CHAPTER VII

SUMMARY AND CONCLUSIONS

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Brief Re-statement of the Problem. The present investigation was undertaken to study the relationship between academic performance of the higher secondary students and three personality variables, namely, intelligence, adjustment, and achievement motivation and also the relationship between academic performance and the perception of the same by the self, peer, teacher, and father. This relationship was studied for a sample of 217 boys and girls and also for 10% (22) extreme academic achievers. The sample with mean age 15 years and 7 months belonged to ten nonresidential higher secondary schools situated in the state of Gujarat and affiliated to the Central Board of Secondary Education, New Delhi. The academic performance of the subjects was the percentage of the marks secured by them at the All India Higher Secondary Examination held in March/April, 1975. Tandon's Group Test of General Mental Ability, Bell Adjustment Inventory, and Mehta's Achievement Motivation Inventory, were the tools used for the measurement of intelligence, adjustment, and achievement motivation. The data were analysed by using the product-moment coefficient of correlation method, regression analysis, Kendall's coefficient of concordance, and the profile analysis for the high and low achievers. The test re-test reliability in case of the personality variables
was found to be significant.

**Conclusions.** On the basis of the statistical analysis, the following conclusions, given in order of the hypotheses, were drawn:

1. The correlation between academic performance and intelligence was .474, which is significant at .01 level of significance. The result supports the hypothesis that academic performance is directly related to intelligence.

2. The correlation between academic performance and adjustment was .102 which is statistically not significant. The result supports the hypothesis that academic performance is not directly related to adjustment.

3. The correlation between academic performance and achievement motivation was .254 which is significant at .01 level of significance. The findings support the hypothesis that academic performance is directly related to achievement motivation.

With the three personality variables as the independent variables, and academic performance as the dependent variable, the regression analysis showed f-ratio to be significant ($p < .01$). $\beta$-coefficients were significant in case of intelligence and achievement motivation but not in case of adjustment, showing thereby that intelligence and achievement motivation contribute significantly to academic performance.

4. The correlation between academic performance and the
perception of the same by the self was .546 which is significant at .01 level of significance. The result supports the hypothesis that academic performance is directly related to the perception of the same by the self.

(5) The correlation between academic performance and the perception of the same by the peer was .648 which is significant at .01 level of significance. The result lends support to the hypothesis that academic performance is directly related to the perception of the same by the peer.

(6) The correlation between academic performance and the perception of the same by the teacher was .828 which is significant at .01 level of significance. The findings support the hypothesis that academic performance is directly related to the perception of the same by the teacher.

(7) The correlation between academic performance and the perception of the same by the father was .553 which is significant at .01 level of significance. The result supports the hypothesis that academic performance is directly related to the perception of the same by the father.

(8) The correlations between academic performance and perceptions of the same by the self, peer, teacher, and father were .546, .648, .828, and .553 respectively.
The result supports the hypothesis that academic performance is differently related to the perceptions of the same by the self, peer, teacher, and father.

The multiple regression analysis with the perceptions as independent variables and academic performance as the dependent variable, showed that f-ratio is highly significant ($p < .01$). $\beta$-coefficients are significant in case of teacher and peer perceptions but not in case of the perceptions of the self and the father. The teacher and the peer are thus better predictors of the actual academic performance.

The correlational analysis confirms that the teacher must play a significant role in the future education and career planning of the students and in other guidance and counselling programmes. It also shows that the system of internal assessment, as introduced by some of the universities and other examining bodies, cannot be discarded on the ground of the inaccuracy of teacher estimate of the academic performance of the students.

(9) While the results in case of the whole sample were more clear, the relationships between academic performance and the various personality and perception variables, considered in the present investigation, were conflicting and confusing in case of extreme academic performers.

For the high academic achievers, the correlation between academic performance and intelligence was .079.
which is statistically not significant. For the low academic achievers the relationship between academic performance and intelligence was .416 which is significant at .05 level of significance.

The statistical analysis supports the hypothesis only to the extent that for the extreme groups in academic performance, academic performance is directly related to intelligence only for the low academic achievers and not for high academic achievers. The profile analysis, however, clearly reveals that for the extreme academic achievers, academic performance is directly related to intelligence.

(10) In case of the high academic achievers, the coefficient of correlation between academic performance and adjustment was .160 and for the low academic achievers it was -.165 which are both statistically not significant. The results support the hypothesis that in case of extreme groups, academic performance is not directly related to adjustment.

The profile analysis for the extreme academic achievers showed that high academic achievers are better adjusted as compared to the low academic achievers who were less adjusted.

(11) In case of the high academic achievers, the coefficient of correlation between academic performance and achievement motivation was .632 which is significant at .01 level of significance. For the low academic achievers, the coefficient of correlation between academic performance
and achievement motivation was -.132 which is statistically not significant. The result supports the hypothesis only to the extent that for extreme groups in academic performance, academic performance is directly related to achievement motivation for the high academic achievers and not for the low academic achievers.

The profile analysis reveals that high academic achievers are high in achievement motivation as compared to low academic achievers who are low in achievement motivation.

The multiple regression analysis, with the three personality variables as independent variables and high and low academic performance as the dependent variable, revealed that f-ratio was not significant. The coefficient of concordance between high and low academic performance and the three personality variables was again not significant. Statistically these personality variables do not contribute to academic performance in case of high and low academic achievers.

(12) In case of the high academic achievers, the coefficients of correlation between academic performance and the perceptions of the same by the self, peer, teacher, and father were .482, .325, .659, and .348. Out of these the correlations in respect of the peer and father perceptions are statistically not significant whereas for self perception it is significant at .05 level and for teacher
perception at .01 level of significance. It supports the hypothesis only to the extent that for high academic achievers, academic performance is directly related to only the teacher and self perceptions and not to peer and father perceptions.

The profile analysis showed that for high academic achievers, self, peer, teacher, and father can all accurately estimate the academic performance of the students. It also showed that all had slightly underestimated the academic performance of the student in case of the high academic achievers.

In case of the low academic achievers, the coefficients of correlation between academic performance and the perception of the same by the self, peer, teacher, and father were .231, .494, .460, and .419 respectively. Out of these the correlation between academic performance and self perception is not significant whereas those in case of peer, teacher, and father are significant at .05 level of significance. It supports the hypothesis only to the extent that for low academic achievers, academic performance is directly related to the perceptions of the same by the peer, teacher, and father and not to that of the self.

The profile analysis revealed that in case of the low academic achievers, the teacher is the most accurate in estimating the academic performance of the students.
The perceptions of the self, peer, and father present a very inconsistent picture and all of them have over-estimated the academic performance of the students whereas the teacher had under-estimated the same.

The multiple regression analysis with the four perceptions as the independent variables and high and low academic performance as the dependent variable, revealed that $f$-ratio was significant ($p < .01$) in case of the high academic achievers. $\beta$-coefficient was significant at .01 level in case of teacher perception but not in case of other perceptions. In case of low academic achievers, $f$-ratio was not significant. The coefficient of concordance, between academic performance and the perceptions was significant both in case of high and low academic achievers.

We may conclude that intelligence, achievement motivation, and perceptions of academic performance by the self, peer, teacher, and father are significantly related to the academic performance of the students at the higher secondary stage. Total adjustment, as measured by the Bell Adjustment Inventory, is not significantly related to academic performance.

The relationships between academic performance and the considered personality and perception variables continue to be inconsistent and show wide variations in case of extreme academic achievers as compared to those of the whole sample. The results suggests the intriguing
possibility of different relationships at different levels of academic performance. The analysis of the results with the present sample indicates a sobering caution in predicting anything for a special subgroup from the results of general population. Intelligence and academic performance were significantly related to each other in case of the whole sample but not in case of the high academic achievers. Similar were the results in case of other variables. It was only in case of adjustment that academic performance and adjustment were not significantly related to each other both in case of the whole sample and the extreme academic achievers. To say the least, caution about the extreme-group prediction is indicated by the present findings.

The complex nature of academic performance due to the interference of a variety of cognitive, noncognitive, personal, social, and socioeconomic variables suggests unlimited possibilities of further scientific research in the area.