CHAPTER - II

REVIEW OF RELATED LITERATURE

Investigations related to the present study are described under two sections. Investigations related to causes of academic underachievement are described in Section-I, and studies related to causes of underachievement in mathematics are described in Section-2.

Section - 1

Investigations Related to
Causes of Academic - Underachievement

1. Srivastava, A.K. (1967) conducted an investigation into the factors related to educational underachievement, involving under, over, high and low achievers with 150 pupils in each group, out of a random samples of 1837 pupils studying in X and XI classes. For this purposes, scores on verbal and non-verbal tests of intelligence were used as predictor variables.

Among other things, the study revealed that study habits, poor reading ability, poor academic motivation,
poor health, poor social & emotional adjustments and low socio-economic status of the family are associated with educational underachievement at the higher secondary school level (25:348).


Some of the findings of this study are poor study habits, unfavourable attitude towards mathematics, low achievement motivation, low verbal ability, lack of self-confidence, more dependence, lack in maturity, emotional instability, less conscientiousness, problem of health and low aspiration level are related to scholastic underachievement at the secondary school level (28:348).

3. Bhaduri, A.A. (1971) conducted a comparative study of certain psychological characteristics of over and underachievers in higher secondary schools. By comparing the expected achievement and actual achievement in school examination marks, 213 overachievers and 216 underachievers were selected.
Among other things, the study revealed that anxiety, neuroticism, poor study habits and unfavourable attitude towards school are the psychological factors associated with underachievement of higher secondary school students (3:343).

4. Bhatt, K.K. (1971) studied the adjustment problems of underachievers. For obtaining over and underachievers, revised Desai and Bhatt group intelligence test was used. As a result of this, 106 underachievers were obtained. The comparison of over and underachieving groups revealed, among other things, that emotional sensitivity is the cause of academic underachievement of secondary school students (4:172).

5. Saxena, P.C. (1972) studied the interest, need patterns, adjustment problems, study habits and personal and background factors of over and underachievers involving a cluster samples of 1769 of XI Standard students. Then over and normalachievers were identified by using multiple regression equation for each subject separately.

The major findings of the study were:

i. Personality characteristics like submissiveness, timidity, broodiness, impulsiveness and dependent type of immaturity are related to academic underachievement of higher secondary school students.
ii. Poor adjustment and poor study habits are related to academic underachievement of higher secondary school students (20:432).


Among other things, the study revealed that less effective adjustment in school and home and less social and religious adjustments are associated with academic underachievement of secondary school students (22:344).

7. Menon, S.K. (1973) made a comparative study of personality characteristics of over and underachievers of high ability.

This study, among other things revealed that more extraversion, maladjustment, less academic interest and poor socio-economic status are related to academic underachievement of secondary school students (15:350).

8. Passi, B.K. and Lalithamma, M.S. (1973) studied self-concepts and creativity of over, normal and underachievers amongst X grade students of Baroda. They, among other things, found that overachievers were more creative
and no mean differences were found among the groups in self concepts (17:1-11).

9. Jayagopal, R. (1974) investigated the personality factors of highachievers and underachievers of some schools in the city of Madras. The annual marks of VIII Standard were converted into Z scores and arranged in descending order. Upper and lower quartiles of this distribution formed high and underachievers in this study. The samples thus selected included 61 students in each group of high and underachievers.

The study, among other things, revealed that personality factors such as guilt proneness, diffidence and emotional instability are related to academic underachievement at the secondary school level (10:224).

10. Rao, N.C.S. (1975) conducted an experimental study of bright underachievers and found that emotional problems and needs are related to academic underachievement (19:88).

11. Agarwal, S.K. (1975) conducted a psycho-social study of academic undersachievement at secondary school level in the state of Rajasthan. Among other things, he found that low educational, social and humanistic values, poor socio-economic status, more tension, more frustration and parents
unfavourable attitude towards education are related to academic underachievement at the secondary school level (1:657).

12. Chaudari, V.P., Jain (1975) studied the factors contributing to academic underachievement. Among other things, he found that poor study habits is the cause of academic underachievement (5:660).


14. Ghuman, M.S. (1976) studied the aptitude, personality traits and academic motivation of academic overachievers, and underachievers. Among other things, he found that low-achievement motivation and emotional stability are related to academic underachievement at the higher secondary school level (6:664).

15. Sharma, G.S. (1978) studied the attributes of underachievement of undergraduate students. The application of regression equation of academic achievement on intelligence resulted in 177 underachievers.
This study revealed that withdrawal tendency, inferiority complex, emotional instability, poor study habits and poor socio-economic status are related academic underachievement of undergraduate students (21:357).

16. Tandon, S. (1978) conducted a psychological and ecological study of underachievers. A sample of 200 students of X class who had failed at high school examinations and had I.Q. of 110 and above were considered as underachievers in this study. For the purpose of comparison 200 students who had I.Q. of 110 and above and secured first division were selected. The study, among other things revealed that emotional less stability, high anxiety, inferiority feelings, diffidence, pessimism, moody and depressed nature and less interest in studies are related to underachievement (27:361).

17. Jody, L. and Fitz, P. (1978) found that poor creativity is the cause of academic underachievement at the secondary school stage (11:645-650).

18. Nagpal, R. (1979) studied non-intellectual characteristics of over and underachieving engineering students. Among other things, he found that underachieving engineering students experience a greater number of emotional problems (16:677).
19. Kanoy, Robert, C., Johnson, B. (1980) studied locus of control and self concept in achieving and underachieving bright elementary children and found that poor self concepts on intellectual and school status and lower internal control are related to underachievement of bright elementary students (12:395-399).

20. Sharma, P. (1981) studied the factors related academic underachievement and found that poor academic motivation, poor linguistic ability, poor planning of study work and emotional insecurity are related to academic underachievement (23:845).

21. Srivastava, A.K. (1981) studied intercorrelates between some variables found to be significantly related to underachievement. The study revealed that poor study habits, poor general adjustment, poor reading ability, poor academic motivation are related to academic underachievement (26:699).

22. Singh, R.P. (1983) studied the relationship between under and over academic achievement and its motivational correlation and found that less harmonious motivational organisation is related to academic underachievement (24:856).

23. Maitra, K. (1985) studied the affective correlates of the gifted underachievers. Among other things he found
that lack of interest in studies and educational guidance from parents are related to academic underachievement at the secondary school level (13:834).

24. Medhahuns, S.O. (1985) conducted an investigation of causes of underachievement among undergraduates in selected Nigerian Universities. Among other things, he found that lack of effective study technique, health problem and lack of adequate teaching facilities, library materials and equipments are related to underachievement of undergraduate students of Nigerian Universities (14:165-177).

25. Janos, P.M., Sanifilippo, S.M. and Robinson, N.M. (1986) studied underachievement among markedly accelerated college students. They, among other things, found that underachievers are less psychologically matured and are suffering more internal conflict (9:303-313).

26. Puri, K. (1987) studied the personality traits and self concepts of 16 to 18 years old underachievers and found that lower scholastic ability, poor S.E.S. and anxiety are related to academic underachievement at the secondary school level (18:845).
1. Iyer, K.K. (1977) studied some factors related to underachievement in mathematics of secondary school students. For this purpose, a verbal group test of intelligence, a non-verbal group test of intelligence and standardised test of mathematics were administered.

The study revealed that low intelligence, less self reliance, poor sense of personal freedom, less feeling of belongingness, withdrawing tendency, nervous symptoms, poor social skills, poor school relations, general and test anxiety are the factors related to underachievement in secondary school mathematics (8:668).

It is evident from the above review quoted in Sections - 1 and 2, that a number of studies have been conducted on the 'Causes of Academic Underachievement' but a very few studies (i.e. two only) on the 'Causes of Underachievement in Mathematics'. Out of the two studies, only one is conducted in India. However the coverage of causal factors is not that comprehensive. As such, the present study is undertaken, with a view to identify the cause of underachievement in mathematics covering more relevant causal factors.
REFERENCES


9. Janos, P.M., Sanfilippo, S.M. and Robinson, N.M.


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