Attempts were made in the present chapter to present an analytical picture of the status of correlates of academic achievement of the high-, average-, and low-achievers of both Indian and African students. It was thought that nationality, perhaps, might offer an explanation of the differentials in academic achievement. The following hypotheses were tested:

1. Differentials would exist with regard to the styles of learning of Indian and African Students belonging to high-, average-, and low-achieving groups.

2. Differentials would exist with regard to the locus of control of Indian and African Students belonging to high-, average-, and low-achieving groups.

3. Differentials would exist with regard to the achievement motivation of Indian and African Students belonging to high-, average-, and low-achieving groups.

4. Differentials would exist with regard to the IQ of Indian and African Students belonging to high-, average-, and low-achieving groups.

These hypotheses were tested by dividing the discrepant academic achievement groups (HAs, AAs, & LAs) into two subgroups each. The split of these groups on the basis of nationality led to the composition of relatively small subgroups. There was, however, every possibility that these subgroups lose the normality and linearity of the distribution of their scores pertaining to different measures of variables in the context of academic achievement. Hence, only t test was employed to verify the above-stated hypotheses. Results have been given Table 9.
Results

Table 9 represents 37 sets of t values of all the 37 measures being studied.

Related to each of the 37 measures, three t values have been worked out for Indian and African groups. The first t value aimed at finding out the significance of difference between mean scores of Indian and African Students belonging to high-achieving groups (HA₁-HA₂). The second t value sought to determine the significance of difference between mean scores, on all measures, of Indian and African students belonging to average-achieving group (AA₁-AA₂). The last t value sought to explore the significance of difference between mean scores of Indian and African Students belonging to low-achieving group (LA₁-LA₂). These three t values were calculated to test the hypotheses given in the present chapter.

High-Achievers Belonging to Indian and African Samples

For the partial testing of the four hypotheses of this chapter, high-achievers in the groups of Indian and African Students were studied within themselves. The rationale of the hypotheses was that high-achievers were not themselves homogeneous and be differentiated on the basis of culture. So, to test this assumption, a value comparing Indian high-achievers and African high-achievers (HA₁-HA₂) was calculated, as represented in Table 9.
<table>
<thead>
<tr>
<th>S.No. of Variables</th>
<th>Measuring Code</th>
<th>INDIANS (N=156)</th>
<th>AFRICANS (N=121)</th>
<th>table 9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High-Achievers</td>
<td>Average-Achievers</td>
<td>Low-Achievers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>Mean SD</td>
</tr>
<tr>
<td>1. Academic Achiev</td>
<td>ACH</td>
<td>65.63 5.11</td>
<td>55.80 4.66</td>
<td>44.22 6.71</td>
</tr>
<tr>
<td>2. Deep Approach</td>
<td>DA</td>
<td>13.14 2.65</td>
<td>12.32 3.06</td>
<td>12.39 2.91</td>
</tr>
<tr>
<td>3. Relating Ideas</td>
<td>RI</td>
<td>12.22 2.78</td>
<td>11.89 2.83</td>
<td>12.26 2.49</td>
</tr>
<tr>
<td>4. Use of Evidence</td>
<td>UE</td>
<td>11.60 3.19</td>
<td>11.56 3.45</td>
<td>11.44 2.99</td>
</tr>
<tr>
<td>5. Intrinsic Motivation</td>
<td>IM</td>
<td>10.97 2.49</td>
<td>10.96 3.52</td>
<td>10.97 3.33</td>
</tr>
<tr>
<td>7. Syllabus Boundness</td>
<td>SB</td>
<td>7.54 2.37</td>
<td>7.51 2.07</td>
<td>7.54 2.24</td>
</tr>
<tr>
<td>8. Fear of Failure</td>
<td>FF</td>
<td>7.25 1.37</td>
<td>7.24 1.98</td>
<td>7.24 2.12</td>
</tr>
<tr>
<td>9. Extrinsic Motivation</td>
<td>EM</td>
<td>8.35 2.97</td>
<td>8.05 3.17</td>
<td>8.38 2.99</td>
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<td>11. Strategic Approach</td>
<td>ST</td>
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<td>11.48 3.29</td>
<td>11.91 3.09</td>
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<tr>
<td>12. Negative Attitudes</td>
<td>NA</td>
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<td>5.52 3.66</td>
<td>9.41 5.69</td>
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<tr>
<td>13. Achievement Motivation</td>
<td>AM</td>
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<td>12.07 2.65</td>
<td>12.25 1.45</td>
</tr>
<tr>
<td>15. Globaltrotting</td>
<td>GT</td>
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<td>8.65 3.12</td>
<td>8.81 2.57</td>
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<tr>
<td>16. Operation Learning</td>
<td>OL</td>
<td>11.68 2.67</td>
<td>11.48 2.96</td>
<td>11.83 2.91</td>
</tr>
<tr>
<td>17. Inprossedence</td>
<td>IP</td>
<td>10.49 2.94</td>
<td>9.99 3.21</td>
<td>10.09 2.11</td>
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<td>18. Measuring Orientation</td>
<td>MG</td>
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<td>46.94 9.71</td>
<td>47.69 8.62</td>
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<td>20. Achieving Orientation</td>
<td>AO</td>
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<td>41.91 7.59</td>
<td>42.11 7.18</td>
</tr>
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<td>21. Holistic Orientation</td>
<td>HO</td>
<td>41.53 6.45</td>
<td>40.79 7.56</td>
<td>41.29 7.77</td>
</tr>
</tbody>
</table>

Means, SDs, and t values for Indian students (N=544) and African students belonging to the High-, Average-, and Low-Achieving Groups on each of the 37 variables.
Here, means, standard deviations, and t-test comparisons were carried out between Indian high-achievers and African high-achievers on all measures.

**Academic Achievement**

Table 9 summarizes the results revealing that the mean and standard deviation for the Indian high-achievers for academic achievement as measured by aggregate percentage of marks were 63.63 and 5.11 respectively. Compared with the mean and standard deviation for the Indian high-achievers, the mean ACH score for African high-achievers was 56.86 (SD=3.75), t=8.02, p<.05. This finding indicated that the mean achievement score for Indian high-achievers was significantly greater than that reported for the African high-achievers.

**Styles of Learning**

As seen in Table 9, out of the 16 learning style subscales, about 15 significant differences were observed. The mean score for DA for the Indian high-achievers was 13.14 (SD=2.63), while that for the African high-achievers was 11.93 (SD=2.05), t=2.77, p<.05. This suggested that the Indian high-achievers had significantly greater scores on DA than the African high-achievers.

Regarding RI, Table 9 shows that the mean score for the Indian high-achievers was found to be significantly above that reported for African high-achievers, 12.22
(SD=2.73) compared with 9.83 (SD=4.43), t=4.34, P<.05.

With reference to UE, Table 9 shows the mean score for the Indian high-achievers to be 11.60 (SD=3.18), while that reported for the African high-achievers was 9.69 (SD=2.61), t=3.57, P<.05. This indicated that Indian high-achievers had significantly higher UE scores than did the African high-achievers.

In the case of IM, Table 9 shows the mean score for the Indian high-achievers to be 10.99 (SD=3.67), while the mean score for the African high-achievers was 9.69 (SD=3.06), t=2.11, P<.05. This suggested that Indian high-achievers had significantly greater scores on IM than did the African high-achievers.

Regarding SA, the mean score for the Indian high-achievers was found to be significantly higher than that reported for the African high-achievers as seen in Table 9, 14.05 (SD=3.73) compared with 11.19 (SD=3.37), t=4.50, P<.05.

Coming to SB, it was found that the mean score for the Indian high-achievers was significantly higher than the mean score for the African high-achievers as seen in Table 9, 7.54 (SD=2.37) compared with 5.43 (SD=2.85), t=4.91, P<.05.

With reference to FF, Table 9 shows the mean score for the Indian high-achievers to be 7.25 (SD=2.69), while the mean score for the African high-achievers was 6.07.
As seen in Table 9, the mean score for extrinsic motivation for the Indian high-achievers was 8.93 (SD=4.27), while that for the African high-achievers was 10.52 (SD=2.61), t=2.31, P<.05. This was an indication that Indian high-achievers had significantly lower extrinsic motivation scores than did the high-achievers of the African Sample.

Regarding DS, the mean score for high-achievers of the Indian sample was found to be significantly lower than that reported for the African high-achievers as seen in Table 9, 9.89 (SD=3.47) compared with 11.45 (SD=3.26), t=2.62, P<.05.

In the case of ST, Table 9 shows the mean score for the Indian high-achievers to be 10.92 (SD=3.26), while the mean score for the African high-achievers was 13.17 (SD=3.09), t=4.01, P<.05. This indicated that the Indian high-achievers had significantly lower ST scores than did the high-achievers of the African Sample.

Regarding AM, the mean score for the high-achievers of the Indian Sample was found to be significantly lower than that reported for the African high-achievers as seen in Table 9, 12.16 (SD=2.54) compared with 13.90 (SD=2.29), t=4.03, P<.05.

With reference to CL, Table 9 shows the mean score
for the Indian high-achievers to be 10.90 (SD=3.34), while
the mean score for the African high-achievers was 8.86
(SD=2.63), t=3.67, P<.05. This indicated that the Indian
high-achievers had significantly higher comprehension
learning scores than did the African high-achievers.

As seen in Table 9, the mean score for GT for the
high-achievers of the Indian Sample was 8.77 (SD=2.91),
while that for the African high-achievers was 8.83
(SD=2.38), t=.13, P>.05. This suggested that Indian
high-achievers achieved lower scores on GT than did the
African high-achievers, although the mean difference was
not statistically significant.

On OL, the mean score for Indian high-achievers was
found to be significantly above that reported for the
high-achievers of the African Sample as seen in Table 9,
11.68 (SD=2.62) compared with 10.24 (SD=3.28), t=2.99,
P<.05.

On IP, the mean score for Indian high-achievers was
10.49 (SD=2.94), while that for African high-achievers was
8.81 (SD=2.17), t=3.46, P<.05. This was an indication that
Indian high-achievers had significantly higher
improvidence scores than did the African high-achievers.

Regarding MO, the mean score for Indian high-
achievers was found to be significantly higher than that
reported for the African high-achievers as is evident
from Table 9, 47.95 (SD=9.25) compared with 41.19
With reference to RO, Table 9 shows the mean score for the Indian high-achievers to be 37.77 (SD=8.97), while the mean score for the African high-achievers was 33.21 (SD=6.38), \( t=3.09, \ P<.05 \). This indicated that Indian high-achievers had significantly higher reproducing orientation scores than did the African high-achievers.

As seen in Table 9, the mean score for AO for the Indian high-achievers was 40.24 (SD=8.46), while that for the African high-achievers was 48.45 (SD=7.32), \( t=5.74, \ P<.05 \). This indicated clearly that Indian high-achievers achieved significantly lower scores on AO than did the African high-achievers.

With respect to HO, Table 9 shows the mean score for the Indian high-achievers to be 41.93 (SD=6.65), while the mean score for the African high-achievers was 36.74 (SD=7.43), \( t=4.38, \ P<.05 \). This clearly demonstrated that Indian high-achievers had significantly higher scores than did the African high-achievers.

**Locus of Control**

Table 9 presents the means, standard deviations, and \( t \) values of locus of control for high-achievers belonging to Indian Sample, compared with African high-achievers.

As seen in Table 9, the mean score for locus of control for the Indian high-achievers was 9.28 (SD=3.02), while that for the African high-achievers was 9.36.
This suggested that Indian high-achievers achieved lower scores on locus of control than did the African high-achievers, although the mean difference was not statistically significant.

**Achievement Motivation**

Table 9 presents the means, standard deviations, and t values of achievement motivation for Indian high-achievers, compared with high-achievers belonging to African Sample.

As seen in Table 9, the mean score for achievement motivation (N-Ach) for Indian high-achievers was 52.27 (SD=5.30), while that for the African high-achievers was 47.26 (SD=5.13), t=5.47, P<.05. This indicated clearly that Indian high-achievers had significantly higher achievement motivation scores than did the African high-achievers.

**Intelligence**

Table 9 also presents the means, standard deviations and t values of the subvariables of the Intelligence for the high-achievers belonging to Indian Sample, compared with African high-achievers.

Comparing the mean scores on nine different subvariables of verbal intelligence, only three significant differences were found as seen in Table 9. Apart from FI, AN, and RS, Table 9 indicated that the means
of the rest of the subvariables for the Indian high-achievers were highly comparable to those of the high-achievers belonging to African Sample, as there were no statistically significant mean differences reported between these groups for the rest of these nine subvariables.

Regarding FI, the mean score for high-achievers of the Indian sample was found to be significantly higher than that reported for the African high-achievers as seen in Table 9, 6.06 (SD=2.38) compared with 5.07 (SD=2.12), t=2.43, P<.05.

With reference to AN, Table 9 shows the mean score for the Indian high-achievers to be 10.63 (SD=3.14), while the mean score for the African high-achievers was 12.05 (SD=3.30), t=2.57, P<.05. This indicated that the Indian high-achievers had significantly lower analogies scores than did the high-achievers of the African Sample.

With respect to RS, Table 9 shows the mean score for the Indian high-achievers to be 5.10 (SD=1.88), while the mean score for the African high-achievers was 5.81 (SD=1.81), t=2.20, P<.05. This suggested that the Indian high-achievers had significantly lower reasoning scores than did the African high-achievers.

Considering Vint, NVint, DIQ\textsubscript{1}, DIQ\textsubscript{2}, and DIQ\textsubscript{Comb} (Vide Table 9), there were no statistically significant mean differences reported between Indian high-achievers
and African high-achievers for any of these subvariables. The mean score for NVint for the Indian high-achievers, however, was seen to be greater than the mean score for the African high-achievers, 44.15 (SD=9.06) compared with 42.00 (SD=9.53), t=1.35, P>.05, although this difference was not statistically significant. Regarding DIQ2, the mean score for Indian high-achievers was found to be higher than that reported for African high-achievers, as seen in Table 9, 108.45 (SD=12.31) compared with 105.53 (SD=12.95), t=1.35, P>.05, although this difference was not statistically significant.

**Average-Achievers belonging to Indian and African samples**

The hypotheses of the present chapter were partially tested by the comparison of the two high-achieving groups belonging to Indian and African Samples, partially by the comparison of two average-achieving groups belonging to Indian and African Samples, and partially by the comparison of two low-achieving groups belonging to Indian and African Samples. For the latter two, average-and low-achievers of the Indian Sample were compared with average-and low-achievers of African Sample.

In this section, comparison was made between average-achievers belonging to Indian Sample and average-achievers belonging to African Sample on the basis of
means, standard deviations, and t values presented in Table 9. Here, means, standard deviations, and t-test comparisons were carried out between the two groups on all measures.

**Academic Achievement**

Comparing Indian average-achievers and African average-achievers on academic achievement, the mean score for Indian average-achievers was found to be significantly greater than that reported for the African average-achievers, as seen in Table 9, 53.80 (SD=4.66) against 50.14 (SD=2.97), t=6.32, P<.05.

**Styles of Learning**

Table 9 reveals the results of the 16 learning style subscales for both Indian average-achievers and African average-achievers, indicating that Indian average-achievers had significantly greater scores on DP, SP, CL, and GT, while the African average-achievers had significantly higher scores on DS, ST, NA, AM, OL and IP. Their respective mean scores for DP were 12.32 (SD=3.06) compared with 11.38 (SD=2.88), t=2.36, P<.05 for African average-achievers. For SA, their mean scores were 13.95 (SD=3.71) compared with 12.26 (SD=5.00), t=3.16, P<.05 for African average-achievers. For CL, their respective means scores were 10.94 (SD=3.17) compared with 9.07 (SD=3.04), t=4.38, P<.05 for African average-achievers. Their
respective mean scores for GT were 8.65 (SD=3.12) compared with 7.79 (SD=2.84), t=2.11, P<.05 for African average achievers. Concerning DS, their respective mean scores were 9.83 (SD=3.10) compared with 12.79 (SD=3.07), t=7.21, P<.05 for African average-achievers. Their respective mean scores for ST were 11.48 (SD=3.29) compared with 13.40 (SD=2.86), t=4.51, P<.05 for African average-achievers. For NA, their respective mean scores were 8.52 (SD=3.86) compared with 10.06 (SD=4.36), t=2.91, P<.05 for African average-achievers. Their respective mean scores for AM were 12.07 (SD=2.65) compared with 13.67 (SD=2.18), t=4.69, P<.05 for African average-achievers. For OL, their respective mean scores were 11.48 (SD=2.96) compared with 12.28 (SD=3.10), t=2.01, P<.05 for African average-achievers. Their respective mean scores for IP were 9.89 (SD=3.21) compared with 11.14 (SD=3.13), t=2.95, P<.05 for African average-achievers. For the rest of the learning style subvariables, there were no statistically significant mean differences reported between Indian average-achievers and the African average-achievers.

Regarding MO, Table 9 indicates that the mean score for average-achievers belonging to the Indian Sample was highly comparable to that of the African Sample. There was no statistically significant mean difference reported between these groups.
With reference to RO, Table 9 shows the mean score for the average-achievers belonging to Indian Sample to be 39.34 (SD=8.59), while the mean score for African average-achievers was 36.85 (SD=7.96), t=2.22, P<.05. This indicated that Indian average-achievers had significantly higher reproducing orientation scores than did average-achievers of the African Sample.

Comparing Indian average-achievers and African average-achievers on AO, the mean score for Indian average-achievers was found to be significantly lower than that reported for the African average-achievers, as seen in Table 9, 41.91 (SD=7.89) against 49.92 (SD=7.74), t=7.67, P<.05.

For HO, Table 9 indicates that the mean for Indian average-achievers was highly comparable to that of African average-achievers as there was no statistically significant mean difference reported between the two groups.

**Locus of Control**

Table 9 presents means, standard deviations, and t values of locus of control for average-achievers belonging to Indian Sample, compared with African average-achievers.

As seen in Table 9, the mean score for locus of control for the Indian average-achievers was 9.91 (SD=2.96), while that for the African average-achievers
was 9.13 (SD=3.37), t=1.94, P<.05. This indicated that Indian average-achievers achieved higher scores on locus of control than did the African average-achievers, although the t value did not reach the acceptable level of significance.

Achievement Motivation

Table 9 presents the means, standard deviations, and t values of achievement motivation for Indian average-achievers, compared with average-achievers belonging to African Sample.

As seen in Table 9, the mean score for achievement motivation (N-Ach) for Indian average-achievers was 50.31 (SD=5.96), while that for the African average-achievers was 53.39 (SD=5.17), t= 3.99, P<.05. This clearly indicated that Indian average-achievers had significantly lower achievement motivation scores than did the African average-achievers.

Intelligence

Table 9 also presents the means, standard deviations, and t values of verbal intelligence and its subvariables, Vint, DIQ1, DIQ2, and DIQcomb for Indian average-achievers, compared with African average-achievers.

Comparing the Indian average-achievers and the African average-achievers on the basis of nine dimensions of Vint, the mean scores for Indian average-achievers were...
found to be significantly lower than those reported for African average-achievers in the areas of MI, VS, VO, CF, analogies and best answers. Significant t values, of 2.51, 7.59, 4.57, 2.18, 4.84, and 2.35 were found for MI, VS, VO, CF, AN and BA respectively. Regarding RS, the mean score for Indian average-achievers was found to be higher than that reported for African average-achievers as seen in Table 9, 4.34 (SD =1.98) compared with 3.85 (SD=1.70), t=1.91, P>.05, although this difference was not statistically significant.

As seen in Table 9, the mean score for verbal intelligence for the Indian average-achievers was 49.16 (SD=13.26), while that for the African average-achievers was 54.21 (SD=9.47), t= 3.03, P<.05. This suggested that Indian average-achievers achieved significantly lower score on Vint than did average-achievers belonging to African sample.

As for NVint and DIQ2, Table 9 indicates that their means for the Indian average-achievers were highly comparable to those of African average-achievers as there were no statistically significant mean differences reported between the two groups for these variables.

But for DIQ1 and DIQ_{comb}, there were statistically significant mean differences reported between Indian average-achievers and African average-achievers for these variables. As seen in Table 9, the mean score for DIQ1 for
the Indian average-achievers was 96.54 (SD=14.90), while that for the African average-achievers was 102.22 (SD=10.65), t= 3.03. P<.05. This indicated that Indian average-achievers had significantly lower DIQ\textsubscript{1} scores than did the African average-achievers. Regarding DIQ\textsubscript{Comb}, the mean score for Indian average-achievers was also found to be significantly lower than that reported for the African average-achievers as seen in Table 9, 96.85 (SD=13.72) compared with 100.43 (SD=10.71), t= 2.05, P<.05.

Low-Achievers Belonging to Indian and African Samples

The four hypotheses of the present chapter were partially tested by the comparison of the two high-achieving groups belonging to Indian and African samples, two average-achieving groups belonging to Indian and African sample, and two low-achieving groups belonging to Indian and African samples.

In this section, comparison was made between low-achievers belonging to Indian sample and low-achievers belonging to African sample on the basis of means, standard deviations, and t values presented in Table 9. Means, standard deviations, and t-test comparisons were carried out between the two groups on all measures.

Academic Achievement

Comparing Indian low-achievers and African low-achievers on academic achievement, the mean score for
Indian low-achievers was found to be significantly greater than that reported for the African low-achievers, as seen in Table 9, 44.22 (SD=6.71) compared with 39.57 (SD=5.44), t=5.11, P<.05.

**Style of learning**

Table 9 reveals the results of the 16 learning style measures for both Indian low-achievers and African low-achievers, indicating that Indian low-achievers had significantly higher scores on DA, IM, EM, and CL, while the African low-achievers had significantly higher scores on SA, DS, ST and NA. Their respective mean scores for deep approach were 12.39 (SD=2.91) compared with 11.18 (SD=3.35), t=2.68, P<.05 for African low-achievers. For IM, their respective mean scores were 10.60 (SD=3.33) compared with 8.78 (SD=3.36), t=3.73, P<.05 for African low-achievers. For extrinsic motivation, their respective mean scores were 10.84 (SD=4.22) compared with 8.69 (SD=4.09), t=3.55, P<.05 for African low-achievers. For CL, their respective mean scores were 11.18 (SD=2.93) compared with 9.00(SD=3.20), t=4.93, P<.05 for African low-achievers. Their respective mean scores for SA were 14.26 (SD=3.83) compared with 15.71 (SD=5.84), t= 2.11, P<.05 for African low-achievers. DS approach, their respective mean scores were 9.49 (SD=2.94) compared with 12.48 (SD=2.75), t=7.16, P<.05 for African low-achievers. Their respective mean scores for strategic approach were 11.91.
for African low-achievers. Their respective mean scores for NA were 9.41 (SD=3.69) compared with 11.23 (SD=3.68), \( t = 3.39, P < .05 \) for African low-achievers. For the rest of the learning style subvariables, there were no statistically significant mean differences reported between Indian low-achievers and the African low-achievers.

Regarding MO, Table 9 shows the mean scores for Indian low-achievers to be 47.69 (SD=8.82), while the mean score for African low-achievers was 43.00 (SD=8.01), \( t = 3.78, P < .05 \). This indicated that Indian low-achievers had significantly higher MO scores than did low-achievers of the African sample.

Comparing Indian low-achievers and African low-achievers on AO, the mean score for Indian low-achievers was found to be significantly lower than that reported for the African low-achievers, as seen in Table 9, 43.81 (SD=7.14) against 49.68 (SD=7.14), \( t = 5.63, P < .05 \).

For RO and HO, there were no statistically significant mean differences reported between Indian low-achievers and the African low-achievers.

Locus of Control

Table 9 presents means, standard deviations, and t values of locus of control for Indian low-achievers.
compared with low-achievers belonging to African sample.

Table 9 indicated that the locus of control mean for low-achievers belonging to Indian sample was highly comparable to that of African low-achievers. There was no statistically significant mean difference reported between these groups for locus of control.

**Achievement Motivation**

Table 9 presents means, standard deviations, and t values of achievement motivation for Indian low-achievers, compared with low-achievers belonging to African sample.

As seen in Table 9, the mean score for achievement motivation (N-Ach) for Indian low-achievers was 50.62 (SD=5.22), while that for the African low-achievers was 52.78 (SD=5.77), t= 2.72, P<.05. This suggested clearly that Indian low-achievers had significantly lower achievement motivation score than did the African low-achievers.

**Intelligence**

Table 9 also presents the means, standard deviations, and t values of the Vint, NVint, DIQ\(_1\), DIQ\(_2\), and DIQ\(_\text{Comb}\) for Indian low-achievers, compared with African low-achievers.

Comparing the mean scores for Indian low-achievers and African low-achievers on nine subvariables of verbal intelligence, only two significant differences were found
as seen in Table 9. With the exception of NS, VS and RS, the means of the rest of the subvariables for the Indian low-achievers were highly comparable to those of the low-achievers belonging to African sample, as there were no statistically significant mean differences reported between these groups for any of these subvariables.

Regarding NS, the mean score for low-achievers belonging to the Indian sample was found to be significantly higher than that reported for the African low-achievers as seen in Table 9, 7.00 (SD=2.77) compared with 5.65 (SD=2.22), t=3.61, P<.05.

With reference to VS, Table 9 shows the mean score for the Indian low-achievers to be 4.12 (SD=1.57), while the mean score for the African low-achievers was 5.03 (SD=1.56), t=3.95, P<.05. This indicated that the Indian low-achievers had significantly lower VS scores than did the low-achievers of the African sample.

As seen in Table 9, the mean score for RS for Indian low-achievers was 4.70 (SD=2.03), while that for the African low-achievers was 4.25 (SD=1.23), t=1.77, P>.05. This suggested that Indian low-achievers achieved higher scores on reasoning than did the African low-achievers although the mean difference was not statistically significant.

Table 9 shows that the mean scores for Vint, NVint, DIQ1, DIQ2, and DIQComb for the low-achievers belonging to
Discussion of Results

The four hypotheses of the present chapter assumed that Indian students could be differentiated from the African students on the basis of their learning styles, locus of control, achievement motivation, and intelligence when they were grouped into high-, average-, and low-achievers. Since it was the measures of academic achievement which differentiated high-, average-, and low-achievers in the total sample for both cultures, it was essentially an examination of some of the relationships between the criterion and culture as well as between the criterion and the independent variables taken separately.

Hypothesis 1

Differentials would exist with regard to styles of learning of Indian and African students belonging to high-, average-, and low-achieving groups.

Table 9 reveals that seven common learning style measures significantly differentiated Indians from the Africans at all levels of achievement. Indians belonging to
al. Achieving groups were characterized by better learning styles, reflected in their higher scores on deep approach and comprehension learning (DA, & CL) and lower scores on surface approach, disorganized approach, strategic approach, negative attitude, and achieving orientation (SA, DS, ST, NA, & AO).

Few specific learning style measures differentiated Indians from the Africans at one or two levels of achievement only. For instance, RI, UE, SB, FF, and HO did vary more with Indian high-achievers as compared to African high-achievers. These measures did not, however, significantly demarcate the Indians and Africans of average-, and low-achieving groups. This means that the Indians high-achievers adopted better approaches to learning, though relatively fearful of failure due to, perhaps, the stiff and unhealthy competition among the Indian college students who aspire to secure excellent grades to qualify for admission to much-sought-after graduate courses in the university departments or to attract lucrative jobs in a country characterized by overpopulation and high rate of unemployment. This finding, however, contradicted the results of earlier studies suggesting that high-achievers are characterized by low fear of failure (Hoppe, 1930; Dembo, 1931; Gould, 1939; Sears, 1940; Rotter, 1954; Okafor, 1989).

Learning style dimensions, namely, IM, MO, and RO differentiated significantly the Indians from the Africans
at two levels of achievement, Indians achieving higher than the Africans at the corresponding levels of achievement. $t$ values of 1.33 for IM, .49 for MO, and .47 for RO (though nonsignificant at the remaining level of achievement) showed the same trend of superiority of the Indians as compared to the Africans at the remaining level of achievement. In a way, these might also be considered as common learning style measure associated with the Indians at all levels of achievement.

On the basis of the foregoing discussion, strong points have emerged to uphold Hypothesis 1 of the present chapter which now stands confirmed in that 41 out of 60 $t$ values obtained for its verification came out to be significant at .01 or .05 level. Thus, it would appear that culture exercises a considerable influence on styles of learning and that use of better learning styles by the Indians could, possibly, explain away their higher academic attainment when compared with their African counterparts.

Hypothesis 2

Differentials would exist with regard to the locus of control of Indian and African students belonging to high-, average-, and low-achieving groups.

This hypothesis stands rejected as none of the $t$ values calculated for its verification came out to be significant at .01 or .05 level ($HA_I-HA_F$, $t=.17$, $P>.05$; $AA_I-AA_F$, $t=1.94$;
Thus, it would appear that the effects of locus of control on academic achievement were the same for both cultures.

Hypothesis 3

Differentials would exist with regard to the achievement motivation of Indian and African students belonging to high-, average-, and low-achieving groups.

This hypothesis stands confirmed as n-Ach was found to demarcate between the Indians and Africans at all levels of achievement. Indian high-achievers achieved greater mean n-Ach scores than the African high-achievers, while African average- and low-achievers achieved higher than the Indians of the corresponding levels of achievement. This implied that the effects of achievement motivation on academic achievement would be different for the Indians and the Africans. Perhaps, higher n-Ach on the part of Indian high-achievers was another important factor contributing to their higher achievement when compared to their African counterparts. This finding is of major practical importance in educating the Africans enrolled in various institutions of higher learning in India.

Hypothesis 4

Differentials would exist with regard to the IQ of Indian and African students belonging to high-, average-, and low-achieving groups.
This hypothesis stands rejected with reference to the number of t values which came out to be significant for its verification. Significant t values for the verbal intelligence dimension of VO between Indians and Africans at the average – and low-achievement levels were observed. This showed that African average-and low-achievers were superior to the Indian average-and low-achievers in VS. This area did not, however, significantly differentiate between Indian low-achievers and African low-achievers. t value of .85 (though nonsignificant) showed the same trend of superiority of Africans as compared to the Indians at the high level of achievement. Again, significant t value for the verbal intelligence dimension of vocabulary opposites between Indian average-achievers and African average-achievers was observed. Indian average-achievers were found to be weaker in VO as compared to the African average-achievers. These results have been expected as the African sample could be said to be more conversant than the Indian sample in English which is the language of the verbal test of intelligence and generally adopted as lingua franca in most African countries.

In all, only 14 out of 42 t values calculated to verify this hypothesis came out to be significant, thereby, dictating an outright rejection of this hypothesis. It would appear, therefore, that the effects of intelligence on academic achievement were the same for the Indians and the Africans. Intelligence might not be an important factor leading to the variations in the academic achievements of these two groups.