Today, India stands at the threshold of becoming a nuclear power. This is indicated by launching of 'Agni' recently. If our country is to benefit fully from this powerful tool, we must find a way to change our morbid attitude towards science education. In India, majority of pupils fail every year in science subjects. This problem is of a great concern to the educationists now a days as it is a case of great wastage of human energy and resources.

The Kothari Commission (1964) has also expressed its concern with the problem of underachievers because it involves children who are not intellectually dull, and it is a matter of concern to a developing country like India, which cannot remain indifferent to this loss of potential manpower. The commission has suggested diagnosis of the causes of failure, which may be physical, intellectual, emotional and environmental.

There are a number of factors which influence the academic achievement of the pupils. Physical environment plays an important role; especially, sociocultural and familial background variables are of a greater significance. Therefore, extra attention must be paid to the children who are identified as over- and underachievers in science. The investigator selected the present problem
keeping in view the importance of science education at school level. This study was conducted by following adequate research methodology. After about four years of hard work the investigator has been able to complete the work. The present volume is the report of the same.

The report has been organised into six chapters. Chapter I, namely Theoretical Framework provides the academic background of the problem. In this chapter theory and research regarding intelligence, specific aptitudes, opportunity and motivation socioeconomic status, familial variables and personality variables and their bearing on academic achievement is discussed. In chapter II, the theory of over- and underachievement and some researches based on it are presented lucidly. Chapter III contains the detailed description of the problem under investigation including definition of the terms, objectives, hypotheses and delimitations of the study. Chapter IV includes the methodology followed including sampling methods, tools used and techniques of data analysis. Chapter V presents the results of data analysis in terms of tables, equations and their interpretations. Chapter VI, which is the last chapter of the report, includes findings and their implications for education and further research.

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R. Chauhan
Investigator