Psychological testing has started since World War I and attained popular foothold ever since, for personnel selection, placement, promotion and for various ergonomic applications. In the developing countries the uses of psychological tests are yet to pass through some modifications before they become practically acceptable. In India, such testing has already taken a few steps forward although not widely favoured. There might be many reasons for its setback, one of those being that psychological test batteries include a number of subtests requiring much time for test administration. Of the various aptitude tests, viz., Wesman Personnel Classification Test (PCT), Differential Aptitude Test (DAT), Flanagan Aptitude Classification Test (FACT), The General Aptitude Test Battery (GATB), etc., the test administration time for the GATB is considerably less. An attempt was, therefore, made to find out whether the seven GATB parts (paper-pencil) could form elementary linkage among themselves, and if so, whether the probable subtests of the linkages could be used instead of the seven parts, thus saving time for test administration.

The GATB was administered on the clerical (N=230) and the supervisory technical personnel (N=170) personnel, who had work experience upto 35 years and education
upto graduation. The answer sheets were scored following standard keys (GATE manual, 1973). The job performance scores were obtained from job performance inventories, which were filled by the concerned department heads.

The results are presented separately for the clerical and the supervisory technical group.

A. Clerical group:

Across the departments, there were no significant differences among the mean scores, obtained by the personnel, either on the GATE parts or on the aptitudes.

Personnel with length of service upto 25 years showed significantly higher mean scores than the personnel having length of service from 26 years to 35 years, on parts 1, 3, 4, 5 & 7. Similar results were obtained for the aptitudes G, V, S, P & Q.

There were no significant differences among the mean scores either on parts 2 & 6 or aptitude N, obtained by the personnel, across the entire length of service.

Educationwise, on parts 1, 4 & 6, the graduates scored significantly higher than the matriculates, and the matriculates scored significantly higher than the non-matriculates. Similar results were also obtained for aptitudes G, V, N & Q.
On parts 2, 3, 5 & 7, the graduates' mean scores were significantly higher than those of the matriculates and the non-matriculates. Similar results were reflected for aptitudes S & P.

B. Supervisory Technical group:

Personnel of the printing and the dyeing departments showed significantly higher mean scores than those of the spinning, weaving, finishing and the engineering departments, on all the parts, except part 2. Similar results were obtained for all the six aptitudes.

The mean scores of the personnel with length of service up to 15 years were significantly higher than those obtained by the personnel with length of service from 16 years to 30 years, either on the parts or the aptitudes.

On all the parts, the graduates (B.Sc/B.Tech) scored significantly higher than the diploma holders and the diploma holders scored significantly higher than the certificate holders or the personnel having practical experience. Similar observations were also noted for the aptitude scores.

Across the levels of occupation, there were no significant differences among the mean scores, either on the parts or the aptitudes.
The results stated earlier (A & B), thus, led to the formation of ten subgroups, five for the clerical and five for the technical groups.

Intercorrelation matrices for all the ten groups showed positive associations amongst most of the seven GATB parts.

Elementary linkage analysis, for all the ten groups, reflected that the seven GATB parts could be shortened to three parts only, viz., parts 1, 3 & 6.

Significantly high correlations were obtained between the job performance scores and the scores on parts 1, 3 & 6, for almost all the ten groups.

Multiple correlations between the job performance scores and the test performance scores on parts 1, 3 & 6, were also highly significant for the ten groups.

Multiple regression equations formulated for the ten groups for predicting job performance scores showed different weights (statistically significant) for parts 1, 3 & 6.

The findings obtained in this study appear to be encouraging to the extent that the seven GATB parts could be shortened to parts 1, 3 & 6, only, thereby reducing the time for test administration. This would also motivate
managerial staff in the industries to go in for more psychological testing for purposes of personnel selection. However, the results remain restricted to the recruitment of clerical and supervisory technical personnel for the three textile mills, where the study was conducted. To be able to generalize from the obtained findings, the study will have to be extended to a large sample to be representative of the textile population in the country.