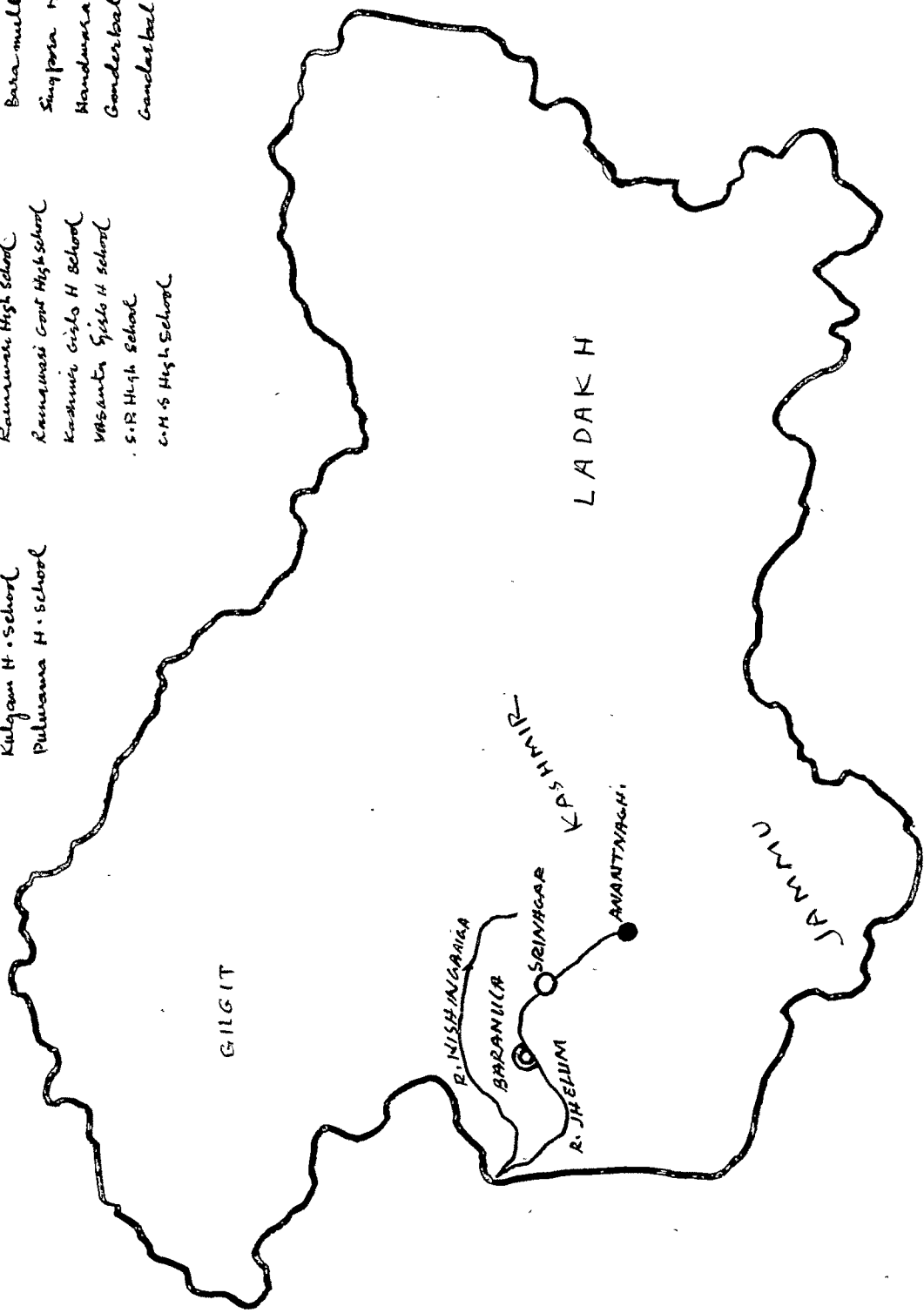
- Pampos High School
- Awantipora H. School
- Bijbehara H. School
- Govt H. School Anantnag
- Gislo H. School Anantnag
- Nattam H. School
- Kulgam H. School
- Pulwama H. School

DIST SRINAGAR

- M.R. High School
- Nawakadal High School
- Alaukadal H. Girls High School
- Hindu High School
- Islamia High School
- National High School
- Ramwari High School
- Ramwari Govt High School
- Kashmiri Girls H. School
- Vasanta Girls H. School
- S.R. High School
- C.M.S. High School

DIST BARAMULLA

- Pattan High School
- Nagam High School
- Tangmarg H. School
- Sopore Girls H. School
- Sopore High School
- Baramulla H. School
- Baramulla Girls H. School
- Singpora H. School
- Handwara H. School
- Ganderbal H. School
- Ganderbal Girls H. School



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II. AdministrationPurpose

The main purpose for the final administration of the test is to provide data necessary for standardization of the test, i.e. for fixing the norms and determining the reliability of the test. A comparison of test score is valid only when exactly the sample procedure is adopted in administering a standardized test used for fixing the norms. If the procedure at two administrations is not identical, the results will lack in reliability. Utmost care is, therefore, taken in standardizing the procedure for administering the test in the final run.

There are some factors that influence the performance of the subjects on a test. The first set of factors relate to the test and the administration of the test. These factors are the sample selected, the directions given, time limits fixed, supervision provided and the general set up and also environmental conditions of testing. It is upto the constructor to see to all those conditions which can be controlled and are standardized as perfectly as possible.

Time Limit

The time limit is a very important factor in many tests, specially those which are speed tests. In the try out, sufficient time was allowed so that most of the

pupils could try almost all the items. Regarding the time limit for the final run of tests, Lindquist⁴ writes, "the time allowance should be so adjusted that at least 75 per cent of the pupils will have time to consider all the items. Ruch⁵ favours such a time limit that 90 per cent attempt all items within their power". Bean⁶ suggests, "time limits are liberally planned so that everyone who works at a minimum acceptable speed can finish all items". Ross⁷ also suggests that "sufficient time should be given so that almost all the pupils have time to finish". In the present case, the time limit for each sub-test has been fixed on the criterion that at least 90 per cent of the pupils are able to try all the items within their power. On this criterion the time limit for the sub-tests are fixed as under.

TABLE 12
Time Limits for Sub-tests

S.No.	Sub-test	No. of items	Time in Minutes	
			Mt.	secs.
1.	Opposites	20	10	- 00
2.	Similarities	23	10	- 00
3.	Classification	23	15	- 00
4.	Analogies	21	10	- 00
5.	Problems	13	15	- 00
6.	Number Series	24	10	- 00
7.	Jumbled Sentences	24	10	- 00
		148	100	- 00

⁴ Lindquist, E.F., Hawkes, H.E. and Mann : The Construction and Use of Achievement Examination .p.116.

⁵ Ruch, G.M.: The Object of New Examination.p.312.

⁶ Bean, K.L. : Construction of Educational and Personnel Tests, New York, McGraw-Hill Book Co.Inc.p.30

⁷ Ross, C.C. : Measurement in Today's Schools. New York, Prentice Hall Inc. p.156.

Directions

The same directions that were fixed at the time of First and Second try-outs were retained as they were found quite satisfactory.

Physical Set Up

The testing was done in as natural way as possible. All the testing was done during the first three periods. No testing was done in the latter half of the day to avoid effect of fatigue on the pupils performance. The help of trained teachers and Headmasters was freely taken to administer the tests in their schools.

Co-operation and Difficulties

The author was lucky in being on the staff of the Training College, Srinagar, as there was much contact with the Headmasters of High Schools and also the teachers who come to attend seminars on the State level.

It is really with great pleasure to mention that though they were busy with their school activities, the Heads of institutions and the colleagues extended their full co-operation to the tester in his arduous task of testing such a large group.

Scoring

Scoring procedure was undertaken with the help of key which was suitably improvised. In the scoring procedure exactly the same allotment of one mark for each correct response, as was followed in the pilot test was followed. No partial credits were allowed for partially correct answers. The scoring was done

without use of any formula for correction for chance.

After scoring was over, the statistical analysis of the data was carried out. (Copy of the Key in the Appendix).

References

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4. Kamat, V.V. : Measuring Intelligence of Indian Children, London, Oxford University Press.
5. Lindquist, E.F. : Educational Measurement, Ch. 10. Washington, D.C., American Council on Education, 1950.
6. Parten, M. : Surveys, Polls and Samples, New York, Harper and Brothers.
7. Thorndike, R.L. : Personnel Selection, App. B. , London, John Wiley and Sons, Inc.; New York, Chapman and Hall Ltd., 1949.