CHAPTER V
SUMMARY AND CONCLUSIONS.

Aimed at providing an adequate measuring instrument for the purpose of selection and guidance of pupils entering the commerce stream of the newly introduced Multipurpose schools, the present test of the commercial aptitude was constructed and standardised.

In the process of this development, commercial aptitude was defined as those abilities which were symptomatic of future success in commerce (academic). An examination of previous theoretical analyses and a review of a number of empirical studies provided the clues for the preliminary listing of abilities on the aptitude determiners. The preliminary list of abilities was finalised on the basis of the judgments of a number of eminent teachers of commerce of all levels, i.e., school, college and university.

Test items covering the finally selected abilities were constructed, following general principles of test construction. The first and the original battery contained 186 items and it was administered on one hundred pupils of different schools in Calcutta. The preliminary battery contained 173 items and covered the a-priori selected abilities. Selection and classification of the 500 pupils of the sample have already been discussed in earlier chapters.

The items in this preliminary battery were analysed after the test had been administered on a group of 500 pupils of different streams, i.e., Science, Commerce and Humanities of new entrants of ninth grade level of the Higher Secondary Schools. The sampling of testees was found to be random and representative. The measures of central tendency, variability and the significance
of the reliabilities of the statistics were computed (Table 1.1 to 1.6). The distribution was found to be statistically reliable.

Differences between the means of different groups of students - Science, Commerce and Humanities under consideration are found to be significant (Table 1.3).

The final battery, after item analysis contained 140 items. These batteries emerged out of these 140 selected items. The science battery consists of 30 items, the commerce battery consists of 40 items and Humanities battery consists of 30 items. Another 40 items have been included which showed discrimination of two aptitudes at a time — either Science and Commerce, or Commerce and Humanities, or Humanities and Science. This has been done with a view (1) to adding seal, and interest (2) to supplementing partial discrimination. The rationale upon which the differential batteries were framed has been discussed in details in earlier chapters.

The reliability of these three batteries and the whole one is computed separately and is shown in table - 2.6. The evidences indicate that the present Commercial Aptitude Test is a reliable measuring instrument for the obtained scores.

Each of the three final test batteries was validated against the appropriate composite criterion obtained out of a combination of two years' terminal examination (school) marks in percentages in Science, Commerce and Humanities subjects under the respective streams of the Multifunctional Schools. The values for the validity co-efficient obtained from different groups with different batteries were calculated and were shown in Table 4.5. Each sub-battery of the composite final test was validated against the results of school examinations for the respective sub-batteries.
The final test battery yielded a very reliable index of prediction of possible achievements obtained through follow-up studies in the results of Higher Secondary Examination, after their admission into B.Com., B.Sc., and B.A. first year classes. The forecasting efficiency was found to be very reliable for each of the three batteries (Table - 3.7).

Weights were assigned to the items of the three final batteries (Science, Commerce and Humanities) according to their performances in their corresponding subjects with the help of the above table(73). Each group of students was classified into five categories - A, B, C, D, and E, according to their standing on the distribution of scores obtained. Median values of each of the categories have been computed and given in Tables 2.9, 2.10, 4.1 and 4.2 for assessing an individual’s standing on the scale; the decile score values have also been calculated for a comparative study(table - 4.2). These can be utilised during admission tests.

From the results of this investigation it may be deduced that there exists a distinct commercial aptitude, at least academic which view gets support from the results of the Factor-Analysis also.

Evidences show that the existence of commercial aptitude may be successfully detected and measured at the age of transfer. Its existence prior to this age cannot be established at the present stage of investigation.

The commercial aptitude calls for academic organisation as highly related to the academic achievements in the line (subsequent school and college results).

From the follow-up results a high forecasting value of the commercial aptitude test has been established.
Thus, the issues centering round the hypothesis of the present
investigation may be considered to have been satisfactorily answered.

This may be added at the long last, this is perhaps the first detailed
statistical and psychological analysis of the study in the academic aptitude for
commerce in our country. This study will no doubt help to clear the ground for
changes in practice that are still envisaged. It will provoke serious heart-
searchings on the present method of selection of candidates to the different
streams of curricula of study upon which depend the welfare of the individual
as well as the State.

There has been a rapid increase in the development and application of
instruments to analyze the different aspects of intelligence. Such instruments
help to assess the different aptitudes as they show the individual's characteris-
tic strengths and weaknesses. This study of intra-individual variation in
performance on the sub-tests or items of intelligence, aptitude, and other
personality tests, has helped in the development of multiple aptitude batteries.
The differential aptitude testing received a strong impetus from the vocational
and educational counseling needs.

The humble attempt to study the trait organization in academic aptitude
of commerce has been undertaken on a very humble scale to find the possibility of
the application of factor analysis to provide a theoretical basis for the
construction of a multiple aptitude battery for the 3 important streams in our
school education. It is expected from the preliminary factorial study that
the different aptitudes could be more systematically identified, sorted, defined
and measured by more refined tests.

It can not but be said therefore, that the work has come to an end. On
the other hand, the investigation has raised many more problems than it aimed.
to solve. In fact, it may be said to be endless. But, this may be considered to be the stage, where the limited scope of the investigation may be said to have been covered and must be stopped and let future researchers carry on the work ahead. The findings have been interesting and the concrete results brought satisfaction to the present investigator.

The use of this multiple aptitude battery in the selection of students to the different streams is expected to save much national money and energy and may bring individual and national welfare.