CHAPTER 2

SURVEY OF RELATED WORKS
Intelligence testing was common in India from ancient times. Preparing the puzzles, completing the verse by composing the last line appropriately, and maze-solving were the popular instruments of testing intelligence. This sort of intelligence testing was done mainly for amusements and not for any academic purpose.

Innumerable stories of Birbal and Akbar demonstrate the problems arising in a number of situations, solutions of which required highly intellectual abilities more specifically called as problem-solving ability. Such problems demonstrate a variety of intelligence tests. Very often, some problematic situation was created where Birbal always solved the problem in his own ingenious way. It was believed, in his time, that Birbal possessed the maximum problem-solving ability. It was also believed that any kind of a problem cleverly solved by him.

Maharshi Vyas has composed a number of puzzles in his poems in Mahabharat. In Gujarat, the poet Shamaidas has also composed such puzzles in the 13th century (Dessi, K. S., 1954).

The rigorous intelligence testing on the scientific basis started in France in 1905 with the advent of Binet-Simon Scale. This scale gave an impetus to
intelligence testing in many countries and especially in Europe and America,

In India, the honour of standardising the first mental test goes to Prof. C. Herbert Rice of Lahore. He translated the Binet Scale into Hindustani and adapted it to a point scale in 1929. He had administered the test to 1072 boys only in the age group of 5 years to 16 years. Later on he converted this test into an age-scale.

In 1926, Maite administered the Stanford Adult Test to Bengali post graduate students. In the next year i.e., 1927, Chatterjee published the findings of his studies with Burt's group tests administered to college freshmen at Lahore.

Again in the same year of 1927, J. Manry of Swing Christian College, Allahabad first adapted verbal group tests, the Preliminary Classification Tests, to Indian conditions and published it in Urdu, Hindi and English. L. S. Jha, in 1934, used Hindi adaptation of the Simplex Mental Test and Terman's group tests of intelligence.

V. V. Kamat took a good deal of pains to prepare a thorough revision of the Stanford - Binet tests (1916). He adapted them to two languages, Marathi and Kannada, and published them in 1935. He tested
1074 children of Dharwar, a city in the present Karnataka state. Thereafter, the Binet scales have been translated in many Indian languages. In Gujarat, N. N. Shukla adapted Kamat's revision and published it in 1930.

The second world war encouraged the group testing in India. A number of Indian psychologists got training at Edinburgh and contributed substantially to the testing work on their return to India. Shashikala published his individual test of intelligence in Hindi in 1948.

In Gujarat, especially during the last three decades few intelligence tests that became available can be enumerated as below:


Out of the above tests the first seven tests from no. (i) to no. (vii) are group tests while no. (viii) to no. (xi) are individual tests.

(i) K. G. Desai's battery of group tests of intelligence, published in 1954, consists of 10 tests.
and 210 items. It is a verbal test for the age group of 12 years to 18 + years i.e., for standards VII to XI. It takes about 70 minutes for administration.

This is the first original verbal group test systematically standardised in Gujarat. It was administered to 4735 boys and 4770 girls. Separate norms for boys and girls are provided. Grade-wise and age-wise norms are prepared. This is a completely verbal test applicable to higher standards only. Till today, it has not been revised.

(ii) C. L. Shatt's group tests, published in 1962, are meant for standards V, VI and VII. It includes both verbal and non-verbal items distributed in seven tests. It still awaits revision.

(iii) D. M. Bhavsar's non-verbal group tests are applicable to standards IX, X and XI. It was administered to 3189 boys and 2718 girls from 16 districts of Gujarat. Grade and Age norms, separate for boys and girls are provided. I.Q.'s and P.R.'s are used as measures of brightness.

(iv) Desai-Shatt's group test, published in 1968, is for standards VIII, IX, X and XI i.e., for the age group of 12 + to 18 + years. It takes about 40 minutes for administration. It was administered to 3001 boys and 2653 girls for standardisation purposes. It is a verbal omnibus test of 110 items.
It is not effective at higher levels as it was supposed to be.

(v) G. B. Shah's non-verbal group test, published in 1965, is completely non-verbal, consists of 7 tests. Its administration takes about 40 minutes. It is applicable to standards III to VIII i.e., from 7 years, 6 months to 14 years and 5 months. It was administered to 6037 pupils for standardisation.

(vi) Premila Phatak's test is an adaptation of Goodenough's Man-Drawing Test. It is applicable to the age group of 4 years to 11 years, 11 months. It is a completely non-verbal group test. It could be used for assessment and diagnostic purposes.

(vii) Miss Prem Lathe's group test is meant for 6 years to 13 years. It also is a completely non-verbal group test. (Bhavsar, D. M., 1967).

(viii) N. N. Shukla adapted, in 1950, V. V. Kamat's revision of the Stanford - Binet Scale of 1916. This is the first individual test in Gujarati. It takes about 2 hours for the administration and an expert, well trained examiner is necessary for the administration. It is revised in the year 1975.

(ix) M. C. Bhatt adopted the Woehler Intelligence Scale for Children for the Gujarati population. It is applicable for the age group of 5 years
to 15 years. The normative sample consisted of 220 boys and 220 girls of Ahmedabad city. Scaled scores are used and the age-wise norms are given. The scores are converted into I. Q.'s. It is used for assessment of intelligence and diagnosis.

(x) J. H. Shah, in 1965, adapted the Stanford-Binet Intelligence Scale Third Revision (1960) for Gujarati children. It is meant for the age group of 13 years to 16 years. It is an individual test.

(xi) Leela K. Patel, in 1972, standardised this performance test of intelligence for Gujarati students of grades II to XI i.e., for the age group of 6+ years to 15+ years. It was administered to 400 pupils for standardisation. Classification of intelligence is given on the statistical basis and according to the I. Q.'s.

This short review of the existing tests in Gujarat shows that relatively none put emphasis on the problem-solving ability requiring solutions in day-to-day situations, formal as well as nonformal. Again, some tests are entirely verbal (i, iv), whereas some are entirely non-verbal (iii, v, vi, vii). Verbal tests presume some minimum knowledge of language on the part of the student. On the other hand, Dr. Harper remarks that even in the Terman-Merrill
and Wechsler Scales the verbal parts had been found to be more highly correlated with general intelligence than the non-verbal parts. Cronbach (Cronbach, D. J., 1966) also believes that non-verbal items do not call for higher intelligence. Hence the present author attempted to have a combination of verbal and non-verbal items.

Barring the exceptions of G. B. Shah, Pramila Phatak, and Miss Prem Latha, the age range is rather high. But all these three tests are completely non-verbal tests.

In view of the above facts the present author has visualized the need of the time and has made an attempt to standardize the group test of problem-solving ability in Gujarat employing both types of items. It consists of both verbal and non-verbal items. It is hoped that more work and more research on these lines may fill the long-felt gap in mental testing of Gujarati speaking children at primary level.