

**SCHOLASTIC MOTIVATION OF SECONDARY
SCHOOL PUPILS IN RELATION TO
INTELLIGENCE, SELF-CONCEPT,
CLASSROOM CLIMATE AND
PARENTAL INVOLVEMENT**

RAMAKRISHNAN. K., M.A., M.Ed.

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DECLARATION

I, RAMAKRISHNAN. K., do hereby declare that this thesis SCHOLASTIC MOTIVATION OF SECONDARY SCHOOL PUPILS IN RELATION TO INTELLIGENCE, SELF-CONCEPT, CLASSROOM CLIMATE AND PARENTAL INVOLVEMENT has not been submitted by me in this university or any other university for the award of a Degree, Diploma, Title or Recognition before.

Calicut University,
17.10.2005.



RAMAKRISHNAN. K.

Dr. P. USHA
Reader in Education
Department of Education
University of Calicut.

C E R T I F I C A T E

I, Dr. P. USHA, do hereby certify that this thesis **SCHOLASTIC MOTIVATION OF SECONDARY SCHOOL PUPILS IN RELATION TO INTELLIGENCE, SELF-CONCEPT, CLASSROOM CLIMATE AND PARENTAL INVOLVEMENT** is a record of bonafide study and research carried out by **Ramakrishnan K.** under my supervision and guidance. The report has not been submitted by him for the award of a Degree, Diploma, Title or Recognition before.

Calicut University,
17.10.2005.


Dr. P. USHA
(Supervising Teacher)

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Chapter I

INTRODUCTION

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- ❖ *Need and Significance*
 - ❖ *Statement of the Problem*
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-

INTRODUCTION

The human destiny depends on children who should be nursed and brought up with love, affection and care. The potentialities of the child are to be brought out to the maximum and his innate qualities of hand, head and heart need be properly nourished and developed through education. Education is universally recognized as an important investment in human capital. It contributes to socio-economic development by endowing individuals with the means to improving their health, skills, knowledge and capability for productive work.

There has been a national concern for the India's educational position and rank when compared to other powerful countries in the world. Concern for our Nation's drop-out rate and the prevalence of standardised testing in public and private schools as well as suggestions and considerations for a longer school year all demonstrate the reality of this situation. A child cannot learn until he is ready to learn. Interest is the basic motive force which motivate and activate all the learning processes. The concept of competence in motivation is important for student education, because motivation produces behaviour that leads to learning, and learning leads to growth and change. Gottfried (1990) stated that the impact of motivation on children's education certainly could not be more critical as professionals and the public are concerned about declining test scores and escalating drop-out rates.

It is acknowledged by all teachers that one of the most important single variable which affects schooling is the quality of behaviour called intelligence. Intelligence is not the only determinant of academic achievement. High motivation and engagement-in learning have consistently been linked to reduced drop-out rates and increased levels of student success

(Kushman, Seiber, and Harold, 2000). Development of academic intrinsic motivation in young children is an important goal for educators because of its inherent importance for future motivation, as well as for children's effective school functioning (Gottfried, 1990).

White (1959); Harter (1981); Deci and Ryan (1985) have stipulated that while physiological drives play a role, the bulk of behaviour initiation rests up on the need to feel effective and master the environment (Weist *et al.*, 1998). White (1959) proposed that people are innately motivated to gain mastery over their environment and gain what he termed feeling of effectance. 'Effectance', is defined as one which impels the organism toward competence and is satisfied by a feeling of efficacy or capability (Harter, 1978).

Recent research has provided strong support for the multidimensionality of self-concepts in various areas (Byrne and Gavin, 1996). In particular, the relations of self-concept with educational outcomes and psychological constructs have been found to be very domain specific (Marsh and Yeung, 1996). Even within a curriculum domain recent research has suggested that the multidimensionality is so strong that students are able to distinguish between their self-concepts in different artistic areas.

An environment that nurtures educational motivation can be cultivated in the home, in the classroom, or throughout an entire school system. Much of the recent research on student motivation has rightly centered on the classroom, where the majority of learning takes place and where students are most likely to acquire a strong motivation to gain new knowledge.

The home environment is also characterized by the attitudinal dimension involving the objectives, attitudes, and expectations held by the principal actors at home. The parenting behaviours that foster optimal development of child's academic achievement and achievement related

variables have been extensively recorded in the literature (Baumrind, 1978; Maccoby and Martin, 1983; Gecas and Schwalbe, 1986; Astone and McLanahan, 1991; Keith *et. al.*, 1993; Taylor *et. al.*, 1995; Pettit *et. al.*, 1997; Menaghan *et. al.*, 1997). Parents in general and mothers in particular are the important sources for providing the child with tangible, emotional and informational support in this age of momentous change and unhealthy competition. More over, the scholastic motivation level of individuals is affected by factors like child rearing practices, socio-economic status of the family, family acceptance of education and family acceptance of the child.

1.1. NEED AND SIGNIFICANCE OF THE STUDY

In any school setting, whether it be elementary, secondary or higher education, a student's motivation for learning is generally regarded as one of the most critical determinants, if not the premier determinant, of the success and quality of any learning out come (Mitchell, 1992). The construct of intrinsic motivation in elementary school children is significant and important, because it may have profound implications for initial and future school success (Gottfried, 1990). Students who are more intrinsically than extrinsically motivated fare better, and students who are not motivated to engage in learning are unlikely to succeed (Gottfried, 1990). Higher academic standards make it even more important to motivate even the disengaged and discouraged learners (Brewster and Fager, 2000).

Motivational patterns in older children were already associated with motivational patterns as early as first grade (Gottfried, 1990). Thus, intrinsic motivation may be a key factor both in determining achievement behaviour and in maintaining a healthy self-regard (Goldberg, 1994).

Many young children begin school with a thirst for learning. They enthusiastically and curiously seek novel or challenging tasks (Gold berg,

1994). It can be concluded that young children begin their school intrinsically motivated. When studying motivation, it is useful to distinguish between two basic orientations: Intrinsic (or mastery) versus Extrinsic (or performance) orientation toward learning (Goldberg, 1994). Intrinsic motivational patterns have been associated with high-perceived ability and control, realistic task analysis and planning, and the belief that effort increases one's ability and control (Fincham and Cain, 1986). An extrinsic orientation toward learning is characterized by a concern with external reasons for working, such as the judgement of others regarding one's performance, grades, or some anticipated reward (Goldberg, 1994).

Academic competence, is defined in terms of the students' expectancy and ability beliefs (Wigfield and Eccles, 2000). Research often shows that students' perceptions of academic competency decline as they advance in school (Eccles, *et. al.*, 1998). Schunk and Pajares (2002) attribute this decline to various factors, including greater competition, less teacher attention to individual student progress, and stresses associated with school transition.

The present study is an attempt to reveal the relationship between the selected correlates with scholastic motivation. Scholastic motivation is not a unitary variable. The development of which is closely allied with number of personal and societal factors. Kundu (1989) is of the opinion that scholastic motivation is mostly developed from the social customs rather than inborn. This motivation and its related factors directly influence academic performance (Mc Clelland, 1961); Sivappa (1980); Zargar (1980); Rajeeva (1982); Gupta (1978) and Ahluwalia (1985) had revealed a positive relationship between scholastic motivation and academic performance.

As learners are the principal actors in learning activities, it is quite natural that their psychological characteristics have important consequences with respect to academic performance. The individual differences in

children's cognition about ability and achievement are related to their motivational responses throughout the school years (Kathleen and Carol, 1995). The role of intelligence in predicting scholastic motivation has long been known to educational and psychological researches. Chauhan (1984) found that the academic motivation of students differed significantly at different levels of intelligence, high, middle and low.

A study conducted by Jain (1983) found that high-intelligence - high achievement motivation group was significantly better in concept formation ability than low-intelligence - low achievement motivation group. But intelligence was found to be a better predictor of concept formation ability than achievement motivation. This has inspired the investigator to select intelligence as one of the independent variable for the present study.

There is a great deal of research which shows that the self-concept is, perhaps the basis for all motivational behaviour. It is the self-concept that give rise to possible selves that create the motivation for behaviour (Franken, 1994). The academic self-concept is related to school performance and learning. The studies of Brookover *et. al.* (1964); Parkey (1970); Mwaniki (1973); Marsh (1992); and Hamachek (1995) had all demonstrated the relationship between self-concept and academic motivation. Hence the researcher selected self-concept as one of the independent variable for the present study.

Psychological perceptions of classroom environments have important influence on student learning. Research on learning in India and abroad indicate that effective learning depends on four types of variables such as personal variables of learners, content variables, situation variables of learning and strategy variables of teaching. Situation variables have a significant influence on learner behaviour and class room interaction which in turn results in effective motivation.

Once children start school, they begin forming beliefs about their school-related success and failures. The sources to which children attribute their successes (commonly effort, ability, luck or level of task difficulty) and failures (often lack of ability or lack of effort) have important implications for how they approach and cope with learning situations.

The beliefs teachers themselves have about teaching and learning and the nature of the expectations they hold for students also exert a powerful influence (James, 1993). To a very large degree, students expect to learn if their teachers expect them to learn (Deborah, 1988). Creation of desirable classroom climate largely depend on teacher's ability to sustain the pupils learning to motivate them and to build up positive attitudes towards new learning. Quality of teacher-pupil relationship in class is a major aspect of class room climate. The role of class room climate is crucial for learning process.

Several authors have identified the need for research which clearly specifies classroom and school-wide processes and practices which may enhance student's academic motivation and performance (Urdu and Maehr, 1995). Theoretical studies of student motivation (particularly those utilising social-cognitive perspectives have begun to identify components of learning environments which may influence the quality of student's motivation. These components include the nature of academic tasks assigned to students, the characteristics of authority structures within classes and schools, and the ways in which students' academic work is recognised and evaluated (Carole, 1992). Despite recognising these components, however, there has been, little systematic research substantiating the effects of these (and other) components on students' motivation. One plausible reason for this phenomenon may be a lack of sufficient exploratory research, especially in 'real life' classroom and school settings. Such studies may sensitise researchers to a range of salient

components of learning environments impacting upon student's academic motivation, cognition and achievement. Moreover, exploratory studies may begin to implicate specific processes by which identified components of learning environments may influence students' motivation and achievement.

Qualitative research is considered particularly appropriate for such exploratory studies. More over, one particular approach to qualitative research, phenomenography, has been widely used in educational research in general and specifically, with respect to factors influencing students' motivation, cognition and achievement. The phenomenographic approach to qualitative research, studies learning from the learner's perspective, rather than from the teachers perspective alone. This is important as in some situations at least, student's perceptions and interpretations of events may shape their academic behaviour even more than the events themselves (Eccles, *et al.*, 1983). Blumenfeld (1992) confirms that research incorporating qualitative approaches, will make a useful contribution to 'thickening' the descriptions of students motivational process and how they operate in 'real life' class room and school settings to facilitate students' cognitive engagement in learning and their subsequent academic achievement. Moreover, Christine and Van (2000) remarked that academic climate can discourage non motivated students. Hence the researcher selected classroom climate as one of the independent variable for the present study.

Research has shown that one of the ways to increase student's academic performance is to involve their families (Chaukin, 1993; Henderson and Berla, 1994). Establishing partnership with families has many benefits for schools and families, but to Epstein (1995), "the main reason to create such partnership is to help all youngsters succeed in school". Few countries have already established policies and procedures for improving home school

collaborations, at national level. As a result, the nature and scope of such co-operation tend to vary widely between and within schools.

In relation to family processes and relationships it would appear that a family environment conducive to the development of competence would be one in which child's mastery attempts are encouraged, the child is given responsive and realistic feed back, and the emotional environment is one of relative warmth and support. Empirical evidences indicate that high competence family environments are those in which parents talk frequently with the child (White, 1979; Barton and Coley, 1992; Bloir, 1997), parents have a close and supportive relationship with the child (Rollins and Thomas, 1979; Smith, 1985; Steinberg *et al.*, 1992; Lamp, 1997), parents have high educational aspirations and expectations for the child (Henderson, 1981; Fehrmann *et al.*, 1987; Singh *et al.*, 1995; Catsambis, 1998), parents use induction techniques and point out the consequences of behaviour to the child (Rollins and Thomas, 1979; Hota, 1986; Baumrind, 1991), parents use authoritative style of 'parenting' (Steinberg *et al.*, 1989; Baumrind, 1991; Paulson, 1994), and family life is relatively free of overt conflict between members (Rutter, 1971; Emery, 1982; Davies and Cummings, 1994; Graham *et al.*, 1997).

When parents are involved in their children's education in positive ways, children achieve higher grades and test scores, have better attendance at school, complete more home work and demonstrate more positive attitudes and behaviours (Becher, 1984; Henderson and Berla, 1994). Several studies have demonstrated the positive effects of parent involvement in children's schooling across a wide range of populations and ages (Fehrman *et al.*, 1987; Henderson, 1987; Reynolds and Herbert, 1992; Clarke, 1990; Keith *et al.*, 1993; Epstein, 1995; Taylor *et al.*, 1995; Johnson *et al.*, 1998; Williams, 1998).

Recent research approaching the effects of parent involvement from the frame work of self determination theory suggests that the relationship between parent involvement and student achievement is mediated by motivational processes (Grolnick *et. al.*, 1991; Grolnick and Slowiaczek, 1994). Scholastic motivation is a fundamental requisite for effective learning and its positive correlation with academic achievement has been highlighted by a multitude of research (Atkinson and Raynor, 1974; Pathak, 1974; Desai, 1979; Fatmi, 1986; Lewis, 1991; Jegede, 1994; Kumari, 1994). Family is found to be the most important socio-cultural unit that affects adolescent's scholastic motivation (Castnell, 1984; Wlodkowski and Jaynes, 1990; Epstein, 1992; Leon, 1994; Sui-chu and Willms, 1996). Higher scholastic motivation has been reported in children of working mothers by several researchers (Jones and McBride, 1980; Bal, 1988; Goldberg *et al.*, 1996). But studies by Naftchi, 1995; and Rath and Sexena, 1995; found no significant relationship between parental involvement and academic achievement. Sojourner and Kushner (1997) found a negative, though very low relation between parental involvement and academic performance. In India, Srivastava (1995) found that different aspects of 'parent-child relationship have varying effects on academic achievement. Sufficient research has not been carried out to permit identification of factors that might account for findings from developing countries (Kellaghan, 1994). Further research is needed for examining the effectiveness of substantial parental involvement activities to determine what type of activities have a positive impact on student learning (Yang and Boykin, 1994). Hence the investigator included parental involvement as a variable for the study.

Family has an impact on motivation at early stage of development, lasting through secondary school and beyond, healthy, effective families processes positive attitudes and behaviours toward their children which help them to succeed in school life (Wlodkowski and Jaynes, 1990). Familial

variables such as mother's occupation, income, family acceptance of education, home learning facility etc. significantly affect academic performance of the child (Kelu, 1989; Nair, 1999; Wlodkowski and Jaynes, 1990). These research evidences inspired the investigator to select socio-economic status as one of the independent variable for the present study.

Even though studies on motivation and other factors were conducted largely among students, the investigator cannot locate adequate studies dealing with intelligence, self-concept, classroom climate, parental involvement and socio-economic status and their influence on scholastic motivation independently and in combination. This made the investigator to carryout the research work on the relation of Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status on Scholastic Motivation of pupils. The present study attempts to find out the relation, and effect of each independent variable on dependent variable, and to evolve a multiple regression equation to predict Scholastic Motivation in terms of intelligence, self-concept, classroom climate, parental involvement and socio-economic status.

1.2. STATEMENT OF THE PROBLEM

The present study is entitled as "**SCHOLASTIC MOTIVATION OF SECONDARY SCHOOL PUPILS IN RELATION TO INTELLIGENCE, SELF-CONCEPT, CLASSROOM CLIMATE AND PARENTAL INVOLVEMENT**".

1.3. DEFINITION OF KEY TERMS

1.3.1. Scholastic Motivation

Scholastic Motivation is the meaningfulness, value, and benefits of academic tasks to the learner-regardless of whether or not they are intrinsically interesting (Hermine, 1987).

For the present study, Scholastic Motivation refers to the consistent striving of an individual to achieve certain level of marks and a general educational objective with reference to certain standards of excellence in competing conditions.

1.3.2. Secondary school pupils

The term refers to students studying in standards VIII, IX, and X of the recognised schools in Kerala.

1.3.3. Intelligence

Intelligence is the application of cognitive skills and knowledge to learn, solve problems, and obtain ends that are valued by an individual or culture (Gardner, 1985).

As used in the study intelligence is to judge well, comprehend and to reason well.

1.3.4. Self-Concept

Self-Concept refers to the enduring system of attitudes we hold about ourselves, and has been shown to be vitally important in the achievement of goals and the development of relationships, both among children and adults (Burns, 1979).

1.3.5. Classroom Climate

Classroom Climate is defined as the atmosphere and general environment in classroom that may help or hinder the learning process (Hawes and Hawes, 1982).

1.3.6. Parental Involvement

Parental Involvement is defined as a type of parental behaviour, attachment and relationship with child that serves to improve child's competence in every field (Chowdhury and Samal, 1997).

In the present investigation, Parental Involvement denotes the extent to which parental resources are dedicated to the fostering of optimal child development so that it would lead to his academic competence.

1.4. VARIABLES OF THE STUDY

The variables selected for the study are categorised as Independent and Dependent Variables and are presented below.

1.4.1. Independent Variables

The Independent Variables selected for the present study are:

- (i) Intelligence
- (ii) Self-Concept
- (iii) Classroom Climate
- (iv) Parental Involvement and
- (v) Socio-Economic status

1.4.2. Dependent Variable

'Scholastic Motivation' is treated as the Dependent Variable for the present study.

1.5 OBJECTIVES OF THE STUDY

The present study was designed with the following objectives.

1. To compare the mean scores of the independent and dependent variables for the sub-samples formed on the basis of Sex, Locale and School Management.
2. To identify the independent variables which influence Scholastic Motivation in terms of their ability to discriminate between Low, Average and High groups when taken in pairs.
3. To estimate the relationship between each of the independent variables and Scholastic Motivation for the Total sample and sub-samples based on Sex, Locale and School Management.
4. To find out best predictor of Scholastic Motivation from the set of five independent variables viz., Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status.
5. To develop a prediction equation for Scholastic Motivation in terms of independent variables.
6. To determine the effect of each of the independent variables on dependent variable for the Total sample.
7. To find out the group differences (High, Average, Low) in Scholastic Motivation for the Total sample.

1.6. HYPOTHESES

1. There will be significant difference in the mean scores of independent and dependent variables for the sub-samples formed on the basis of Sex, Locale and School Management.
2. There will be significant difference between Low, Average and High Scholastic Motivation groups (taken in pairs) with respect to the mean scores of independent variables.

3. There will be significant positive relation between each of the independent variables and Scholastic Motivation for Total sample and sub-samples based on Sex, Locale and School Management.
4. Scholastic Motivation can be predicted using the set of five independent variables viz., Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status.
5. The effect of each of the independent variables on Scholastic Motivation will be significant for the Total sample.
6. There will be significant group difference in Scholastic Motivation for the Total sample.

1.7. METHODOLOGY

1.7.1. Sample

The study was conducted on a representative sample of 970 standard IX pupils of secondary schools from Kannur, Kozhikode, Malappuram, Trissur, and Palakkad districts of Kerala. The sample was selected using stratified random sampling technique with due representation to factors like sex, locale, and management category of schools.

1.7.2. Tools

For the present investigation, the dependent variable 'Scholastic Motivation' was measured by the tool developed by the investigator. Readily available standardised tools were used for measuring the independent variable 'Intelligence', 'Self-Concept', 'Classroom Climate', 'Parental Involvement', and 'Socio-Economic Status'. The investigator used the following tools for the present study.

- i) Standard Progressive Matrices (Raven, 1958)

- ii) Scale of Self-Concept (Sumangala and Kumari, 1994)
- iii) Scale of Classroom Climate (Usha and Sunitha, 1997)
- iv) Parental Involvement Inventory (Usha and Kuruvilla, 1999)
- v) General Data Sheet.
- vi) Scale of Scholastic Motivation (Usha and Ramakrishnan, 2002).

1.7.3. Statistical Techniques Used

The following statistical techniques were used for the analysis of data in the present study.

- i) Preliminary Analysis
- ii) Test of Significance of Mean Difference for Large Independent Samples (Guilford, 1966).
- iii) Pearson's Product Moment Coefficient of Correlation.
- iv) Step wise Regression Analysis (ANOVA approach)
- v) One-way Analysis of Variance
- vi) Scheffe's Test of Multiple Comparison (Ferguson, 1976).

1.8. SCOPE AND LIMITATIONS OF THE STUDY

The main purpose of the present investigation was to examine the Scholastic Motivation of secondary school pupils in relation to Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status for the total sample and the sub-samples based on sex, locale and type of management. The independent variables were selected in such a way as they are all related to the achievement of secondary school pupils.

Though considerable effort has been made to make the study generalisable and precise, the investigator could identify the following limitations also.

1. There may be many factors affecting Scholastic Motivation of pupils. The present study was confined to two personal variables viz., Intelligence and Self-Concept, one environment variable i.e., Classroom Climate and two familial variables i.e., Parental Involvement and Socio-Economic Status. The effect of other factors on Scholastic Motivation was not included for the present study.
2. The population for the study was limited to standard IX students of the secondary schools.
3. Selection of schools was not state wide, but was confined to five revenue districts of Kerala.
4. The study of each of the independent variables on dependent variable was explored using only five major techniques viz., Test of Significance of the Difference between Means of Large Independent Samples, Pearson's Product Moment Coefficient of Correlation, Stepwise Regression Analysis, One-way ANOVA and Scheffe's Test of Multiple Comparison.
5. The selection of the dependent variable has been restricted to 'Scholastic Motivation' of secondary school pupils.
6. Due to practical difficulties component wise analysis of the independent variables and correlational analysis were not attempted.

The generalisability of the study may be limited to the extent of the nature of the tools and the sample selected. The findings will be valid to the extent the sample, tools and methods are valid. All possible precautions were taken to attain the highest degree of accuracy in respect of these factors.

1.9. ORGANISATION OF THE REPORT

The report has been presented in five chapters as follows:

- Chapter 1** An introduction to the problem, need and significance of the study, statement of the problem, definition of key terms, variables of the study, objectives and hypotheses, a brief methodology, scope and limitations of the study and organisation of the report.
- Chapter 2** A theoretical overview of dependent and independent variables along with a detailed review of related studies.
- Chapter 3** Methodology in detail with description of the variables, tools, sample, classification techniques and statistical techniques used for the study.
- Chapter 4** Details of analysis of the data along with conclusions and interpretations of the results.
- Chapter 5** A summary of the study along with major findings, tenability of hypotheses, suggestions for improving educational practice and suggestions for further research in the area concerned.

REVIEW OF RELATED LITERATURE

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- ❖ *Intelligence – Theory and Related Studies*
 - ❖ *Self-Concept – Theory and Related Studies*
 - ❖ *Classroom Climate – Theory and Related Studies*
 - ❖ *Parental Involvement – Theory and Related Studies*
 - ❖ *Scholastic Motivation – Theory and Related Studies*
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REVIEW OF RELATED LITERATURE

This chapter provides a brief review of literature related to the main themes under study. The major variables selected for the study are Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status besides the dependent variable Scholastic Motivation. The reviewed literature has been classified and are presented under the following heads:-

2.1. INTELLIGENCE

- i) THEORETICAL OVERVIEW
- ii) RELATED STUDIES

2.2. SELF-CONCEPT

- i) THEORETICAL OVERVIEW
- ii) RELATED STUDIES

2.3. CLASSROOM CLIMATE

- i) THEORETICAL OVERVIEW
- ii) RELATED STUDIED

2.4. PARENTAL INVOLVEMENT

- i) THEORETICAL OVERVIEW
- ii) RELATED STUDIES

2.5. SCHOLASTIC MOTIVATION

- i) THEORETICAL OVERVIEW
- ii) RELATED STUDIED

2.6 INTER RELATIONSHIP OF VARIABLES – RELATED STUDIES

2.1. INTELLIGENCE

2.1.1. INTELLIGENCE – THEORETICAL OVERVIEW

The nature and measurement of intelligence are still of central concern to educators and psychologists.

Intelligence is the ability to learn or understand or to deal with new or trying situations. It is the ability to apply knowledge to manipulate one's environment or to think abstractly as measured by objective criteria (as tests).

Intelligence is a combination of the ability to:

1. *Learn.* This includes all kinds of informal and formal learning via any combination of experience, education, and training.
2. *Pose problems.* This includes recognizing problem situations and transforming them into more clearly defined problem.
3. *Solve problems.* This includes solving problems, accomplishing tasks, fashioning products, and doing complex projects.

Definition of Intelligence

Much of the excitement among investigators in the field of intelligence drives from their trying to determine exactly what intelligence is. Different investigators have emphasized different aspects of intelligence in their definitions.

Cattell (1963) proposed a model in which 'g' factor is subdivided in to major dimension: *fluid intelligence*, which is the ability to solve abstract rational problem that is not taught and relatively free of cultural influences;

crystalized intelligence is the result of an individual's learning which increases throughout life span.

Vygotsky (1978) suggested that intellectual development may be largely influenced by a child's interactions with others. Feuerstein, has elaborated upon this point of view, suggesting that the key to intellectual development is what he calls mediated learning experience.

Gardner (1985) proposed a theory of multiple intelligence. He originally identified seven components of intelligence. The first two intelligences are linguistic and logical mathematical, the most valued by society and the only two aspects measured in standardised tests. Other intelligences are spatial intelligence, "the ability to form a mental model of the spatial world"; musical intelligence, "the ability to create, communicate, and understand meanings made out of sound"; and bodily kinaesthetic intelligence, "the ability to solve problems or to fashion products using one's whole body"; The final two intelligences are termed as personal intelligences. Interpersonal intelligence is "the ability to understand other people." Intra-personal intelligence is "the capacity to form an accurate, veridical model of one self and to be able to use that model, to operate effectively in life." Gardner asserted that all people, excluding those with brain impairment, possess all of the intelligences in varying levels and combinations. Later Gardner identified an additional intelligence, naturalist intelligence that "allows people to distinguish among, classify, and use features of the environment". Gardner's theory of multiple intelligences not only challenged the idea that true intelligence can be measured by standardized tests like IQ or SAT, but also is a major concept in education reform today.

Perkins (1995) examined a large number of research studies both on the measurement of IQ and of programmes of study designed to increase IQ. He presented a detailed arguments that IQ has three major components or

dimensions: 1) *Neural intelligence*. This refers to the efficiency and precision of one's neurological system. 2) *Experiential intelligence*: This refers to one's accumulated knowledge and experience in different areas. It can be thought of as the accumulation of all of one's expertises. 3) *Reflective intelligence*: This refers to one's broad-based strategies for attacking problems, for learning, and for approaching intellectually challenging tasks. It includes attitudes that support persistence; systemization, and imagination. It includes self-monitoring and self-management.

Steinberg (1988) focused on three components:

1. *Practical intelligence* – the ability to do well in informal and formal educational settings; adapting to and shaping one's environment; street smarts.
2. *Experiential intelligence* – the ability to deal with novel situations so that they are easily handled in the future; the ability to think in novel ways.
3. *Componential intelligence* – the ability to process information effectively.

Goleman (1999) has documented the need to nurture emotional intelligence to improve the quality of life in a hurried and stressful environment. Emotional intelligence consists of self-awareness, impulse control, zeal, persistence, self motivation and empathy.

Torrance's (2000, 2002) figural and verbal tasks reveal originality, elaboration, fluency, flexibility, and redefinition abilities.

Measurement of Intelligence

Intelligence can be measured by using individual tests, group tests, and performance tests. Several tests have so far been prepared following the multi factor approach – including abilities that previous research has shown to be predictive of academic success.

The first scale to measure intelligence was produced by Binet and Simon (1905) which is an individual test of performance and its scores are interpreted in terms of mental age. Terman and Merrill (1960) published a revised form of this test.

Wechsler – Bellevue Intelligence Scale (1939) is an individual test. There are eleven sub tests. This is a point scale. This has two tests: one for adults and the other for children.

The Army Alfa Test and Army Beta Test were the first group tests developed for the literates and illiterates respectively during the period of first world war (1918-1925). Army general classification tests serve as a measure of learning ability.

California Test of Maturity is a general intelligence test. This test yields three scores; a language score, a non-language score and a total score.

Otis Quick Scoring Mental Ability Test intends to measure mental ability by measuring the extent to which the students mental ability has helped him to acquire certain mental skills and information.

Raven's Progressive Matrices (1958) is a non-verbal group test which is very popular for its easiness in administration. This test has five section: A, B, C, D and E, each having twelve problem situation. This is a speed test. These tests measure the ability to see relation and solve problems. Bhatia's Performance Test Battery is another test to measure intelligence. This can be

used for the illiterates and school going children as a supplement to verbal test.

2.1.2. INTELLIGENCE – RELATED STUDIES

Prakash (1981) conducted a study on 816 school going adolescent boys to determine the relationship of need achievement with intelligence and found significant positive relationship between need achievement and intelligence.

Dutt (1983) in a socio-psychological study of the tribal high school students compared achievement motivation of 200 tribal and 200 non tribal students. It was found that there exist significant relationship between intelligence and achievement motivation.

Reddy (1983) on a sample of 360 students of classes VI, VIII and X studied intellectual capacity and need achievement. The results showed positive relationship between intelligence and need achievement.

Chauhan (1984) in a comparative study of achievement motivation of scheduled tribe and scheduled caste students collected data from 600 students and found that achievement motivation differed significantly at different levels of intelligence.

Singh (1986) in an investigation in to the relationship between achievement motivation and intelligence on a sample of 184 school students from Delhi and 184 students from Haryana reported positive relationship between achievement motivation and intelligence.

Tripathi (1986) investigated achievement motivation of 500 high school students and found that achievement motivation is significantly related with intelligence for boys and girls.

According to Kathleen and Carol (1995) the individual differences in children's cognition about ability and achievement are related to their motivational responses throughout the school years.

According to Busato *et al.*, (1999) intellectual ability and achievement motivation were associated positively with academic success.

Intelligence not related with motivation

Navula (1979) studied achievement motivation and other correlates in relation to intelligence and other factors. The sample consisted of 608 B.Ed trainees and it was found that intelligence is not related with achievement motivation.

Gagne and St. Pere (2002) found that IQ and Motivation were not correlated.

SUMMARY OF RELATED STUDIES ON INTELLIGENCE

Area of Study	Investigator	Result
Intelligence and need achievement	1. Prakash, 1981 2. Reddy, 1983	Intelligence shows positive correlation with need achievement.
Intelligence and Academic Motivation	1. Chauhan, 1982 2. Kathleen and Carol, 1995	Intelligence shows positive correlation with Academic Motivation
Intelligence and Achievement Motivation	1. Dutt, 1983 2. Singh, 1986 3. Tripathi, 1986 4. Busato <i>et al.</i> , 1999	Intelligence shows positive correlation with Achievement Motivation

Area of Study	Investigator	Result
Intelligence and Achievement Motivation	1. Navula, 1979	Intelligence is not related with Achievement Motivation
Intelligence and Motivation	1. Gagne and St. Pere, 2002	Intelligence is not related with Motivation

2.2. SELF-CONCEPT

2.2.1. SELF-CONCEPT – THEORETICAL OVERVIEW

According to Byrne (1984), there is no clear, concise, and universally accepted operational definition of self-concept.

Self-concept will be considered broadly to include the perception of oneself, including one's attitudes, knowledge and feelings regarding abilities, appearance, and social relationships. It is the totality of attitudes, judgements and values of an individual relating to his behaviour, abilities and qualities.

Self is assumed to be an impression or image of a person as perceived by others as well as by oneself. The term 'self image' is some times used as a synonym for *self-concept*.

Self-concept is composed of all the beliefs and evaluations one has about oneself and they not only determine who one is, but what one thinks he/she is, what one can do and what one thinks he can become.

Eysenck *et al.*, (1972) defined self-concept as "the totality of attitudes, judgements and values of an individual relating to his behaviours, abilities and qualities." The term as implied in this definition, embrace the awareness of these variables and their evaluations.

A person's self-concept includes not only his perception about he is really look, but what he thinks he ought to be and would like to be. This component of self is called the 'ideal self' and 'real self.' The difference between 'ideal self' and 'real self', if when large, is taken as indicating absence of self-concept. The proximity of the two selves is indicative of high self-concept. Self-concept represents organized, coherent and integrated pattern of self related perceptions.

Jersild (1960) expressed that the true self represents a person's inner world. "It is a composite of a person's thought and feelings, striving and hopes, tears and fantasies, his view of what he is, what he has been and what he might become, and his attitudes pertaining to his worthy."

According to Gharpade (1978) the concept of self originates in social and interpersonal relation with others. The self, according to this approach, is assumed to be an impression of image of a person as perceived by others as well as oneself. The constructs self-concept and self image are synonymously used.

Postmodern views of self observe how a relational perspective of self is created as a person participates in various relational communities.

Definitions of the Self-concept

Kihlstrom and Cantor (1984) suggest that individuals hold perception of themselves in terms of traits and values.

Self-concept may be defined as "the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his/her personal existence" (Purkey, 1988).

Accrding to Franken (1994) self-concept is not innate, but is developed by the individual through interaction with the environment and

reflecting on that interaction. It can be modified or changed. Franken (1994) also stated that "there is a great deal of research which shows that the self-concept is, perhaps, the basis for all motivated behaviour. It is the self-concept that gives rise to possible selves, and it is the possible selves that create the motivation for behaviour."

Leonard *et. al.*, (1995) view the self-concept as composed of four interrelated self-perceptions: He perceived self, the *ideal self*, one's self esteem, and a set of social identities. Each of these elements plays a crucial role in understanding how self-concept relates to energizing, directing and sustaining organisational behaviour.

Measurement of Self-Concept

The measurement of self-concept is done using a variety of methods like the Q-sorting (which distinguishes between the 'real-description' and the discrepancy between this and the 'ideal self' description), The Adjective Checklist Technique, The Semantic Differential Technique, The Role Construct Reporting Technique, Inventories, Questionnaires, and Likert Type Rating Scales.

2.2.2 SELF-CONCEPT - RELATED STUDIES

Jordan (1981) investigated the unique and common contributions of global self-concept, academic self-concept, and need for academic competence to the variance in academic achievement of inner city black adolescents. Result indicated that academic self-concept and need for academic competence accounted for significant proportions of criterion variance.

Green (1982) suggested that motivation is a dynamic process in which perceived outcomes are evaluated and then incorporated into one's self-concept of ability.

Saraswat (1982) reported that only intellectual self-concept was positively and significantly related to academic achievement motivation in both sexes.

Bharathi (1984) found that at different age-levels, different self-concept measures were found to be related with achievement motivation.

Pal (1984) found that high scholastic achievers promoted self-concept in comparison to low scholastic achievers.

Pathani (1985) reported that self-concept was a significant predictor of academic achievement (actual) and academic achievement (perceived).

The studies conducted by Kunda and Sanitioso (1988) suggested that the content of people's self-conceptions at a given time may be influenced by the perceived desirability of different attributes.

✓ Mishra (1991) explored the effect of self-concept on achievement motivation and academic achievement which obtained that self-concept has significant effect on achievement motivation and academic achievement of students.

Robin (1991) conducted a research on co-operative learning, self-concept and Academic Achievement and found that students who were more involved in co-operative learning classes had higher scores on a measure of student self-concept and that student's academic self-concept and the student's academic goals were positively related to academic achievement motivation.

Gonzalez (1991) found that the development of positive self-concepts which predispose students to learn with increased will and effectivity together with the teaching of learning strategies.

Krishnan (1993) found that there was a significant relationship between self-concept and academic achievement of the college students.

April and Christy (1995) identified self-concept as a way of motivating and increasing student learning.

Einar (1995) found that self-enhancing ego orientation was positively related to achievement, self-perceptions, and intrinsic motivation.

Waxman *et al.*, (1996) found that resilient students had higher social self-concept, achievement motivation and academic self-concept.

Saroja (1997) found, there existed a positive correlation between self-concept and academic achievement of female adults.

Einar and Harald (1999) studied relationship among achievement, self-concept and motivation in mathematics and language arts in a longitudinal two-wave, three variable panel study involving three cohorts, results were consistent with a skill development model of the achievement/self-concept relationship.

Gay and Nancy (1999) found that lack of motivation stemmed from student's perceptions of non-acceptance and poor self-esteem.

Van and Mertens (2000) evaluated the casual relations between academic self-concept and academic achievement using five waves of the Flemish longitudinal research in secondary education project. The result support the motivational influence of academic self-concept.

Dennis and Valentina (2000) found there are four needs that motivate students to strive for school success: (1) seeking excellence in one's work; (2) self-esteem; (3) affiliation; and (4) social concern.

Bernard and John (2003) investigated how student's mathematics self-concept (MSC) is related to their motivation to learn mathematics (SMOT) and gender differences in the two constructs. Results at 0.05 level, show a statistically significant relationship between students MSC and SMOT.

SUMMARY OF RELATED STUDIES ON SELF-CONCEPT

Area of Study	Investigator	Result
Academic Self-concept and need for Academic competence	1. Jordan, 1981	Academic Self-concept shows positive correlation with need for academic competence.
Self-concept and Motivation	1. Green, 1982 2. Kunda and Sanitioso, 1988 3. Gonzalez, 1991 4. April and Christy, 1995 5. Einar, 1995 6. Gay and Nancy, 1999 7. Van and Mertens, 2000 8. Dennis and Valentina, 2000 9. Bernard and John, 2003	Self-concept shows positive correlation with motivation
Self-concept and Achievement Motivation	1. Saraswat, 1982 2. Bharathi, 1984 3. Pal, 1984 4. Pathani, 1985 5. Mishra, 1991 6. Robin, 1991 7. Krishnan, 1993	Self-concept shows positive correlation with Achievement Motivation

Area of Study	Investigator	Result
Self-concept and Achievement Motivation	8. Waxman <i>et. al.</i> , 1996 9. Saroja, 1997 10. Einar and Harald, 1999	Self-concept shows positive correlation with Achievement Motivation

2.3. CLASSROOM CLIMATE

2.3.1 CLASSROOM CLIMATE – THEORETICAL OVERVIEW

Since the school is the principal context for learning, the quality of school is likely to have consequences in learner's academic performance. If this premise is accepted, then it is natural to look for school factors for a meaningful explanation of academic performance. Any serious discussion on academic performance need to consider the classroom environment factor.

An environment of a classroom is a social-psychological phenomenon which emerges from the interaction between human and material elements existing within the classroom system. The premise is that the quality of the environment may vary depending on the quality of the existing elements like teacher, students, curricular activities, reward structure, interaction processes, and similar such factors. It is possible, then, that the learning experiences are likely to vary with variation in school/classroom environment.

The learning environment observed in more effective teacher's classrooms differed from the learning, environment observed in less effective teachers' classrooms. In effective teacher's classrooms, the pupils were more orderly, the teacher was less permissive and spent less time "managing" the class, and the pupils received more praise and fewer rebukes. The discussion strategy observed in more effective teachers' classroom also differed consistently from that used in less effective teachers classrooms with respect to the use of pupils' time, more effective teacher's pupils spent more time in

academic activities and more time organized in a single large group with the teacher in charge, they spent less time in small, autonomous groups or working as individuals, and when they were doing seat work, pupils of more effective teachers were supervised more closely.

Concept of Classroom Climate

Classroom climate is defined as "the atmosphere and general environment in the classroom that may help or hinder the learning process. This includes physical and material resources, emotional tone, and attitude of teacher, social attitudes of peers, rules and regulations" (Hawes & Hawes, 1982). This view sees the creation of the desirable classroom climate as largely depend on teachers ability to sustain the pupils learning to motivate them and to build up positive attitudes towards new learning. The teacher exerts a great deal of influence on the pupil. The most powerful influence in producing such conditions is the reinforcement provided by the learning environment, either directly from the teacher or indirectly through his arrangement of learning task that offer good opportunities for successful outcomes and progress in learning.

Classroom climate implies a measure of the quality and quantity of the cognitive, creative and social life in terms of teacher-pupil interaction. Good (1959) defined educational environment as "the sum of all physical, social, emotional and mental factors that contribute to the total teaching learning situation."

Thelen (1981) has described classroom climate in terms of three constructs – components called ALP components: Authenticity, Legitimacy and Productivity.

- a) *Authenticity* (A): Pupils involvement. That is pupils meaningfulness, understanding, pleasant experiences, lively exciting and dramatic situations in learning activities.
- b) *Legitimacy* (L): Pupils satisfaction or purposefulness. That is pupils efforts in solving problems, concern for learning and preparing themselves for the purpose or aim in life.
- c) *Productivity* (P): Pupils goal attainment that is pupils consciousness, effectiveness, potentials and self learning in productive learning activities. That is the climate of any classroom is essentially the direction and extent to which these constructs operate in varied combinations creating a way of life of the class.

Stratton and Nicky (1991) defined classroom environment as the "total external context in which an individual operates. The concept environment is usually used to include physical surroundings and more specifically to include all different factors of the physical, but to exclude the soul."

The classroom climate is the general tone of a class. It reflects the totality of all the actions, relationships, and physical aspects of the environment as perceived by the students and the teacher. Although, it is probably the most important of the teachers' immediate classroom concerns, it is hardest to define exactly, and therefore is usually expressed in subjective terms conveying an impressionistic feeling about the class as friendly, business like, chaotic, regimented, exciting, secure, dull or permissive.

Riffini (1988) stressed the importance of co-operative learning activities to remove motivational barriers and redirect student behaviour away from failure-avoiding activities in academic settings. Co-operative learning activities help students realize that personal effort can contribute to group as well as individual goals.

In competitive classes, improved personal performance is dependent upon and causes worse performance for classmates. In individualistic structures personal performance is independent of the performance of others (Johnson & Johnson, 1975). A competitive classroom features fewer interactions between students, more individualized work, little encouragement to help classmates, and evaluation that in some way depends upon the performance of the other members of the class.

"The classroom is not an island" (Maehr and Carol, 1991). Depending on their degree of congruence with classroom goals and practices, school wide goals either dilute or enhance classroom efforts.

Deborah (1988) reported that to a very large degree, students expect to learn if their teachers expect them to learn. School wide goals, policies, and procedures also interact with classroom climate and practices.

Characteristics of Classroom Climate

Many researchers and authors have identified the following characteristics of classroom climate of teacher – pupil interaction – formality, diversity, cohesiveness, speed, material environment, friction, favouritism, difficulty, apathy, democracy, cliqueness, satisfaction, teacher support, disorganisation, competitiveness, involvement, affiliation, task orientation, order and organisation, rule, clarity, teacher control, innovation, personalisation, participation, independence, differentiation (Fraser, 1986). Creative stimulation, cognitive encouragement, permissiveness, acceptance, influence of classmates, control (Misra, 1986), teacher talk, accepts feelings, praise or encourage, accepts or uses ideas of pupils, ask questions, lectures, give directions, criticises or justifies authority, student talk response, student talk initiation, silence (Amidon and Flanders, 1961).

Classroom climate includes the following components: Formality, Diversity, Speed, Friction, Goal direction, Favouritism, Difficulty, Apathy, Cliques, Disorganization, Involvement, Affiliation, Order and organization, Rule clarity, and Personalisation.

Measurement of Classroom Climate

The most extensively used environment inventories in the secondary schools in developed countries are the following:

1. Learning Environment Inventory (LEI) of Fraser, Anderson and Walberg (1982).
2. The Classroom Environment Scale (CES) (Trickett and Moos, 1973; Fisher and Fraser, 1983; Moos and Trickett, 1974).
3. Individualised Classroom Environment Questionnaire (ICEQ) (Rentoul and Fraser, 1983).
4. My Class Inventory (MCI) (Fraser, Anderson and Walberg, 1982; Fraser and O'Brien, 1985).
5. Science Laboratory Environment Inventory (SLEI) (Hofstein and Lunetta, 1991).
6. College and University Classroom Environment Inventory (CUCEI) (Fraser, Treagust and Dennis, 1986).

2.3.2. CLASSROOM CLIMATE – RELATED STUDIES

Green (1983) in his study of class room motivation among a sample of 423 fourth grade students in 21 classes included five scales adopted from the CES to improve their readability for younger children. It was suggested that motivational levels affect the nature of the classroom environment.

Christian (1984) conducted a study on group dynamics, academic motivation, classroom climate and academic performance among a sample of 292 higher secondary pupils. It was found that pupils in urban classrooms had shown higher mean scores on academic motivation as well as classroom climate, but an average score on academic performance.

Kumar (1984) found that there were positive and significant correlations between total classroom social climate and total academic motivation scores.

Klung (1989) stressed that school leaders can influence levels of motivation by "shaping the schools instructional climate" which in turn shapes "the attitudes of teachers, students, parents and the community at large toward education."

Result of the study, conducted by Susan (1989) indicated that motivational factors may be instrumental in mediating student's actual performance of writing tasks in the class room, and motivational consequences may differ as a result of process and product oriented approaches to writing instruction.

Carole (1992) examined the classroom learning environment in relation to achievement goal theory of motivation. A perspective is presented that argues for identification and analysis of classroom structures that can contribute to a mastery orientation. With such an orientation, the focus will be on effort rather than ability.

Todd (1996) found that students' inadequate motivation is related to their poor self esteem, unchallenging and repetitive assignment, emotionally stressful classroom environments, and extensive use of extrinsic rewards.

Powell (1997) found that teachers and students differed significantly in their perceptions of the frequency with which teachers used adaptive motivational strategies. Both high and low achieving students reported low frequencies of teachers using motivational strategies that would support a mastery goal.

Block and Fantuzzo (1997) found that students who participated in peer collaboration scored higher on measures of computation and word problems and reported higher levels of academic motivation and social competence than did students who did not participate in peer collaboration.

Waxman and Huang (1996) investigated the classroom learning environment of resilient and non-resilient students from inner city elementary schools found that the resilient students had higher motivation and more positive perceptions of their learning environments.

According to Guthrie *et. al.*, (1998) the classroom contexts can be constructed to influence motivational outcomes positively.

Hicks and Carol (1998) found that the nature of motivational change on entry to middle school depends on characteristics of the learning environment in which students find themselves. Student's perceptions of their educational experiences generally influence their motivation more than the objective reality of those experiences.

Mary (1998) suggested that both intrinsic and extrinsic motivation are constrained by teacher-centred methods.

Gay and Nancy (1999) proposed the use of classroom activities to stimulate and motivate student participation and interest that were supported by co-operative learning and multiple intelligence activities.

The results of the study conducted by Gregory (1999) indicated that establishing a positive teacher-student relationship was a strong motivator. Teacher ability to meet diverse student's needs was a motivating factor.

Grenchik *et. al.*, (1999) conducted an action research on "Effective Motivation through Meeting Student's Needs." The findings indicated a positive correlation between the teachers' intervention to meet student needs and the level of student motivation.

Linda (1994) suggested that practitioners who shift away from systems of rewards and punishment and instead, actively involve students in shaping classroom climate and learning promote both students' motivation to learn and their commitment to democratic values.

Linda (1999) stated that young children's natural motivation to learn will survive only in schools where the curriculum is worth learning; where students focus on learning (not on competition or grades) and where students feel valued, and there for are disposed to care about the schools values, including learning.

Theodore (1999) revealed that cooperative learning improves students' learning motivation in a diverse college student population by creating a favourable disposition toward the learning experience through personal relevance and choice.

Leslie *et. al.*, (2000) examined the impact of a multi faceted intervention on student motivation and achievement. Participating in the study were second and third graders from 3 schools. The 12-week intervention was comprised of 3 elements: (1) use of the theory of multiple intelligences in instruction; (2) the incorporation of cooperative learning; and (3) the provision of an engaged learning environment. The findings of the post intervention data illustrated that multiple intelligence, cooperative

learning, and engaged learning had a positive effect on increasing student motivation and achievement.

Christine and Van (2000) found that an academic climate can discourage non-motivated students.

Yair (2000) found the structures of instruction that disaffect students are overwhelmingly represented in students' daily school life; those that spark their hearts are not frequent enough to motivate students.

Denise *et. al.*, (2001) investigated primary student's perceptions of teacher practices and learning in learner-centred (LC) and non-learner-centred (NLC) classroom contexts. Found that primary students valued similar characteristics in teachers regardless of classroom context of grade level. Children's interest in school work and learning was lower in NLC classrooms than in LC classrooms, especially for students who perceived their teachers as non supportive and non stimulating.

Douglas *et. al.*, (2001) revealed that improvement or academic motivation requires both changes in school organizational structures and in curriculum and instruction.

Ivey and Broaddus (2001) found quality and diversity of reading materials were the motivating factors of reading of adolescent students rather than classroom setting or other people.

Kim *et. al.*, (2001) reported that students with poor motivation are often bored in school and have poor relation with their teachers. Cooperative learning was chosen as the best strategy for intervention following a review of research on strategies to improve student motivation.

Greene *et. al.*, (2004) conducted a study on contributions of classroom perceptions and motivation and found that student perceptions of classroom structures are important for their motivation.

Spera and Wentzel (2004) examined student-teacher goal congruence and its relation to social and academic motivation. Based on a sample of 97 ninth-grades, high levels of goal congruence for each of the four goals measured was positively related to student interest in class and perceived social support from teachers.

SUMMARY OF RELATED STUDIES ON CLASSROOM CLIMATE

Area of Study	Investigator	Result
Classroom Climate and Academic Motivation	<ol style="list-style-type: none"> 1. Green, 1983 2. Christian, 1984 3. Kumar, 1984 4. Klung, 1989 5. Susan, 1989 6. Carole, 1992 7. Todd, 1996 8. Powell, 1997 9. Block and Fantuzzo, 1997 10. Waxman and Huang, 1996 11. Guthrie <i>et al.</i>, 1998 12. Hicks and Carol, 1998 13. Mary, 1998 14. Gay and Nancy, 1999 15. Gregory, 1999 	Classroom Climate shows positive correlation with Academic Motivation.

Area of Study	Investigator	Result
Classroom Climate and Academic Motivation	16. Grenchik <i>et. al.</i> , 1999 17. Linda, 1994 18. Linda, 1999 19. Theodore, 1999 20. Leslie <i>et. al.</i> , 2000 21. Christine and Van, 2000 22. Yair, 2000 23. Denise <i>et. al.</i> , 2001 24. Douglas <i>et. al.</i> , 2001 25. Ivey and Broaddus, 2001 26. Kim <i>et. al.</i> , 2001 27. Greene <i>et al.</i> , 2004 28. Spera and Wentzel, 2004	Classroom Climate shows positive correlation with Academic Motivation.

2.4. PARENTAL INVOLVEMENT

2.4.1 PARENTAL INVOLVEMENT – THEORETICAL OVERVIEW

Children's home environment shapes the initial constellation of attitudes they develop toward learning. When parents nurture their children's natural curiosity about the world by welcoming their questions, encouraging exploration, and familiarising them with resources that can enlarge their world, they are giving their children the message that learning is worthwhile and frequently fun and satisfying. When children are raised in a home that nurtures a sense of self-worth, competence, autonomy, and self-efficacy, they will be more apt to accept the risks inherent in learning (Linda, 1994).

All parents care about their children's development and want to succeed as parents (Ehlers and Ruffin, 1990) and so parents shape the way in which a child approaches the world, and their perceived value of learning (Wagner, 2002).

Parents are the first and most important teachers of their children (Ehlers and Ruffin, 1990) and home is the most important social institution. The home is the first and most important academy for learning. This is where the children learn their attitudes and values that are engraved in them for the remainder of their lives.

When families as a whole participate, in children's education in positive ways, there are noticeable changes in the child's test scores, attendance records, quality of work, attitudes and behaviour, graduation rates, and the amount that enrol in higher education. The level of involvement is often questioned by the parents; however, research suggests that "the more intensively parents are involved in their children's learning, the more beneficial are the achievement effects" (Cotton and Wiklund, 2002).

It is believed that when parents monitor home work, encourage participation in extracurricular activities, are active in parent – teacher associations, and help children develop plans for their future, children are more likely to respond and do well in school.

There are indications that prove that the most effective form of parental involvement is when the parents work directly with their child. Researchers find that the more activity each parent puts in there will be greater achievement for that student in comparison to the children with passive parents. Passive parent involvement is better than no involvement, however the affect aren't as successful for the child. However, when parents read, and

work with their children at home and develop a stronger work ethic with their child the student improves in school.

Concept of Parental Involvement

The term 'Parental Involvement' includes several different forms of participation in education and with the schools. Parents can support their children's schooling by attending school functions and responding to school obligations (Parent-teacher conferences). They can become more involved in helping their children improve their school work-providing encouragement, arranging for appropriate study time and space, modelling desired behaviour (such as reading for pleasure), monitoring home work, and actively tutoring their children at home.

The cumulative knowledge from existing studies suggests the importance of several types of parent involvement, including the following:

- 1) Autonomy promoting parenting practices (Lamborn *et. al.*, 1991);
- 2) Provision of a stimulating literacy and material environment (Snow *et. al.*, 1991);
- 3) Appropriate monitoring of television viewing and home work completion (Clark, 1993) and
- 4) High expectations and moderate levels of parental support and supervision (Kurdek, *et. al.*, 1995). There is mounting evidence that each of these parent involvement variables facilitates children's academic performance. There are also indications that they do so in relatively complex ways that interact with family background and social context variables such as ethnicity, family structure, maternal employment status, socio-economic status, and gender (Schiamberg

and Chin, 1986; Milne, 1989; Tocchi and Englehard, 1991; Zimilies and Lee, 1991; and Lee and Croninger, 1994).

According to Vandergrift and Greene (1992) there are two key elements that work together to make up the concept of parental involvement. One of these is a level of commitment to parental support. This includes such things as encouraging the student, being sympathetic, reassuring, and understanding. The other element needed is a level of parental activity and participation such as doing something that is observable. This combination of level of commitment and active participation is what makes an involved parent.

Sui-chu and Willms (1996) developed four dimensions of parental involvement: 1) home discussion; 2) home supervision; 3) school communication; and 4) school participation. They report that "of the four types of involvement, home discussion was most strongly related to academic achievement."

Good parent-teacher relations are conducive to children's school performance. When parents communicate constructively with teachers and participate in school activities, they gain a clearer understanding of what is expected of their children at school and they may learn from teachers how to work at home to enhance their children's education (Izzo *et. al.*, 1999).

Finn (1998) suggested that helping with home work is a concrete way that parents demonstrate the commitment they have to education. Any kind of parental involvement helps the child academically as well as emotionally. Parents can serve as 'advocates' to the school, providing encouragement and showing children how important education is.

Dimensions of Parental Involvement

Emotional support (Rice *et. al.*, 1997; Lamb, 1997); Expectations and aspiration (Milne *et. al.*, 1986; Ballen and Moles, 1994); Structuring home environment (Bloir, 1997; Epstein, 1992); Dealing friends (Small, 1990); Recreation (Miller, 1986; Taylor *et. al.*, 1995); Health care (Kurtz *et. al.*, 1993; Hanson and Ginsburg, 1985); Discipline (Baumrind, 1991; Webster, 1993; Rath and Patnaik, 1999); Encouragement (Waugh *et. al.*, 1993; Castambis, 1998); Communication (Lessin and Jacob, 1984; Lee 1994; Sui-chu and Willms, 1996); Participation in school activities (Heyns, 1978; Sui-chu and Willms, 1996) are dimensions of parental involvement which have been recorded consistently in the literature.

Parental involvement is usually measured using self reports of parents. Reports of perceived parenting made by children/adolescents or by teachers and also by observation methods in which the nature of parent-child relation is assessed by experts in the case of infants and toddlers. Even though differences exist regarding the accuracy of parent reports and child reports, investigators mostly employ child report since parenting as perceived by the child or adolescent has been found to have more implications. In some cases multiple measures of and reports of mother and father involvement are used to reduce measurement error (Grolnick and Slowiaczek, 1994; Whitbeck *et. al.*, 1997).

2.4.2. PARENTAL INVOLVEMENT – RELATED STUDIES

Sattes (1985) examined literature on parental involvement in the education of students at all levels. The review cites research indicating beneficial effects of parent involvement on student achievement, attendance, motivation and behaviour.

Barton *et. al.* (1986) found that both mothers' and fathers' child rearing practices can be specifically related to unique aspects of children's motivation structure.

Fehrmann *et. al.*, (1987) examined the direct and indirect effects of parental involvement on high school grades on a sample of 28,057 high school students. Findings indicated that parental involvement had a positive effect on grades and led to increased time spent on home work.

Sowaid *et. al.* (1987) in a study on lower socio-economic status Indian boys observed that restrictive attitudes by fathers and protective attitudes by both fathers and mothers were inversely related to their children's motivation. A loving attitude by the father was positively related to motivation.

Stevenson and Baker (1987) in their study revealed that: (1) the higher the educational status of the mother, the greater the degree of parental involvement in school activities; (2) the younger the age of the child, the greater is the degree of parental involvement and (3) children of parents who are more involved in school activities do better in school than children with parents who are less involved.

A co relational study by Sing *et. al.*, (1989) on child-rearing practices and achievement motivation revealed that indirect disciplines and loving as well as protecting attitude of parents contribute significantly to the development of achievement motivation both in tribal and non tribal school children.

According to Clarke (1990) parents who praise children's skills and efforts, show interest and concern, and reward success tend to have children who are successful in school.

Gottfried *et. al.*, (1992) in a longitudinal study of children at ages 9 and 10 years, the role of parental motivational practices in a children's academic intrinsic motivation and achievement was tested. Children's academic intrinsic motivation is positively related to encouragement of task endogeneity and negatively related to provision of task-extrinsic consequences.

According to Maqsd and Coleman (1993) parents have a strong influence on the development of their children's achievement motivation. They found significantly higher achievement motivation scores for the adolescents living with family when compared with those living in a boarding school.

Fontaine (1994) found that more motivated children live in more rigidly structured families, have less autonomy and internal locus of causality. Variations were found with regard to socio-economic status.

Gottfried *et. al.*, (1994) conducted a study on role of parental motivational practices in children's academic intrinsic motivation and achievement. It revealed that children's academic intrinsic motivation is positively related to parental encouragement of task endogeneity and negatively related to parental provision of task extrinsic consequences.

Grolnick and Slowiaczek (1994) examined the relationship between parental involvement in their children's schooling and children's motivation and academic achievement. Subjects were of 300, 11 to 14 year olds. Data from parent, student, and teacher evaluations suggest that parental involvement manifests itself in many ways. Children who are confident in school may actually push parents to become actively involved in school.

Hein and Lewko (1994) in their examination of parenting styles within the families of high performing science students aged 11-22 years, observed the positive effects of authoritative parenting because children from such

families showed higher levels of family cohesion, interaction and encouragement, as well as higher levels of achievement motivation and higher scores on a science outcome measure.

Hernandez (1994) studied inter generational academic aspirations of Mexican – American females. It revealed that major factors associated with daughter's level of aspiration were mother's encouragement, importance of daughter's education to mother, and mother's academic level.

A student survey was administered by Miller (1995) and found a large number of single family homes and the negative peer pressure sometimes associated with middle school were also factors contributing to a lack of motivation in students.

Mc Grath and Repetti (1995) examined parents satisfaction with their children's school performance and parents value for their children's academic success as variables that may influence children's perceptions of academic success or failure. Results of analysis indicated that parents' attitude towards their children's academic performance may directly, or indirectly shape children's perception of their academic competence.

Melby and Conger (1996) examined the relation of involved parenting and parental hostility on academic performance of 347 male and female adolescents and the results indicated a strong relation between academic performance and parental behaviours. Adolescents of mothers and fathers who displayed more hostile behaviours displayed lower academic performance.

Suman and Umapathy (1997) examined the relationship between achievement motivation and parent-child relationship in adolescents. Achievement motivation was higher when adolescents perceived their parents as loving and demanding.

Gregory (1999) found that student motivation was enhanced when parents created an accepting and supportive relationship with their children while placing value on their children's education.

Rebecca (1999) found that academic motivation of students from single parent families was found to be greater than that of peers living in two-parent families.

Denise (2000) observed that students are more successful if their parents participate at school and encourage education and learning at home.

O'Connor *et. al.*, (2000) in their study on associations between parental divorce and children's adjustment found lower levels of academic achievement in children from broken families when compared with children from intact families.

Parental Involvement not Related with Motivation

Muller and Kerbow (1993) suggested that parents' close supervision of home work and after school activities and frequent contacts with school or parent-teacher conferences will have negative effects on student achievement motivation.

Lee (1994) reported negative effects of parental involvement on student's achievement when parents make frequent contacts with school or parent – teacher conference.

Luster *et. al.*, (2004) hypothesised parental support for achievement after school entry to be related to individual differences in academic motivation, but this hypothesis was not supported.

**SUMMARY OF RELATED STUDIES ON
PARENTAL INVOLVEMENT**

Area of Study	Investigator	Result
Parental Involvement and Academic Motivation	<ol style="list-style-type: none"> 1. Sattes, 1985 2. Barton <i>et. al.</i>, 1986 3. Fehrmann <i>et. al.</i>, 1987 4. Sowaid <i>et. al.</i>, 1987 5. Stevenson and Baker, 1987 6. Gottfried <i>et al.</i>, 1992 7. Fontaine, 1994 8. Gottfried <i>et. al.</i>, 1994 9. Grolnick and Slowiaczek, 1994 10. Hernandez, 1994 11. Miller, 1995 12. Mc Grath and Repetti, 1995 13. Melby and Conger, 1996 14. Gregory, 1999 15. Rebecca, 1999 16. Denise, 2000 	Parental Involvement shows positive correlation with Academic Motivation
Parental Involvement and Achievement Motivation	<ol style="list-style-type: none"> 1. Singh <i>et. al.</i>, 1989 2. Clarke, 1990 3. Maqsud and Coleman, 1993 4. Hein and Lewko, 1994 5. Suman and Umapathy, 1997 6. O'connor <i>et. al.</i>, 2000 	Parental Involvement shows positive correlation with Achievement and Achievement Motivation
Parental Involvement and Achievement Motivation	<ol style="list-style-type: none"> 1. Muller and Kerbow, 1993 2. Lee, 1994 3. Luster <i>et. al.</i>, 2004 	Parental Involvement not related with Achievement Motivation

2.5. SCHOLASTIC MOTIVATION

2.5.1. SCHOLASTIC MOTIVATION – THEORETICAL OVERVIEW

Concept of Motivation

Theory and research pertaining to motivation had gained much importance in the last three decades. Any one interested in the effective functioning of a society, school or individual must inevitably deal with the question of motivation and its determinants. 'Motivation' is an umbrella term having a wide variety of connotations and definitions.

Mc Clelland *et. al.*, (1953) defined 'motive' as the reintegration by a cue of change in an effective situation. To Maslow (1954) motivation is a construct, never ending, fluctuating, complex and universal characteristic of practically every organismic state of affairs.

Hebb (1955) defined motivation as the effect of two sensory events - a cue or cognitive functions guiding behaviour and an arousal or vigilance function which provides the energy of movement.

A motivational variable is one that facilitates or energises several different responses, whose termination or removal following a new response lead to the learning of that response, whose sudden increase lead to the abandonment of responses, and whose effect on behaviour cannot be attributed to learning, sensation, innate capacities and sets (Brown, 1961).

According to Feather (1963) motive is a relatively stable personality disposition which may have an innate basis but is more likely the product of early learning of approaching or avoiding a stimuli.

According to Kleinginna and Kleinginna (1981) motivation is an internal state or condition (sometimes described as a need, desire, or want) that serves to activate or energize behaviour and give it direction.

Franken (1994) defined motivation as the arousal, direction, and persistence of behaviour. Motivation is the attribute that "moves" us to do or not to do something (Gredler, 2001). Huitt (2001) described motivation as the desire or want that energizes and directs goal – oriented behaviour.

Theories Associated with Motivation

There exist a number of theories regarding human motivation. These include behavioural, cognitive, psychoanalytic, humanistic, social, and social cognition theories. The salient features of motivation to the different schools of psychology are given below:

i) Behavioural Theories

Each of the major theoretical approaches in behavioural learning theory has a primary factor in motivation. Classical conditioning states that biological responses to associated stimuli energize and direct behaviour. Operant learning states that the primary factor is consequences: the application of reinforcers provides incentives to increase behaviour; the application of punishers provides disincentives that result in a decrease in behaviour.

Theories belonging to the behavioural approach describe motivation in terms of behavioural tendencies in given situations; they emphasize the role of learning experiences, contingencies of reinforcement, and situational variables in determining the direction and intensity of behaviour. The radical behaviourism (Skinner, 1938) as well as the social learning theory (Bandura, 1986,1997) belonging to this general approach.

ii) Cognitive Theories

There are several motivational theories that trace their roots to the information processing approach to learning. These approaches focus on the categories and labels people use help to identify thoughts, emotions, dispositions, and behaviours. Cognitive approaches view motivation as determined by a process of decision making, in which an active individual seeking meaning and control of his/her environment, considers and selects from among alternative ways of behaving. Prevalent in this approach are:

a) *Cognitive Dissonance Theory*

Cognitive dissonance theory is in some respects similar to disequilibrium in Piaget's theory of cognitive development. This theory was developed by Festinger (1957) and states that when there is a discrepancy between two beliefs, two actions, or between a belief and an action, we will act to resolve conflict and discrepancies. The implication is that if one creates the appropriate amount of disequilibrium, this will in turn lead to the individual changing his or her behaviour which in turn will lead to a change in thought patterns which in turn leads to more change in behaviour.

b) *Attribution Theory*

Attribution theory (Heider, 1958; Weiner, 1974, 1980) proposes that every individual tries to explain success or failure of self and others by offering certain 'attributions.' These attributions are either internal or external and are either under control or not under control. The following chart shows the four attributions that result from a combination of internal or external locus of control and whether or not control is possible.

Nature of control	Internal	External
No control	Ability	Luck
Control	Effort	Task Difficulty

In a teaching/learning environment, it is important to assist the learner to develop a self-attribution explanation of effort (internal, control). If the person has an attribution of ability (internal, no control) as soon as the individual experiences some difficulties in the learning process, he or she will decrease appropriate learning behaviour (e.g. I am not good at this). If the person has an external attribution, then nothing the person can do will help that individual in a learning situation (i.e., responsibility for demonstrating what has been learned is completely outside the person). In this case, there is nothing to be done by the individual when learning problems occur.

c) Expectancy Theory (Vroom, 1964)

Expectancy theory proposes the equation:

Motivation = Perceived Probability of Success (Expectancy)

Connector: of Success and Reward (Instrumentality)

Value of obtaining Goal (Valance, Value)

Since this formula states that the three factors of Expectancy, Instrumentality and Valance or Value are to be multiplied by each other, a low value in one will result in a low value of motivation. Therefore, all three must be present in order for motivation to occur. That is, if an individual doesn't believe he or she can be successful at a task or the individual does not see a connection between his or her activity and success or the individual does not value the results of success, then the probability is lowered that the individual will engage in the required learning activity. From the perspective of this theory,

all three variables must be high in order for motivation and the resulting behaviour to be high.

iii) Psychoanalytic Theories

The psychoanalytic theories of motivation propose a variety of fundamental influences. Freud (1990) suggested that all action or behaviour is a result of internal, biological instincts that are classified in to two categories: life (sexual) and death (aggression). Erikson (1993) and Sullivan (1968) proposed that interpersonal and social relationships are fundamental, Adler (1989) proposed power, while Jung (1953, 1997) proposed temperament and search for soul or personal meaningfulness.

Psycho analysis has contributed to the study of academic motivation by placing it within the context of personality in general, and by suggesting a frame work for the analysis and treatment of motivational difficulties such as work inhibition and neurotic anxiety.

iv) Humanistic Theories

a) Self actualisation theory

Maslow (1954) has proposed that human motivation can be understood as resulting from a hierarchy of needs. These needs, starting with the most basic psychological demands, progress upward through safety needs, belonging needs, and esteem needs and culminate in self-actualisation. Each level directs behaviour toward the need level that is not being adequately met. As lower-level needs are met, the motivation to meet the higher-level needs becomes active. Furthermore, as an individual progresses upward, it becomes progressively more difficult to successfully fulfil the needs of each higher level. For this reason Maslow believed that very few people actually

reach the level of self-actualisation, and it is a life long process for the few who do.

b) Self-concept Based theory

Maslow's work lead to additional attempts to develop a grand theory of motivation, a theory that would put all of the factors influencing motivation in to one model. Leonard, Beauvais, and Scholl (1995) propose five factors as the sources of motivation:

1. Instrumental Motivation (rewards and punishers)
2. Intrinsic Process Motivation (Enjoyment, fun)
3. Goal Internalisation (Self-determined values and goals)
4. Internal Self-concept based Motivation (matching behaviour with internally – developed ideal self).
5. External Self-Concept based Motivation (matching behaviour with externally – developed ideal self).

Individuals are influenced by all five factors, though in varying degrees that can change in specific situations.

Factors one and five are both externally oriented. The main difference is that individuals who are instrumentally motivated are influenced more by immediate actions in the environment (e.g.; operant – conditioning) where as individuals who are self-concept motivated are influenced more by their constructions of external demands and ideals (e.g.; social cognition).

Factors two, three and four are more internally oriented. In the case of intrinsic process, the specific task is interesting and provides immediate internal reinforcement (e.g.; cognitive or humanistic theory). The individual with a goal – internalisation orientation is more task-oriented (e.g.; humanistic

or social cognition theory) whereas the person with an internal self-concept orientation is more influenced by individual constructions of the ideal self (humanistic or psycho analytic theory).

v) **Social Learning Theory**

Social learning theory of motivation suggests that modelling (imitating others) and vicarious learning (watching others have consequences applied to their behaviour) are important motivators of behaviour.

vi) **Social Cognition Theory**

Social cognition theory proposes reciprocal determination as a primary factor in both learning and motivation. In this view, the environment, and individual's behaviour and the individual's characteristics (e.g., knowledge, emotions, cognitive development) *both influence and are influenced by each other*. Bandura (1986, 1997) highlights self-efficacy (the belief that a particular action is possible and that the individual can accomplish it) and self-regulation (the establishment of goals, the development of a plan to attain those goals, the commitment to implement that plan, the actual implementation of the plan, and subsequent actions of reflection and modification).

Carole (1992) and Dweck (1986) proposes environment, behaviour and personal qualities as major components of social cognitive motivation.

vii) **Transpersonal or Spiritual Theories**

Most of the transpersonal or spiritual theories deal with the meaningfulness of our lives or ultimate meanings. Maslow (1954) has also been influential in this approach to motivation. Other influential scholars included Allport (1955), Frankl (1998), James (1997), Jung (1953, 1997) and Wilber (1998).

Concept of Achievement Motivation

The concept achievement motive is a pattern of planning of actions and of feelings connected with striving to achieve some internalised standard of excellence. Individuals with high achievement motivation are interested in excellence for its own sake rather than for the rewards it brings. According to Atkinson (1964) there are basically two types, in a theoretical sense and each will act in achievement oriented fashion under different conditions. The two major types are: (1) person for whom the need to achieve is greater than the fear of failure and (2) the person for whom the fear of failure is greater than the need to achieve. Each of these individuals is motivated by the desire to achieve certain pleasant effect, with the difference being, that for the former the pleasant affect is in avoiding a sense of failure.

Atkinson and Feather (1966) and Atkinson and Raynor (1974) provided clear presentations of the expanded theory of achievement motivation. Achievement oriented behaviour is seen to be a function of a number of factors including the motive to succeed, the motive to avoid failure, the perceived probability of success and the incentive value of success.

Achievement motivation has been defined as a concern for excellence in performance as reflected in competition with the standards set by others or one self unique, accomplishment or longer term involvement (McClelland, 1976).

Ravelle and Michaels (1976) pointed out that achievement motivation can be seen as a special case of the inertial tendency postulate, but research has not been carried out to verify this observation. Achievement motivation refers to a pattern of actions and feelings connected to striving to achieve some internalised standards of excellence in performance (Vidler, 1977).

Deci's (1978) cognitive model of behaviour include five important elements. They are stimulus inputs, awareness of potential satisfaction, selection of goal, goal directed behaviour, and rewards and satisfaction. Deci asserts that people seek goals which they expect to bring rewards. When a person gets the reward for achieving a goal, he feels satisfied and this satisfaction is the final step in the sequence and will lead to termination of the sequence.

Nicholls (1984) defined achievement motivation as that behaviour in which the goal is to develop or demonstrate to self or to others – high ability, or to avoid demonstrating low ability. This implies that in achievement situation individuals desire success to the extent that it indicates high ability and seek to avoid failure to the extent that it indicates low ability (Kukla, 1978; McFarland and Ross, 1982).

Most of the studies conducted on motivation was based on the assumption that it is unitary construct. The recent development of a multifactorial scale (Cassidy and Lynn, 1989) enables to incorporate a more comprehensive analysis of motivation than was previously possible (Cassidy and Lynn, 1991). According to them multi dimensional analysis of motivation has brought out the importance of the individual factors, whereas an undimensional approach would have hidden its effects. Moreover the direction of effect of various factors is not the same and summation would involve a cancelling out effect.

Scholastic Motivation

Scholastic Motivation is concerned with the factors which determine the direction, intensity, and persistence of behaviour related to learning and achievement in academic frameworks. According to Frymeyer (1972) 'Scholastic Motivation' is that which gives direction and intensity to human

behaviour in an educational context, and motivation to learn in school is that which gives direction and intensity to the pupils behaviour in a school situation.

Analysis of the extensive research in this area shows a consistent relationship between motivational factors and achievement and suggests that motivation plays an important role in determining the level of achievement at all stages of academic study. Indeed motivation is generally considered a necessary condition for learning and behaviour. In addition to its significance for level of achievement, educators view academic motivation as an important variable in its own right, as a central factor in the personality and social development of the child.

Motivation which is related to learning in a classroom (academic) setting might be described as scholastic motivation or academic motivation. The pupils whose motivation to learn is positive, function with more productivity in classroom academic activities. Also better classroom environment and modern educational practices lead to better academic motivation and performance.

People who have a greater orientation towards approaching success tend to have higher levels of academic achievement (Atkinson and Feather, 1974).

Condry and Chambers (1978) found that when students were confronted with complex intellectual tasks, those with an intrinsic orientation used more logical information – gathering and decision – making strategies than did students who were extrinsically oriented.

According to Harter (1981), a child has an intrinsic orientation when classroom learning is determined by internal interests such as mastery, curiosity, and preference for challenge. A child has an extrinsic orientation

when classroom learning is determined by external interests such as teacher approval and/or grades (Harter, 1981).

According to Jere (1987), motivation to learn is a competence acquired "through general experience but stimulated most directly through modelling, communication of expectations and direct instruction or socialization by significant others (especially parents and teachers)."

A student who is intrinsically motivated undertakes an activity "for its own sake, for the enjoyment it provides, the learning it permits, or the feelings of accomplishment it evokes." An extrinsically motivated student performs "in order to obtain some reward or avoid some punishment external to the activity itself; such as grades, stickers or teacher approval" (Lepper, 1988).

Obviously, motivation is a critical issue in education. Wlodkowski and Jaynes (1990) explained that in the broadest sense, motivation is "a value and a desire for learning." Motivation involves a student's desire to participate in the learning process. It is also concerned with the reasons or goals which underlie a students' participation in learning activities (Linda, 1994). Motivation can be either intrinsic or extrinsic in its source. Woolfolk (2001) described intrinsic motivation as involving internal, personal factors such as needs, interests, curiosity, and enjoyment. A student who is intrinsically motivated undertakes an activity "for it's own sake," because the activity itself is rewarding (Linda, 1994; Woolfolk, 2001). In contrast is extrinsic motivation, in which the student engages in an activity in order to obtain a reward, or to avoid a punishment. This student is not really interested in the activity for its own sake, but rather for what it will gain them (Woolfolk, 2001).

In teaching, both intrinsic and extrinsic motivation are important. Intrinsic motivation increases the effectiveness of learning, and is therefore

more desired (Fulk and Montgomery, 1994). Linda (1994) notes that when students are intrinsically motivated, they tend to use strategies that require more effort and involve processing of information on a deeper level. Students with an intrinsic orientation also tend to prefer tasks that are moderately challenging. In contrast, students who are extrinsically motivated tend to put forth a minimum of energy in less difficult tasks.

Realistically, not every educational activity will be intrinsically motivating. When students exhibit minimal motivation, extrinsic motivation can be utilized to foster the development of intrinsic motivation. Teachers can enhance intrinsic motivation by using strategies such as praise and goal setting (Fulk and Montgomery, 1994).

Virtually all children are born with a motivation to learn (Wlodkowski and Jaynes, 1990). Infants and young children are naturally curious, and appear driven by a need to explore and interact with their world (Linda, 1994). Unfortunately, children seem to lose this enthusiasm for learning as they grow. Linda (1994) noted that "learning often becomes a drudgery instead of delight." Wlodkowski and Jaynes (1990) provide three explanations for the decrease in motivation as children get older: 1) The design of the graded school, where students are faced with quizzes, tests, exams, grades, assignments, home work and projects. These are demands which the students did not face in their younger years. 2) The increasing complexity of advanced learning, and 3) The distractions of a chaotic society and world which compete for a student's time, energy, and attention.

Harter (1996) revealed a shift from predominantly intrinsic motivational orientation in third grade to a more extrinsic motivational orientation by ninth grade. Several factors were presented as contributing to the decreasing levels of intrinsic motivation in some students. These include the teachers increased emphasis on grades, competition and control of

students. In the shift from elementary to middle school, students find an environment that is more impersonal, more formal, more evaluative, and more competitive than what they had previously experienced. Wlodkoski and Jaynes (1990) also consider factors influencing motivation outside the school environment. They present four major influences on an individual's motivation to learn: culture, school, the child as an individual, and family.

Definition of Scholastic Motivation

Hermine (1987) defined scholastic motivation as "the meaningfulness, value, and benefits of academic tasks to the learner – regardless of whether or not they are intrinsically interesting."

The motivation to learn is characterized by long-term, quality involvement in learning and commitment to the process of learning (Carole, 1990).

Scholastic motivation is the ultimate product of many aspects of the school experiences: significant relationships between teachers and students and among students; a meaningful, well-taught curriculum; teachers who maintain high expectations and look for ways to help each student connect to the curriculum; and opportunities for choice and self evaluation that foster students ownership of learning.

Measurement of Scholastic Motivation

The measurement techniques of scholastic motivation can be done by using following scales.

1. Children's Self Report Scale of Intrinsic versus Extrinsic Motivation in the Classroom (Harter, 1980, 1981).
2. Young Children's Academic Intrinsic Motivation Inventory (YCAIMI).
3. Attitude/Motivation Test Battery (AMTB) (Gardner, 1985).

4. Miller Motivation Scale (Miller, 1987).
5. Motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990).
6. Student Participation Questionnaire (Finn *et. al.*, 1991).
7. Classroom Goal Orientation Scale (Duda & Nicholls, 1992).
8. Harter Motivation Instrument (Harter *et. al.*, 1992).
9. Academic Motivation Scale (Child Development Project, 1993).
10. Academic Motivation Scale (Vallerand *et. al.*, 1993).
11. School Achievement Motivation Rating Scale (Chiu, 1997).

2.5.2. MOTIVATION - RELATED STUDIES

Motivation and Scholastic Achievement

Mansuri (1986) found that the students having high level motivation towards school were better in achievement than those with a low level of motivation towards school.

Pokay and Blumenfeld (1988) examined the relation among motivation, learning strategy use and achievement motivation and learning strategy used were influenced grades.

Wentzel (1988) found the potential relevance of motivation to achieve socially prescribed as well as cognitive outcomes for explaining academic performance in the classroom.

Pintrich and De Groot (1990) found that motivation is highly correlated to the use of cognitive strategies and academic achievement.

Wentzel *et. al.*, (1990) investigated the concurrent effects of motivational, affective, and self regulatory processes on academic achievement in preadolescence. The result suggested that motivational,

affective and self regulatory factors play an important role in the achievement of academic competence.

Gardner and Mac Intyre (1991) investigated the effects of integrative and instrumental motivation on the learning of French/English vocabulary, and found that both integratively – and instrumentally motivated subjects learned the vocabulary faster than subjects not so motivated.

Reynolds and Herbert (1992) conducted a study to formulate a structural model of High School Mathematics outcomes and reported that motivation had significant effect on mathematics outcomes.

Schultz and Switzky (1993) found individual differences in motivational orientation appear to effect the academic performance of non handicapped students to a greater extent compared to their non-handicapped peers.

Fortier *et. al.*, (1995) found students who feel competent and self determined in the school context develop an autonomous motivational profile toward education, which in turn leads them to obtain higher school grades.

Julianne (1995) found that the strongest predictor of motivation was the literacy task: during open tasks, children used more reading strategies, persisted longer and controlled their attention better regardless of instructional condition.

Douglas *et. al.*, (1996) examined the impact of child maltreatment and age on perceptions of competence, and the relations among perceived competence, motivation, and school functioning. The results indicated that both maltreated and non maltreated children exhibited maladaptive motivational orientations toward scholastic task and poor academic

performance, supporting the idea that threats to scholastic functioning reside as much within the ecology of poverty as in that of maltreatment.

The study of Moss *et. al.*, (1997) found the relationship between general learning ability and motivation for academic achievement.

✓ Stipek and Ryan (1997) examined the influence of several motivational variables on scholastic achievement and found a weak relationship between motivation and achievement.

Wolters (1997) found that students regulate their level of effort in academic tasks by using a variety of cognitive, volitional, and motivational strategies; and students motivational regulation were related positively to their goal orientation, use of some cognitive strategies, and course grade.

According to Carl (1998) about half of regular secondary students make no consistent effort to learn. Intrinsic appeals are applicable to any lesson in any subject at any level. These include novelty, anticipation, security, challenge, completion, application of learned skills, feed back, identification and competition.

✓ The study of Wolters (1998) indicated that students use of motivational regulation strategies could be used to predict their use of learning strategies, effort and classroom performance.

Study conducted by Hsiao (2001) found that external motivation orientation was a positive predictor for Chinese children's effort and performance.

Pamela *et. al.*, (2001) found students are unmotivated to write due to low self confidence, lack of control over writing tasks, inadequate amount of time to expand on writing pieces, lack of emphasis on organizers, limited peer

collaboration, and insufficient relevance to real life. Faculty reported lack of student motivation in writing tasks which hinder writing achievement.

✓ Turner and Johnson (2001) found that motivational patterns develop early as a function of family variables and have the potential to influence academic success.

Middleton and Midgley (2002) found that motivational orientations predicted student beliefs and behaviours in predictable patterns.

Whitehead (2003) found that intrinsic motivation is a much stronger predictor of achievement.

Motivation not related with Scholastic Achievement

It should be noted that some studies have found little or no significant relationship between motivation and academic achievement. Niebuhr (1995) examined the relationship of individual motivation and its effect on academic achievement and found student motivation showed no significant effect on the relationship with academic achievement.

A study by Goldberg and Cornell (1998) revealed that intrinsic motivation did not directly influence subsequent achievement.

✓ Gagne and Pere (2002) conducted a study to assess the unique contribution of motivation to academic achievement and found student's motivation were not related to their academic achievement.

The study of Steinfeld (2002) found there is insufficient evidence to support the notion that motivation predicts mathematics achievement with respect to the Mathematics Test.

Bouffard *et. al.* (2003) found intrinsic motivation did not make a significant contribution to academic achievement at either school grade or in any academic domain.

Bruinsma (2004) investigated the question of whether a students expectancy, values and negative affect influenced their deep information processing approach and achievement at the end of the first and second academic year found even though the analysis showed a relationship between students expectancy, values and the deep information processing approach, this approach did not affect academic achievement.

Achievement Motivation and Scholastic Achievement

Ahluwalia (1985) found that academic performance was positively and significantly related with achievement motivation.

✓ Gandhi (1985) studied the academic achievement and its relation to achievement motive, affiliation motive and power motive. The sample consisted of 500 boys and 500 girls. Results showed that achievement motive is significantly and positively related to academic achievement of high school students of both the sexes.

Geetha (1985) while studying the influence of anxiety and achievement motivation of secondary school pupils found a significant and positive correlation between biology achievement and achievement motivation.

✓ Ghosh (1985) conducted a study to find out the relationship of achievement in chemistry and its determinants. The sample was 450 boys and girls of West Beragal schools just promoted to class X. Positive correlation between achievement in Chemistry and achievement motivation was obtained.

In a study of achievement related motivation among tribal and non-tribal high school students Fatmi (1986) found that achievement motivation is positively related to achievement.

✓ Mehta (1987) found that the students who had high achievement motivation achieved higher school achievement when one of the independent variables was attitude towards parents and teachers.

✓ Parachottil (1987) studied the relationship of achievement motivation and achievement in Hindi of socially advantaged and disadvantaged secondary pupils and found positive relationship between achievement motivation and achievement in Hindi for the total sample and for the socially advantaged and socially disadvantaged groups.

✓ Sherrill (1988) in a study of achievement attitude and achievement motivation of grade 3 and 6 pupils found a significant positive relationship between science achievement and motivation.

✓ Lewis (1991) studied the relationship between achievement motivation and academic performance of 400 Caribbean immigrant students and found that motivation influences academic achievement.

✓ Rejani (1991) studied about the relationship of attitude towards education and achievement motivation with social studies achievement of high school pupils found a marked relationship between achievement motivation and social studies achievement.

Amma (1992) in a study on affective correlates of achievement in secondary school Biology found that achievement motivation is a significant affective variable that differentiates high achievers and low achievers in Biology.

✓ Gupta *et. al.* (1993) in a comparative study of the factors affecting academic achievement found that achievement motivation to be significantly related to academic achievement in the case of girls but not of boys.

Schultz (1993) reported that socio-economic advantage and achievement motivation are significant mediators of academic performance among minority children.

Jegade (1994) in a study on 160 Nigerian secondary school students found achievement motivation to be a reliable predictor of English language performance.

✓ Kumar (1994) studied the interaction of approaches to studying and achievement motivation on achievement in Biology of secondary school pupils and found that the main effect of achievement motivation on achievement in Biology was significant for the knowledge category.

✓ Kumari (1994) investigated the interaction effect of creativity and some other psychological variables on achievement in Biology of secondary school pupils and found significant positive relation of achievement motivation with achievement in Biology.

Mohammed (1995) found that achievement motivation has significant relationship with cognitive and affective achievement in Malayalam of secondary school pupils.

Valsala (1997) conducted a study on certain cognitive and affective correlates of process outcomes in physics of university entrants and found that more than 63 percentage of variance of process outcomes in physics can be attributed to achievement motivation.

Mc Ewan and Goldenberg (1999) conducted a descriptive correlational study to identify the influence of motivation and anxiety on academic success

found that academic ability, achievement motivation and inherent anxiety had a greater potential for predicting students who would succeed.

✓ Murthy (2000) in his study on 455 second year higher secondary students found a significant positive relationship between achievement motivation and academic achievement in History.

Rao *et. al.*, (2000) examined the relationship between cognitive and motivational variables and their relationship to mathematics attainments found that performance on the public examinations in mathematics was predicted by prior achievement motivation and self-concept of mathematics ability.

Kumar (2001) in a study on 612 graduate students from the agriculture and engineering colleges of Annamalai University found significant positive relationship between academic achievement and achieving tendency.

Achievement Motivation not related with Scholastic Achievement

✓ Rajput (1984) in a study of achievement in mathematics in relation to intelligence and achievement motivation observed that in neutral classroom conditions, the achievement of students in mathematics is not affected by their achievement motivation.

Valsamma (1984) found that achievement motivation cannot differentiate under achievers from over and normal achievers.

✓ Sontakey (1986) in a comparative study of personality factors and achievement motivation in Natural and Biological sciences found achievement motivation to be a poor predictor of achievement in biological sciences.

Hagborg (1992) compared school motivation, scholastic competence and intrinsic motivation of 157 white 9th and 10th grade students and found that on measures of scholastic competence and motivation orientation the High – group is different from both the Medium – and Low groups.

✓ Jayaseelan (1992) studied the influence of achievement motivation and science studying approach on science achievement on a sample of 675 standard IX students. In his study he found no significant relationship between achievement motivation and science achievement.

Meera (1999) found that achievement motivation is not significantly related with achievement in English of secondary school students.

Nair (1999) conducted a study on 1758 secondary school pupils and found that achievement motivation does not discriminate between over and underachievers in science.

Scholastic Motivation and Scholastic Achievement

The study of Srivastava (1974) revealed that academic motivation exerts high influence on the academic achievement even if SES and IQ are held constant.

✓ Desai (1979) studied classroom ethics, motivation and academic achievement of 1555 secondary school pupils and found that pupil's academic motivation is positively related to academic achievement.

Carole and Archer (1988) found that the classroom goal orientation may facilitate the maintenance of adaptive motivation patterns when mastery goals are salient and are adopted by students.

According to Gottfried (1988) Academic Intrinsic motivation is a reliable, valid and significant construct. It was positively related to

achievement, IQ, and perception of competence and inversely related to anxiety.

According to Gottfried (1990) the young elementary school children's academic intrinsic motivation is a reliable, valid and significant construct and it was positively related to achievement.

In a research paper comprised of several field studies and laboratory experiments, Boggiano *et. al.*, (1992) revealed that academic motivation positively influenced academic performance.

Fortier *et. al.*, (1995) found perceived academic competence and perceived academic self-determination positively influenced autonomous academic motivation which had a positive impact on school performance.

Rezabek (1995) found a significant correlation between academic intrinsic motivation and academic achievement.

Baker and Wigfield (1999) designed the study to assess dimensions of reading motivation and examine how these dimensions related to students reading activity and achievement found the strength of the relations between reading motivation and reading achievement was greater for girls and for white students.

Busato *et. al.*, (1999) found that intellectual ability and academic motivation were associated positively with academic success.

Findings of the study conducted by Cox and Guthrie (2001) indicate that amount of reading is multiply determined by cognitive and motivational constructs, which is consistent with an engagement perspective on reading development.

Martins *et. al.*, (2002) found that students with low levels of academic achievement motivation attribute less importance to school – related areas and reveal less favourable attitude towards school.

Sonnenschein and Munsterman (2002) found that the effective quality of the reading interaction was the most powerful predictor of children's motivations for reading.

Robbins *et. al.*, (2004) found that the best predictors for CGPA (cumulative grade point average) were academic self-efficacy and academic motivation. ($S = 0.496$ and 0.303 , respectively).

SUMMARY OF RELATED STUDIES ON MOTIVATION

Area of Study	Investigator	Result
Motivation and Scholastic Achievement	<ol style="list-style-type: none"> 1. Mansuri, 1986 2. Pokay and Blumenfeld, 1988 3. Wentzel, 1988 4. Pintrich and De Groot, 1990 5. Wentzel <i>et. al.</i>, 1990 6. Gardner and Mac Intyre, 1991 7. Reynolds and Herbart, 1992 8. Schultz and Switzky, 1993 9. Fortier <i>et. al.</i>, 1995 10. Julianne, 1995 11. Douglas <i>et. al.</i>, 1996 12. Moss <i>et. al.</i>, 1997 13. Sipek and Ryan, 1997 14. Wolters, 1997 15. Carl, 1998 16. Wolters, 1998 17. Hsiao, 2001 	Motivation shows positive correlation with Scholastic Achievement

Area of Study	Investigator	Result
	18. Pamela <i>et al.</i> , 2001 19. Turner and Johnson, 2001 20. Middleton and Midgley, 2002 21. Whitehead, 2003	
Motivation and Scholastic Achievement	1. Niebuhr, 1995 2. Goldberg and Cornell, 1998 3. Gagne and Perc, 2002 4. Steinfeld, 2002 5. Bouffard <i>et al.</i> , 2003 6. Bruinsma, 2004	Motivation not related with Scholastic Achievement
Achievement Motivation and Scholastic Achievement	1. Ahluwalia, 1985 2. Gandhi, 1985 3. Geetha, 1985 4. Ghosh, 1985 5. Fatmi, 1986 6. Mehta, 1987 7. Parachottil, 1987 8. Sherrill, 1988 9. Lewis, 1991 10. Rejani, 1991 11. Amma, 1992 12. Gupta, <i>et al.</i> , 1993 13. Schultz, 1993 14. Jegede, 1994 15. Kumar, 1994 16. Kumari, 1994 17. Mohammed, 1995 18. Valsala, 1997 19. Mc Ewan and Goldenberg, 1999 20. Murthy, 2000	Achievement Motivation shows positive correlation with Scholastic Achievement

Area of Study	Investigator	Result
	21. Rao <i>et. al.</i> , 2000 22. Kumar, 2001	
Achievement Motivation and Scholastic Achievement	1. Rajput, 1984 2. Valsamma, 1984 3. Santakey, 1986 4. Hagborg, 1992 5. Jayaseelan, 1992 6. Meera, 1999 7. Nair, 1999	Achievement Motivation not related with Scholastic Achievement
Scholastic Motivation and Scholastic Achievement	1. Srivastava, 1974 2. Desai, 1979 3. Carole and Archer, 1988 4. Gottfried, 1988 5. Gottfried, 1990 6. Boggiano <i>et. al.</i> , 1992 7. Fortier <i>et. al.</i> , 1995 8. Rezabek, 1995 9. Baker and Wigfield, 1999 10. Busato <i>et. al.</i> , 1999 11. Cox and Gutharie, 2001 12. Martins <i>et. al.</i> , 2002 13. Sonnenschein and Munsterman, 2002 14. Robbins <i>et. al.</i> , 2004	Scholastic Motivation shows positive correlation with Scholastic Achievement

2.6. INTER RELATIONSHIP OF VARIABLES – RELATED STUDIES

Tara (1980) obtained a significant positive correlation between self-concept and various aspects of socio-economic status. The study also found slight relationship between self-concept, level of aspiration, and interests at the pre-adolescent stage.

Swain (1984) studied academic achievement of High School students in relation to the instructional design, intelligence, self-concept and achievement motivation. It was found that high intelligent students score significantly better than low intelligent students and students with high self-concept achieve higher than those with low self-concept.

Panwar (1986) found that academic achievement, home background and school background had significant effect on self-concept.

Rehana (1986) revealed that parentally deprived children had low or negative self-concept while the non-parentally deprived had average self-concept.

✓ Stephanie and Hershott (1990) investigated the relationship between social studies classroom environment and student motivation and found that the student satisfaction significantly affects the motivational constructs such as academic motivation, academic self-concept and social self-concept.

Robin (1991) found that students who were more involved in cooperative learning classes had higher scores on a measure of student self-concept and that student's academic self-concept and the students academic goals were positively related to academic achievement.

Jerome and Richard (1992) found that teacher and parent involvement were primary predictors of academic achievement, with teacher and parent autonomy support accounting for additional variance.

Shauna and Merith (1994) found that the children with high global self-concept, compared to low global self-concept perceived themselves as more intelligent, more competent in non academic domains, and receiving more social support.

Wentzel (1994) examined the supportive relationship of 167 sixth graders with parents, teachers and peers in relation to motivation at school. Relations of perceived support from parents, teachers and peers to student motivation differed depending on the source of support and motivational outcome.

Niebuhr (1995) found the elements of both school climate and family environment have a stronger direct impact on academic motivation.

Richman and Rescorla (1995) examined the relationship of parental attitudes and parental warmth to child's academic skills and self-perceptions of competence. High correlations were found between parental warmth and self-efficiency.

Chikkara *et. al.*, (1996) found that home environment played a significant role in cognitive development. There existed a significant correlation between cognitive development and home environment in total.

An action research conducted by Todd (1996) revealed that student's inadequate motivation is related to their poor self-esteem, unchallenging and repetitive assignments, emotionally stressful classroom environments and extensive use of extrinsic rewards.

Mavi and Patel (1997) found that there was a significant negative correlation between intelligence and self-concept.

In an intervention study conducted by Angela *et. al.*, (2000) found the incorporation of cooperative learning and multiple intelligence lessons strengthen student motivational levels and academic achievement.

An action research was conducted by Deborah *et. al.*, (2000) to motivate students to learn through multiple intelligences, co-operative learning, and positive discipline. The targeted population consisted of students in kindergarten, fourth grade and sixth grade at two grade school and one middle school sites. Data indicated that the program reduced inappropriate behaviours and increased student motivation.

✓ Denris and Valentina (2000) conducted a research work to find how the goal and values are related to school motivation and achievement and found that there are four needs that motivate the students to strive for school success: 1. Seeking excellence in one's work; 2) Self-esteem 3) affiliation; and 4) Social concern.

An action research project conducted by Kariotakis *et. al.*, (2000) evaluated a programme to improve students motivation. Three interventions were selected: incorporation of multiple intelligence strategies, implementation of co-operative learning and use of authentic assessment. A post-intervention student survey and check list indicated that student motivation was improved by the intervention.

Moriarity *et. al.*, (2001) revealed that through the use of instructional strategies active student participation increased, parent and student attitudes toward school and learning became more positive, and students experienced academic success by meeting personal goals and increasing their core of known words for reading and writing.

Pamela *et. al.*, (2001) found that students are unmotivated to write due to low self-confidence, lack of control over writing tasks, inadequate amount

of time to expand on writing pieces, lack of emphasis on organizers, limited peer collaboration, and insufficient relevance to real life.

Margeret and Diane (2003) revealed that as a result of implementing multiple intelligence and co-operative learning groups, students showed an increased motivation in class work. Use of multiple intelligences improved assignment completion, class participation and engagement of learners.

SUMMARY OF RELATED STUDIES ON INTER RELATIONSHIP OF VARIABLES

Area of Study	Investigator	Results
Self-concept Socio-economic status, and level of aspiration	1. Tara, 1980	Self-concept shows positive correlation with SES, level of aspiration and interest
Academic Achievement in relation to instructional design, intelligence, self-concept and Achievement motivation	1. Swean, 1984	Intelligence correlated with self-concept and achievement.
Academic Achievement home background and school background on self-concept	1. Panwar, 1986	Academic achievement, home background and school background shows effect on self-concept.
Parental Involvement and Self Concept	1. Rehana, 1986	Parentally deprived children shows low or negative self-concept
Classroom environment and Student Motivation	1. Stephanie and Hershott, 1990	Student satisfaction affects academic motivation, academic self-concept and social-self concept.

Area of Study	Investigator	Results
Co-operative Learning and Academic Self-concept	1. Robin, 1991	Co-operative learning correlated with self-concept and academic achievement.
Teacher and Parent Involvement on Academic Achievement	1. Jerome and Richard, 1992	Teacher and parent involvement were predictors of academic achievement
Self-concept and Intelligence	1. Shauna and Merith, 1994	Children with high global self-concept perceived high intelligent
	2. Mavi and Patel, 1997	Intelligence negatively correlated with self-concept
School climate, family environment and Academic Motivation	1. Niebuhr, 1995	School climate and family environment have impact on academic motivation
Attitudes and Parental warmth to Academic Skills and self-perceptions of competence	1. Richman and Rescorla, 1995	Parental warmth shows correlation with self-efficiency.
Home Environment and Cognitive Development	1. Chikkara <i>et. al.</i> , 1996	Cognitive development shows correlation with home environment.
Self-esteem classroom environment and Motivation	1. Todd, 1996	Motivation is related to self-esteem.
Parents, Teachers, Peers and Motivation	1. Wentzel, 1994	Parents, teachers and peers support motivation.
Co-operative Learning, Multiple Intelligence and Motivation	1. Angela <i>et. al.</i> , 2000 2. Deborah <i>et. al.</i> , 2000	Co-operative learning and multiple intelligence strengthen motivation.

Area of Study	Investigator	Results
	3. Kariotakis <i>et. al.</i> , 2000 4. Margeret and Diane, 2003	
Goal, Values and Motivation	1. Dennis and Valentina, 2000	Seeking excellence, self-esteem, affiliation and social concern correlated with students motivation.
Classroom climate, Parent attitude, and Academic Success	1. Moriariy <i>et. al.</i> , 2001	Instructional strategies enhance student participation, parental attitude, and academic success.
Self-confidence Peer Collaboration and Motivation	1. Pamela <i>et. al.</i> , 2001	Self-confidence, time, peer collaboration affects motivation.

CONCLUSION

An extensive review of the available studies enable the investigator to arrive at the following conclusions:

Intelligence, self-concept, classroom climate and parental involvement are important determinants of academic performance. even though the relation of intelligence, self-concept, classroom climate and parental involvement on achievement motivation are well explored, the investigator could not locate more studies on scholastic motivation in relation to intelligence, self-concept, classroom climate and parental involvement independently and in combination.

Even though intelligence is said to be an important factor of academic performance in consistent relationship was seen between scholastic motivation and intelligence. Reviewed studies revealed positive correlation

between self-concept and achievement motivation, but not with scholastic motivation.

Even though studies revealed positive correlation of scholastic motivation with classroom climate, both positive and negative correlation were found with scholastic motivation and parental involvement.

In the extensive review of related studies the investigator could not locate much study showing the combined effect of select independent variables on scholastic motivation.

A thorough analysis of the nature and extent of correlation of independent variables intelligence, self-concept, classroom climate and parental involvement with dependent variable scholastic motivation can contribute much to the theory and practice of education especially in designing the appropriate learning strategies. This could expand the educational horizon of the child.

METHODOLOGY

-
- ❖ *Variables*
 - ❖ *Tools*
 - ❖ *Sample*
 - ❖ *Data Collection Procedure*
 - ❖ *Scoring and Consolidation*
 - ❖ *Procedure for Analysis of Data*
-

METHODOLOGY

This chapter details the design of the study under the following heads:

3.1. VARIABLES

3.2. METHODOLOGY

3.1. VARIABLES

The present study is an attempt to identify certain personal and environmental variables which correlate best with Scholastic Motivation of secondary school pupils. The study is designed with Scholastic Motivation as dependent variable and a group of select personal and environmental variables as independent variables.

The details relating to the selection of variables are presented below.

3.1.1. SELECTION OF VARIABLES

The variables which showed some degree of relationship with Scholastic Motivation were identified and scrutinized. The various studies conducted abroad and in India in the field of Motivation were reviewed by the investigator.

Even though studies on Student Motivation and other factors were conducted largely, the investigator could not locate adequate studies on the influence of Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status on Scholastic Motivation independently and in combination. The selection of any variable as an independent variable was based on the assumption that the variable would be related to motivation of pupils and could be used as a possible predictor of Scholastic Motivation. A detailed review of literature helped to locate the

major variables which correlate best with Scholastic Motivation. All variables identified are achievement related variables. The identified variables were classified for purpose of clarity and description. The classification is presented below.

(i) Personality variables

These include non-cognitive or affective variables like attitudes, interest, n-achievement, anxiety, adjustment, neuroticism, self-concept, curiosity, aspiration, disequilibrium, emotional conflict, persistence, hope of success and fear of failure, emotional anticipation, need for self efficiency etc.

The role of all these variables has been reported in research studies as factors correlated with Scholastic Motivation.

(ii) Aptitudinal Variables

These include cognitive variables like intelligence, special abilities like numerical ability, spacial ability, critical thinking, verbal reasoning, retentive memory, comprehension and interpretation, cognitive style, creativity, apathy etc. All these cognitive variables has been reported in research studies as factors correlated with academic motivation.

(iii) Social-Familial and Other Environmental Variables

This refers to parental education, profession and income, previous educational and social experience, locale, facilities available at home, structuring of home environment, parent-teacher communication etc. Here also there is adequate evidence of the role of these variables in deciding one's academic motivation.

(iv) Type of School Programme

This covers variables like teaching strategies adopted, learning effectiveness, evaluation procedure adopted, physical climate of the classroom, class satisfaction, teacher characteristics, democracy, friction, source of popularity, learning climate, use of audiovisual materials, size of the class, individual attention given to students, co-curricular activities, classroom atmosphere, cohesiveness, task difficulty and kind of task, competitiveness, task orientation, innovation, creative stimulation, cognitive encouragement, teacher talk and permissiveness.

(v) Approaches to Learning and Study Habits

Variables like study habits, learning style, method of work, review, use of reference materials, self-diagnosis, examination participations, regularity in studies, learning strategy and time etc. all come under this category.

3.1.1.1. Criteria Used for Selection of the Variables

After identifying a broad spectrum of factors, the investigator made a careful selection of the variables to be included for the study. The choice of the variables was made on the basis of the following major considerations.

- (i) The factors selected should be related to the student achievement
- (ii) The factors selected should specifically fall in to personal, environmental and socio-familial categories.
- (iii) Factors selected should be highly related to motivation as shown in related studies.
- (iv) The selected variables should lend themselves to objective and group measurement.

- (v) Standardised tests should as far as possible be available for most of the variables or the variables selected should be such that tests could be developed within a reasonable time.

On the basis of the above criteria the following independent variables were chosen, as detailed below.

3.1.1.2. Independent variables

Personal, environmental and social variables have been introduced as the independent variables of the study. Details of the select variables are as follows.

- (i) Intelligence
- (ii) Self-Concept
- (iii) Classroom Climate
- (iv) Parental Involvement
- (v) Socio-Economic Status

3.1.1.3. Dependent variable

'Scholastic Motivation' is the dependent variable of the study.

3.2. METHODOLOGY

The methodology of the study has been described under the following major heads.

3.2.1. TOOLS USED FOR MEASUREMENT

3.2.2. SAMPLE USED FOR THE STUDY

3.2.3. DATA COLLECTION PROCEDURE

3.2.4. SCORING AND CONSOLIDATION OF DATA

3.2.5. PROCEDURE FOR ANALYSIS OF DATA

3.2.1. TOOLS USED FOR MEASUREMENT

For the present study, the independent variables were measured using standardised tools readily available. The dependent variable Scholastic Motivation was measured by a scale constructed by the investigator in consultation with the experts.

The following tools were used for collecting the needed data.

(i) Standard Progressive Matrices Test

It is a non-verbal intelligence test developed by Raven (1958). It consists of 5 sets of series including 12 items in each sets.

(ii) Scale of Self-Concept

Scale of Self-Concept was used to measure the concept of pupils about themselves. It was developed by Sumangala and Sujatha (1994). This scale consists of forty items in the form of statements.

(iii) Scale of Classroom Climate

Scale of Classroom Climate was used to measure the classroom climate of Secondary School Pupils. It was constructed and standardised by Usha and Sunitha (1997).

(iv) Parental Involvement Inventory

The Parental Involvement Inventory was used to measure the extent and nature of parental involvement in the overall development of the child. This test was developed and standardised by Usha and Kuruvilla (1999).

(v) General Data Sheet

The items in the General data sheet helped to collect information regarding the educational, occupational and income level of both father and mother and the total socio-economic status.

(vi) Scale of Scholastic Motivation

For the assessment of Scholastic Motivation, a scale was developed by the investigator. This multidimensional scale is modelled after the Cassidy and Lynn Achievement Motivation Questionnaire (1989).

Description of The Tools

A brief description of the various tools used for measuring the needed data for the study is presented in the following text.

3.2.1.1. Standard Progressive Matrices Test (1958)

Intelligence of the subjects was measured by administering the standard form of the Raven's Progressive Matrices Test. This is a non-verbal test and is intended to evaluate a person's ability to discern and utilise a logical relationship presented by non-verbal materials.

This test is made up of 5 sets or series, of diagrammatic puzzles exhibiting serial changes in two dimensions simultaneously. Each puzzle has a part missing, which the person taking the test has to find among the options provided.

The test consists of 60 problems divided into five sets (A, B, C, D and E) each made up of 12 problems. In each set the first problem is as nearly as possible self evident. The problems which follow were progressively more difficult.

The five sets provide five opportunities to grasp the method of thought required to solve the problems and five progressive assessments of a person's capacity for intellectual activity.

The first set, set A include rather simple problems. The correct answer figure can be selected from the six alternatives and the selected one will fit into the pattern, thus giving it a definite shape.

The answer figures to the problems in set 'B' are somewhat identical to the elements given in the pattern. In some problems the answer figure can also be derived as the mirror image of the element which is printed at the top position.

Set 'C' is designed to provide a reliable estimate of a person's capacity to think clearly when allowed to work steadily at his or her own speed.

In set 'D', to solve the problems in this section a high level of reasoning power is required. The items in this set distinguishes the immature person from the person of normal, or more than normal, intellectual ability. The test item follow a particular order and twisting to get the desired answer figure.

In set 'E' eight alternatives are given for each problem. All subjects, are given exactly the same series of problems in the same order and asked to work at their own speed, without interruption, from the beginning to the end of the test.

This test is standardised one and its validity and reliability have been established. The reliability coefficients as reported by Raven vary from the low 0.80 to the low 0.90. In a study conducted in Kerala by Nair; the reliability co-efficient was found to vary from 0.79 to 0.86 (by split-half method) and from 0.84 to 0.91 by test-retest method.

Validity of the test has studied in a variety of the usual ways. When Stanford-Binet test was used as the criterion, correlation varied from 0.50 to 0.86. Most of the coefficients of the correlation with these two widely used criterion were 0.60 and 0.70.

Response sheet and the scoring key of the Standard Progressive Matrices are appended as Appendix IA and IB respectively.

3.2.1.2. Scale of Self-Concept

This tool is constructed and standardised by Sumangala and Sujatha (1994). This is in the form of a five point Likert Type Attitude Scale with 40 statements (23 positive and 17 negative).

The scale consists of six constructs of self-concept viz., Personal Self, Social Self, Family Self, Physical Self, Academic Self and Moral-Ethical Self. Each construct is described below for its details.

- (i) **Personal Self:** Personal self refers to the person's construct/concept of himself with his own abilities and deficiencies and how he thinks others may look upon him. The experiences with others in the environment may provide a picture of himself as a person.
- (ii) **Social Self:** Perception of an individual in relation to others and the role one maintains in the societal relations come under this category. It determines whether the person is social or not. The cumulative consequences of social learning are internalised in the self image and laid down in layers leading to the formulation of a particular personality.
- (iii) **Family Self:** An important factor that contributes to self image is the personal interactions that take place in the family. The growing child unknowingly emulates the attitudes and behaviour of those few people

who are emotionally essential to him. If their words and behaviours teach him that he is competent and worthy it forms the centre core of his self image leading to the formulation of a healthy self concept. If he grows among criticism and rejection or if he cannot live up to the expectations of his parents he has little opportunity to develop a positive concept of himself.

- (iv) **Physical Self:** Physical Self is an essential factor in the creation of self image. It refers to one's own body image. The child who has physical handicaps such as impaired vision or hearing or speech impediments under-estimate himself and develop feelings of inferiority and unworthiness.
- (v) **Academic Self:** The child who can achieve academic success in school or who has qualities that make him acceptable to his peers develop a healthy self-concept strengthening his ego. Academic Self is the concept one has about his academic performance. A child who encounters failures and frustrations in school is unhappy and develops complexes leading to a negative self-concept.
- (vi) **Moral-Ethical Self:** Moral-Ethical Self refers to the values, accomplishments and behaviours of others which the child has incorporated in his self. It differs from person to person. Each child gets his own version of values from the people whom he encounter with may be other children, teachers, heroes, fictional figures and athletes. These values are absorbed into his self system.

Scoring

A subject has to respond to each statement by choosing any one of the five alternatives, 'Very much like this', 'Like this', 'Uncertain', 'Not like this', 'Not at all like this'.

For positive statements, the scoring scheme is 5, 4, 3, 2 and 1 for responses like 'Very much like this', 'Like this'; 'Uncertain'; 'Not like this'; and 'Not at all like this' respectively. The scoring is in the reverse order for negative statements.

Reliability and validity

The Reliability of the scale is 0.894 and Validity is 0.540 which shows the scale is highly reliable.

The Scale of Self-Concept (Malayalam version) and the response sheet are appended as Appendix IIA and IIB respectively.

3.2.1.3. Scale of Classroom Climate

Scale of Classroom Climate is used to measure the classroom climate of secondary school pupils. It was constructed and standardised by Usha and Sunitha (1997).

The scale consists of eight elements, viz., Physical climate, Class satisfaction, Positive teacher characteristics, Negative teacher characteristics, Democracy, Friction, Source of popularity and Learning climate.

- (i) **Physical Climate:** It is the availability of adequate books, equipments, space and lighting.
- (ii) **Class Satisfaction:** It is the extent of enjoyment of the class.
- (iii) **Positive teacher characteristics:** Characteristics of teacher that are good for teaching-learning situation such as teacher involvement and teacher support are positive teacher characteristics.
- (iv) **Negative teacher characteristics:** Characteristics of teacher that have negative influence upon the students, and in teaching learning situations.

- (v) **Democracy:** It is the extent to which students share equality in decision making related to the class.
- (vi) **Friction:** It is the amount of tension and quarrelling among students in the class.
- (vii) **Source of popularity:** Extent to which the individual become popular among his class members. Popular students are better adjusted emotionally and have higher self-concept. They are general, outgoing, honest, fair, loyal and sincere.
- (viii) **Learning climate:** It is the psychological and interpersonal atmosphere that exists in a classroom or, other educational setting, primarily influenced by teachers attitude and behaviour.

Scoring

The subject are required to rate each statement on a three-point scale corresponding to the answer, 'Agree'; 'Uncertain'; and 'Disagree' for statements 1 to 20 and 'Always'; 'Some times'; and 'Never' for statements 21 to 58. The scale consists of 58 items; both positive and negative with instructions to respond. The scoring is 3,2,1 for positive items and 1,2,3 for negative items. The validity of the scale is 0.789. The reliability value of test-retest is 0.901.

Scale of Classroom Climate (Malayalam Version) and the response sheet are appended as Appendix IIIA and IIIB respectively.

3.2.1.4. Parental Involvement Inventory

The Parental Involvement Inventory was developed and standardised by Usha and Kuruvilla (1999). This inventory is intended to assess the extent and nature of Parental Involvement in the overall development of the child.

This multidimensional inventory consists of ten components, viz., Emotional Support, Discipline, Health Care, Structuring Home Environment, Communication, Encouragement, Recreation, Expectations and Aspirations, Dealing Friends and Participation in School Activities.

- (i) **Emotional Support:** It is the behaviour of parents towards the child that makes him feel comfortable and confirms in his mind that he is basically accepted and approved as a person.
- (ii) **Discipline:** It denotes the parental behaviour involved in directing and guiding the behaviour of the child.
- (iii) **Health care:** It denotes the extent to which parents are concerned with the health and physical well being of the child.
- (iv) **Structuring Home Environment:** It denotes the parental behaviours associated with providing material and non-material learning facilities, a happy home environment, home tutoring, planning of family activities, assignment of responsibilities in the family etc.
- (v) **Communication:** It denotes the parental behaviour of ensuring mutual interaction with the child.
- (vi) **Encouragement:** It denotes the way parents motivate the child in an activity by way of providing verbal, non-verbal material or immaterial rewards.
- (vii) **Recreation:** It denotes the parental activities of sharing their leisure time with children and having fun with them by way of engaging in any intellectual or non intellectual pleasurable activities.

- (viii) **Expectations and Aspirations:** This denotes the ambitions and wishes that parents keep on about the future of their child especially with regard to his educational attainment and career prospects.
- (ix) **Dealing Friends:** This denotes the parental behaviours associated with awareness about friendships of their children, the guidance parents provide in choice of friends, the way parents accept the child's friends and interact with them etc.
- (x) **Participation in School Activities:** This stands for the extent to which parents take part in children's schooling by way of contacting teachers, participating in school activities like PTA, school days and supporting school by way of material, physical, intellectual or moral support.

Scoring

The inventory consists of 54 items of which 43 are positive and 11 are negative. Respondents have to mark any one of three alternatives, 'Often'; 'Sometimes'; or 'Rarely'. Parental Involvement Inventory measures both paternal involvement and maternal involvement, since the same items are used to assess both paternal and maternal involvements.

The scoring is 3-2-1 for the positive items and 1-2-3 for the negative items. The coefficient of validity was found to be 0.754 (N=50) and the reliability co-efficient was found to be 0.823.

The Parental Involvement Inventory (Malayalam version) and the response sheet are appended as Appendix IVA and IVB respectively.

3.2.1.5. General Data Sheet

General Data Sheet is divided into two sections. The first section elicits the general information about the subject regarding name of pupil, sex, age, caste and religion, number of elder siblings, number of younger siblings, locality of the school and name of the school. The second section is used to elicit information regarding level of education, occupation and income of parents.

The information collected through the first section of the General Data Sheet facilitated in classifying students - sex wise, rural/urban wise, type of management wise. The information gathered from the second section of the General Data Sheet was used to measure the educational level, occupational level and income level of father and mother. Mean of these two information was used to measure the Socio-economic status of the pupils.

Scoring Procedure

In deciding the Socio-Economic Status, the scoring procedure conventionally used by the previous researchers were used. The scoring scheme suggested for income was revised to catch up with the rising cost of living as income increases.

The General Data Sheet used in the present study measures three dimensions of socio-economic status viz., education, occupation, and income level of the family. Each variable in the scale has been divided into categories on the basis of the discussions held with the experts in the field and suggestions given by them. The details regarding the categories and the respective weightages are presented in Table below.

TABLE 3.1

Scoring Scheme of the General Data Sheet

Variables	Categories	Weightage
Mother's education level/Father's educational level	1. Illiterate	5
	2. Primary education	10
	3. Upper Primary Education	15
	4. High School Education	20
	5. Intermediate/TTC/PDC/etc	25
	6. B.A/B.Com/B.Sc/Engg. Diploma etc.	30
	7. M.A/M.Sc/M.Com/M.B.B.S./Engg. Degree, etc	35
Mother's Occupational level/Father's Occupational level	1. Unemployed	5
	2. Unskilled	10
	3. Semi skilled	15
	4. Skilled	20
	5. Semi-Professional	25
	6. High-Professional	30
Mother's income level/Father's income level	1. Below Rs.1000	5
	2. Between Rs.1001/ to Rs.2000/-	10
	3. Between Rs.2001/- to Rs.3000/-	15
	4. Between Rs.3001/- to 4000/-	20
	5. Between Rs.4001/- to 5000/-	25
	6. Above Rs.5000/-	30

The procedure of quantifying parental occupation level is described below.

Parental Occupation level: This has been classified into six categories. These are as follows.

- (i) **Unemployed:** Those who have no work at all. The weightage assigned to this category is five.
- (ii) **Unskilled:** Coolies, Ordinary labourers, Watchman, Peon, etc., from unskilled labourers. 10 points is assigned to this group.

- (iii) **Semi-skilled:** Farmers, Small scale merchants, Library attenders, Police constables etc., belong to this category and they are assigned 15 points.
- (iv) **Skilled:** Mechanics, Fitters, Electricians, Drivers, Photographers, Laboratory assistants, Carpenters, Document writers, Vakil clerks, Head constables, Village officers, and the like fall under this category and they are assigned 20 points.
- (v) **Semi-Professional:** Chemists, Druggists, Qualified nurses, Teachers, Managers, Superintendent of offices, Minor businessmen, Contractors, Small land lords, Sub inspector of police, Sub registrars, Assistant educational officers, Block development officers, Officers of sub-district level, Public health workers etc. fall under this category and they are assigned 25 points.
- (vi) **High-Professionals:** Ministers, Judges, Bank executives and officials, Doctors, Engineers, Lawyers, University teachers, Heads of research organisations, Heads of government departments, Secretaries of government, Big landlords, Business executives, etc., belong to this category and a 30 point score is allotted to this category.

Average of summated score for educational, occupational and income level of both the parents was taken as the score for socio-economic status of an individual. Summated score for mother's educational, occupational and income level, were taken for pupils whose father is either dead or has left the family. Summated score for father's educational, occupational and income level, were taken for pupils whose mother is either dead or has left the family.

The General Data Sheet (English version) is appended as Appendix V.

3.2.1.6. Scale of Scholastic Motivation

For the assessment of Scholastic Motivation, a scale was developed by the investigator. This is a multi-dimensional scale modelled after the Cassidy and Lynn Achievement Motivation Questionnaire (1989), which consists of seven factors namely Work ethic, Acquisitiveness, Dominance, Excellence, competitiveness, Status aspiration and Mastery. Some famous tests were also consulted. This include the Scale of Achievement Motivation of Pillai and Salimkumar (1993) and the Scale of Academic Motivation by Sasidharan (1993). Opinions from experts, researchers and the review of available literature also provided directions in the development of the scale.

Identification of Salient Dimensions

The first step in the development of Scale of Scholastic Motivation was the identification of a tentative list of the dimensions of Scholastic Motivation. As Scholastic Motivation is a global concept, several dimensions are inherent in it: Work ethic, Need for excellence, Self-esteem, Goal Orientation, Need for Mastery, Self-concept, Dominance, Social Concern, Competitiveness, Self-actualisation, Perseverance and Aspiration. Considering all these dimensions, 90 items were generated for the initial draft. These items were presented to subject experts and language experts for critical scrutiny. Some items were deleted, some were edited and modified. Hence a pool of 82 items (64 positive items and 18 negative items) are selected.

Construction of the Scale of Scholastic Motivation

In writing items particular attention was paid to ensure that each item is measuring only the dimensions represented by it. The items were subjected to expert scruitinisation. Items which were ambiguous or double barrelled

were eliminated and from the dimensions selected, items were prepared and arranged.

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Details of dimensions and an illustrative item from each dimension are given below.

- (i) **Work ethic:** It incorporate the desire to study hard and is based on the reinforcement in the performance itself. As a motivational attribute it influences attitudes, values and behaviour.

e.g.: I like to avoid those lessons which I find difficult to study

- (ii) **Need for excellence:** It is defined as competition with a standard of excellence. It is the reward obtained by making the best performance in studies.

e.g.: I prefer learning the difficult portions to the easy ones.

- (iii) **Self-esteem:** If one's learning history is characterised by enjoyment, involvement and success his/her self-esteem tends to be high. A motivated student will be confident in his ability and will have positive feelings associated with one self.

e.g.: I feel that getting high marks is not a problem for me because I can concentrate well in my studies.

- (iv) **Goal Orientation:** This factor consists of the ability to plan one's own goals and course of action. Goals should be clear precise and realistically high. Final goals may be divided into several flexible sub goals. Setting proper goals and striving for their attainment are central to the concept of scholastic motivation.

e.g.: I concentrate on my studies to achieve the top position in my class.



- (v) **Need for Mastery:** It is the satisfaction obtained when succeeding in the study of difficult matters.

e.g.: I find pleasure in answering standard questions.

- (vi) **Self-concept:** It consists of all the attitudes, abilities and assumptions that individual holds concerning himself or herself that act as a guide for behaviour.

e.g.: Even if an exam is conducted without any prior intimation, I can do well.

- (vii) **Dominance:** It include the desire to lead or to take initiative or to become a dominant member of the group.

e.g.: I like to give direction in studies to my classmates and get things going accordingly.

- (viii) **Competitiveness:** It is the satisfaction obtained while competing with others.

e.g.: Tough competition in learning inspires me.

- (ix) **Self-actualisation:** It means to fulfil one's individual nature in all its aspects, being what one can do.

e.g.: Usually I get the marks that I expect.

- (x) **Social Concern:** It includes respect for authority, influence of peer group, acceptance and respect, social responsibilities, recognition, common interest and goals, friendship, affiliation, interest in social problems etc.

e.g.: I believe that the standard of learning can be improved through peer learning activities.

(xii) **Perseverance:** Those who are high in perseverance will continue to work even though the conditions are not that positive, and even after receiving feed back of failure.

e.g.: I would spend more time in studying difficult lessons.

(xii) **Aspiration:** Scholastic motivation is linked with the quality of aspiration a student holds. If one's motivation is high his/her aspiration tend to be realistically high and attainable.

e.g.: It is the internal inspiration for success that compels me to study.

From each dimension, items were selected and arranged. The draft scale thus consisted of 80 items of which 60 were positive and 20 were negative items. Respondents have to mark any one of the three alternatives, 'Always'; 'Sometimes'; and 'Never'.

The scoring is 3-2-1 for the positive items and 1-2-3 for the negative items. The draft scale in Malayalam is presented as Appendix VIA.

Standardisation of the Scale

The draft scale was administered on a sample of 400 students of standard IX randomly selected from ten schools of Malappuram and Kozhikode districts for field testing. Time taken to finish the test was noted. An average of 60 minutes was required to finish the test completely.

Item Analysis

Item analysis was done using the method suggested by Edwards (1969). The answer sheets of 400 students were scored. Incomplete answer sheets were rejected. 385 answer sheets were obtained for analysis. Fifteen answer sheets were randomly rejected so as to reduce the number to 370

which would facilitate computational procedures. The answer sheets were arranged in the descending order of scores so as to select the top and bottom 100 subjects (27 percent of the sample) who represented the high and low scholastic motivation groups respectively. Under each group, for each item, the number of subjects making response to 'Always', 'Sometimes' and 'Never' were found out and presented in the form of a frequency table.

Item analysis was done by finding out the t-value for each item. This was done by using the following formula.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\Sigma(X_H - \bar{X}_H)^2 + \Sigma(X_L - \bar{X}_L)^2}{N(N-1)}}$$

In which \bar{X}_H is the mean response score of a given statement for the high scholastic motivation group; \bar{X}_L is the mean response score on the same statement for the low scholastic motivation group and 'N' the number of subjects in high or low groups.

The t-values of the items of the draft scale of Scholastic Motivation are presented in Table 3.2.

TABLE 3.2

Item analysis Details of Draft Scale of Scholastic Motivation

Item No.	t-value	Item No.	t-value	Item No.	t-value	Item No.	t-value
1	2.68	21	1.25	41	*5.83	61	*9.91
2	*5.72	22	*7.37	42	0.17	62	*5.95
3	4.27	23	-0.09	43	1.10	63	3.94
4	*5.99	24	*5.27	44	*7.22	64	*8.58
5	*6.80	25	-0.95	45	*8.17	65	-0.84
6	2.35	26	3.38	46	1.63	66	*9.88
7	*5.36	27	*7.45	47	*7.01	67	4.15
8	*5.30	28	0.17	48	3.91	68	*8.04
9	3.17	29	*6.71	49	*6.21	69	*5.63
10	*6.90	30	*9.97	50	*6.87	70	4.49
11	*4.73	31	*9.27	51	3.39	71	1.20
12	*4.99	32	*7.61	52	*5.61	72	*6.33
13	*5.32	33	4.26	53	3.45	73	*6.36
14	*6.15	34	*6.48	54	3.65	74	*7.97
15	*7.97	35	3.02	55	*4.55	75	3.88
16	*7.35	36	*8.14	56	*4.50	76	2.48
17	*5.41	37	*4.92	57	4.48	77	*10.71
18	*7.30	38	*6.77	58	*4.79	78	*4.92
19	*8.25	39	-0.40	59	*9.78	79	*9.13
20	*5.26	40	1.62	60	1.90	80	4.10

*Items selected for final scale.

The investigator has planned to develop a fifty statement scale as the final tool. So the items were arranged in the decreasing order of the t-value and fifty items with high t-value were selected in the final scale. Thus the final scale consisted of 39 positive and 11 negative items.

Validity and Reliability

The construct validity of the scale was established by correlating scores of this scale with those of an available standardised tool, "Scale of Achievement Motivation" (Pillai & Salimkumar, 1993). The coefficient of validity was found to be 0.705 (N = 30).

The test-retest reliability of the scale was found to be 0.783.

The indices of validity and reliability coefficients show that the scale is a reasonably valid and reliable tool for assessing the scholastic motivation of secondary school pupils.

The Scale of Scholastic Motivation (Final) in Malayalam, its English version and the response sheet are presented as Appendix VIB, VIC and VID respectively.

3.2.2. SAMPLE USED FOR THE STUDY

The important aspects of the sample selection for the study are given below.

3.2.2.1. Population of the Study

Students of Secondary Schools of Kerala are the target population for the present investigation.

3.2.2.2. Size of the Sample

Regarding the size of the sample Krech and Crutch field (1968) pointed out that a sample of 500 would yield reasonably good results which would keep the error less than five percent. But in order to get sufficient number of cases for the subgroups for the different types of analysis, the sample size was fixed as 1000.

3.2.2.3. Sampling Technique

Stratified random sampling technique which has been widely recommended by Indian social science researchers was used for the selection of sample for the present study. This technique is applicable when the population is composed of subgroups or strata of different size, so that a representative sample must contain individuals drawn from each category or stratum in accordance with the size of the group. Stratification helps to avoid bias and ensures greater representation.

3.2.2.4. Rationale for the various strata considered

The most representative of the secondary school pupils could be obtained by considering the following aspects:

- i) Sex of pupils
- ii) Rural/Urban Schools
- iii) Type of Management (Private/Government Schools).

The above mentioned aspects were considered to ensure adequate representation for the different strata. The decision regarding the proportionate representation for categories was made based on the statistics published by Director of Public Instruction, Government of Kerala. For classifying the schools, the estimated ratios (roughly taken) were as follows:

Boys	:	Girls -	1:1
Rural	:	Urban -	2:1
Government	:	Private -	2:3

Based on the ratio fixed as above, the tentative break-up of the sample was roughly estimated as shown below:

Boys	-	500	Girls	-	500
Rural	-	670	Urban	-	330
Government School	-	400	Private Aided School	-	600

The literacy rate of the state of Kerala is very high and the number of school going children in different parts of the state are almost same. Considering these aspects and for the economy of time and effort, for the collection of data, Kannur, Kozhikode, Malappuram, Palakkad and Thrissur districts were selected for the study. Assuming that the strength of pupils in standard IX will be approximately between 40 and 50, it was decided to select one class division of standard IX from each school. Therefore, it was decided to select twenty five schools for the collection of needed data.

TABLE 3.3
List of Schools Selected for the study

Sl. No.	Name of Schools	Type of School	No. of Boys	No. of Girls	Total No. of students	District	Location	Type of Management
		Mixed/Girls/Boys						Govt./Private
1.	Govt. Brannan HSS, Thalssery	Mixed	30	8	38	Kannur	Urban	Govt.
2.	Govt. HSS. Vadakkumpad	Mixed	11	20	31	Kannur	Rural	Govt.
3.	Onian High School, Kotiyeri	Mixed	13	18	31	Kannur	Rural	Private
4.	VPO High School, Chokli	Mixed	15	17	32	Kannur	Rural	Private
5.	Govt. H.S. Azchavattam	Mixed	17	22	39	Kozhikode	Urban	Govt.
6.	MMVHSS, Kozhikode	Boys	50	-	50	Kozhikode	Urban	Private
7.	SRK Mission HSS, Kozhikode	Mixed	22	28	50	Kozhikode	Urban	Private
8.	Govt. GVHSS, Feroke	Mixed	17	24	41	Kozhikode	Rural	Govt.
9.	Govt. VHSS, Cheruvannur	Mixed	11	20	31	Kozhikode	Rural	Govt.
10.	SPB High School, Ramanattukara	Mixed	20	20	40	Kozhikode	Rural	Private
11.	Farooq High School, Feroke	Mixed	-	47	47	Kozhikode	Rural	Private
12.	Govt. VHSS, Tirur	Girls	-	42	42	Malappuram	Urban	Govt.
13.	MSP HSS, Malappuram	Mixed	22	12	34	Malappuram	Urban	Private
14.	Govt. VHSS, Paravanna	Mixed	18	27	45	Malappuram	Rural	Govt.
15.	Govt. HS Athavanad	Mixed	12	29	41	Malappuram	Rural	Govt.
16.	PKMM HSS, Edarikkode	Mixed	17	21	38	Malappuram	Rural	Private
17.	SMM HSS, Rayirimangalam, Tanur	Mixed	21	19	40	Malappuram	Rural	Private
18.	CBHSS. Vallikkunnu	Mixed	24	14	38	Malappuram	Rural	Private
19.	Govt. HSS Chathannur	Mixed	18	22	40	Palakkad	Rural	Govt.
20.	THS, Thrithala	Mixed	18	19	37	Palakkad	Rural	Private
21.	Peringode High School, Peringode	Mixed	22	14	36	Palakkad	Rural	Private
22.	MJD High School, Kunnamkulam	Mixed	20	18	38	Trissur	Urban	Private
23.	Govt. HSS, Erumappetty	Mixed	22	18	40	Trissur	Rural	Govt.
24.	TMV HSS, Perumpilavu	Mixed	18	22	40	Trissur	Rural	Private
25.	SSM VHSS, Edakkazhiyur	Mixed	19	20	39	Trissur	Rural	Private
	TOTAL		457	521	978			

Final Testing

The investigator prepared the test booklets and answer sheets in the final form. For the present study 6 tests had to be administered in all.

3.2.3. DATA COLLECTION PROCEDURE

The programme for testing was arranged after visiting the selected schools. The investigator met the heads of the schools and the class teachers and had discussion with them and a schedule was fixed for testing. Two consecutive days were fixed for each school. A large sized classroom was specially arranged so that the pupils can take the tests conveniently. In the case of mixed schools (co-educational school), mixed class division was included in the sample.

In administering the tools, the conditions prescribed in the tests were strictly followed. The investigator personally administered the tools to all pupils. Necessary oral instructions were given as to how to mark the response in the response sheet provided. An interval of 5 to 10 minutes was allowed in between two tests.

Uniform procedures were observed in administering the tests in different schools. The following steps were invariably followed for administering each test.

- (i) Distribution of the test booklets to subject together with printed instruction regarding the test.
- (ii) Explaining the general directions in the booklet.
- (iii) Distribution of answer sheets with instruction for filling them up.
- (iv) Making the students familiar with the answer sheets, mode of entering responses etc.

- (v) Clearing the doubts of subjects, giving instructions regarding time limit, methods of dealing with eventualities etc.
- (vi) Strict adherence to the time limit in the case of scholastic motivation test, directions not to write in the booklets, etc.
- (vii) Giving intervals between testing
- (viii) Collecting back the test booklets and the answer sheets.

The administration of the test commenced in November 2003 and was completed by the end of January 2004. A sample of 978 pupils was collected through actual testing.

3.2.4. SCORING AND CONSOLIDATION OF DATA

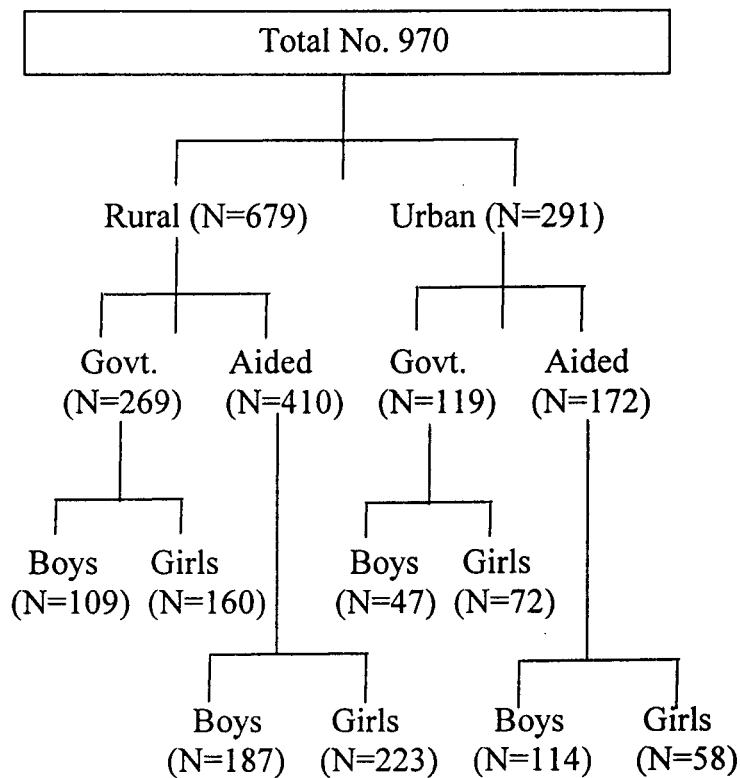
Scoring of the answer sheets was done according to the directions given in the respective test manuals. Scores of the dependent and independent variables, with other relevant data regarding particulars of each pupils was obtained. Incomplete data had to be discarded. Finally, cases that were complete in all respects (with respect to all the variables and entries) were chosen for the final analysis. This left the investigator with 970 subjects.

The scores of these subjects for different tests and other data relating to them, were tabulated on consolidated data sheets. The total sample was classified according to the pre designed categories, Boys/Girls, Rural/Urban and Government/Private with codes used for abbreviating the entries. Each subject was assigned a new serial number against which the data corresponding to the individuals were entered in separate columns. Data entered contained scores on the various tests and other descriptive data such as sex, locale, type of school, and SES of parents or guardians etc. all

converted into suitable codes. The data was entered in such a way that they would be used for computer data processing.

Break up of the final sample are presented in the Table 3.4.

TABLE 3.4
Breaking up of Final Sample



The analysis has been based on the data relating to the above 970 subjects.

3.2.5. PROCEDURE FOR ANALYSIS OF DATA

The objectives of the study and the specific hypothesis to be tested dictated use of the following techniques for analysis. The entire statistical

processing were done using statistical package of social sciences (SPSS) with the computer.

The procedure for analysis of data is described under the following heads:

3.2.5.1 Classification Techniques

3.2.5.2 Statistical Techniques

3.2.5.1. Classification Techniques

(i) Classification of the Dependent Variable

The total sample ($N = 970$) was divided into three groups based on scores of 'Scholastic Motivation' as 'High-Scholastic Motivation group' (HSM), 'Average-Scholastic Motivation group' (ASM) and 'Low-Scholastic Motivation group' (LSM). The conventional procedure of using ' σ ' distance from mean for dividing the total sample was used on the assumption that 'Scholastic Motivation' scores follow normal distribution. Subjects who scored ($M+\sigma$) and above were considered as 'High-Scholastic Motivation' group (HSM). The subjects who scored ($M-\sigma$) and below were considered as 'Low-Scholastic Motivation' group (LSM). 'Average-Scholastic Motivation' group (ASM) were those who scored between ($M+\sigma$) and ($M-\sigma$). The mean Scholastic Motivation score and standard deviation was found to be 116.613 and 12.003 for the Total Sample.

(ii) Classification of the Independent Variable

The total sample ($N=970$) was divided into three groups based on the scores of each of the independent variable as 'High-Intelligence Group' (HIG), 'Average-Intelligence Group' (AIG) and 'Low-Intelligence Group' (LIG) and Self-Concept as 'High-Self-Concept' group (HSC), 'Average-Self-Concept' group (ASC) and 'Low-Self-Concept' group (LSC). Classroom Climate was

divided into 'High-Classroom Climate' group (HCC), 'Average-Classroom Climate' group (ACC) and 'Low-Classroom Climate' group (LCC) and Parental Involvement was divided into 'High-Parental Involvement' group (HPI), 'Average-Parental Involvement' group (API) and 'Low-Parental Involvement' group (LPI). The Socio-Economic Status was divided into 'High-Socio-Economic Status' group (HSES), 'Average-Socio-Economic Status' group (ASES) and 'Low-Socio-Economic Status' group (LSES).

The conventional procedure of using ' σ ' distance from mean was used for dividing the total sample into different classes.

The mean scores and the standard deviations of independent variables are given below.

Variables	Mean	Standard deviation
Intelligence	32.834	9.958
Self-Concept	139.544	15.667
Classroom Climate	143.039	13.507
Parental Involvement	125.405	13.508
Socio-Economic Status	70.943	22.315

3.2.5.2. Statistical Techniques

The main statistical procedures employed in this study are given below.

(i) Preliminary Analysis

For the preliminary analysis of the test scores, statistical indices like Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, etc. were computed separately for the total sample and the sub-samples based on sex, locale and type of management.

(ii) Test of Significance of Mean Difference for Large Independent Samples (Guilford, 1966)

The comparison of High-, Average-, and Low- Motivated pupils with respect to the select independent variables was done with the help of tests of significance of difference between means. This techniques was also used to compare boys and girls, rural-urban and Government-Aided groups in the select variables as preliminary analysis. The difference in the mean scores was tested for significance by finding out the critical ratios. The results were interpreted using two tailed test of significance for appropriate degrees of freedom.

(iii) Pearson's Product Moment Coefficient of Correlation

This was used to estimate the degree of association between the dependent variable (Scholastic Motivation) and each one of the independent variables (five independent variables) for the whole sample and the relevant sub-samples.

The obtained 'r' has been interpreted using the following techniques.

When X and Y are two continuous interval variables, then

$$r = \frac{N \cdot \sum XY - (\sum X) \cdot (\sum Y)}{\sqrt{[N \cdot \sum X^2 - (\sum X)^2][N \cdot \sum Y^2 - (\sum Y)^2]}}$$

To interpret each 'r' the used statistical techniques are,

Test of Significance of the Correlation by Fisher's t-test

This is done by checking whether the 't' value obtained by the formula

$$t = r \sqrt{\frac{N-2}{1-r^2}}$$

exceeds 1.96 or 2.58 for significance at 0.05 level and 0.01 level respectively, where 'r' is the obtained correlation coefficient of each case.

The 0.95 confidence interval of 'r'

0.95 confidence interval of 'r' was estimated using the formulae ($r \pm 1.96 \text{ SEr}$) in which SEr is the standard error of 'r'.

$$\text{SEr} = \frac{1-r^2}{\sqrt{N-1}}$$

'r' being the obtained coefficient of correlation

Verbal descriptions (Garrett, 1979)

'r' from 0.00 to ± 0.20 indifferent or negligible

'r' from ± 0.20 to ± 0.40 low or slight relation.

'r' from ± 0.40 to ± 0.70 substantial or marked relationship.

'r' from ± 0.70 to 1.00 high to very high relationship.

(iv) Stepwise Regression Analysis (ANOVA approach)

Stepwise Regression analysis is a statistical procedure used for analysing the collective and separate contributions of two or more Independent Variables to the variation of a Dependent Variable. It can be used to check whether certain variables are caused or preceded by others to derive a functional relationships between the two sets.

This statistical technique helps to predict a Criterion or Dependent Variable from a set of Predictor or Independent Variables (Tacq, 1997). The Predictor Variables are entered one by one to find out the influence of each variable in predicting the Criterion Variable. First, the Predictor Variable having the highest correlation with the Criterion Variable is entered and then

calculate the measures like f , R , R^2 adjusted R^2 , Partial Regression Coefficients B , the Intercept B_0 , Beta weights and significance of 't' etc.

Using the F value obtained, it is possible to check whether the regressor (predictor variable entered) is significant or not. If the F -value exceeds the tabled value of F for a particular level of significance for appropriate degree of freedom, the regressor is significant. The investigator can then prepare the equation to the regression line using these quantities.

In Step II the Predictor Variable having the next largest correlation is entered. If the percentage variance contributed by the two variables is considerably higher than the percentage variance contributed by the first variable, then it can be assumed that this variable is also a significant predictor. Along with this, the equation to the regression line and R can be calculated from the regression weights computed. If the R also has increased considerably from the previous R , this is an evidence that the Predictor Variable second entered is also significant in predicting the Criterion Variable.

The general regression equation for any number of variables is given as follows:

- Y - Dependent Variable
- X - Independent Variable
- Y^1 - $B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots B_KX_K$
- B_0 - The slope (intercept), the value of Y when X_1 is equal to zero
- B_1 - Regression coefficient for the Independent Variable X_1 - The change in Y per unit increase in x_1
- x_1 - First Predictor Variable
- B_2X_2 - Coefficient and variable for the second Predictor Variable X_2
- B_kX_k - Coefficient and variable for the ' K^{th} ' Predictor Variable - X_k

To look for a function $Y_1 = B_0 + X_1B_1 + X_2B_2 \dots X_KB_K$. Which represents the linear relationship between X_1 and Y better than among other equations.

(v) One-way Analysis of Variance (Best and Khan, 1992)

Analysis of variance is an effective way to determine whether the means of more than two samples are too different to attribute the sampling error. The procedure of One-way ANOVA is through the following stepwise calculations.

Step 1: Total sum of squares, $SS_t = \sum X^2 - (\sum X)^2 / N$

Step 2: Between groups sum of squares,

$$SS_b = (\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + \dots - (\sum X)^2 / N$$

Step 3: Within groups sum of squares, $SS_w = SS_t - SS_b$

Step 4: Mean square between, MS_b/df_b and

$$\text{Mean square within, } MS_w = SS_w/df_w$$

Step 5: F-ratio, $F = MS_b / MS_w$

If for a required level of significance and for (K-1, N-k) degrees of freedom, the obtained value of F is higher than the tabled value of F, the difference in the group means is said to be significant for that level of significance.

(vi) Scheffe's Test of Multiple Comparison (Ferguson, 1976)

The procedure of Scheffe's test for multiple comparison which is often used as a follow up of ANOVA test is as follows:

Step 1: Calculate F-ratio between the pairs of means by using the within group variance estimate.

Step 2: Consult a table of F and obtain the value of F required for significance at 0.05 or 0.01 level for $df_1 = k-1$ and $df_2 = N-k$.

Step 3: Calculate F' where $F' = (k-1) F$

Step 4: Compare the values of F and F'.

For any difference to be significant at the required level, F must be greater than or equal to F'.

Chapter IV

ANALYSIS

-
- ❖ *Preliminary Analysis*
 - ❖ *Investigation of Group Difference for Sub-samples*
 - ❖ *Comparison of Three Differing Levels of Dependent Variable*
 - ❖ *Estimation of Correlation*
 - ❖ *Prediction of the Dependent Variable*
 - ❖ *Investigation of the Effect of Independent Variables on Dependent Variable*
 - ❖ *Investigation of Group Difference for the Total Sample*
 - ❖ *Conclusions and Interpretations*
-

ANALYSIS

Analysis of the data of the present study is presented in this chapter. This has been classified under the following major heads.

- 4.1 PRELIMINARY ANALYSIS
- 4.2 INVESTIGATION OF GROUP DIFFERENCES
- 4.3 COMPARISON OF THE PUPILS BELONGING TO THREE DIFFERING LEVELS OF SCHOLASTIC MOTIVATION FOR EACH OF THE INDEPENDENT VARIABLES
- 4.4 ESTIMATION OF THE RELATIONSHIP BETWEEN EACH OF THE INDEPENDENT AND DEPENDENT VARIABLES
- 4.5 PREDICTION OF DEPENDENT VARIABLE USING INDEPENDENT VARIABLES.
- 4.6 INVESTIGATION OF THE EFFECT OF EACH OF THE INDEPENDENT VARIABLES ON DEPENDENT VARIABLE.
- 4.7 INVESTIGATION OF GROUP DIFFERENCES IN SCHOLASTIC MOTIVATION FOR THE TOTAL SAMPLE
- 4.8 CONCLUSIONS AND INTERPRETATIONS

4.1. PRELIMINARY ANALYSIS

The distribution of the scores of the different variables were examined in order to understand their important properties.

The statistical constants for the score distribution of the independent variables and Scholastic Motivation (dependent variable) for the total sample are given in Table 4.1.

TABLE 4.1

Statistical Constants for the Score Distribution of the Select Independent and Dependent Variables

Sl. No.	Variables	Mean	Median	Mode	Standard Deviation	Kurtosis	Skewness
<i>Independent Variables</i>							
1.	Intelligence	32.834	34.000	34.000	9.958	-0.203	-0.568
2.	Self-Concept	139.544	139.000	148.000	15.667	-0.222	0.175
3.	Classroom Climate	143.039	145.000	149.000	13.507	1.253	-0.763
4.	Parental Involvement	125.405	126.000	133.000	13.508	1.186	-0.517
5.	Socio-Economic Status	70.943	70.000	60.000	22.315	3.641	1.175
<i>Dependent Variable</i>							
6.	Scholastic Motivation	116.613	117.000	115.000	12.003	-0.002	-0.282

From the Table 4.1 it can be seen that the statistical constants of the independent variables and the dependent variable are close approximations to values expected for normal distribution.

The means and standard deviations of the six variables were worked out for the whole sample and are presented in Table 4.2.

TABLE 4.2

Statistical Summary of the Scores for the Whole Sample

Sl. No.	Variables	Total Boys N = 457		Total Girls N = 513		Total Rural subjects N=679		Total Urban subjects N=291		Total Govt. subjects N=388		Total Private subjects N=582		Total subjects N=970	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1.	Intelligence	33.917	9.335	31.869	10.395	31.710	10.209	35.457	8.820	31.887	9.458	33.466	10.236	32.834	9.958
2.	Self-Concept	139.786	15.448	139.329	15.872	139.524	15.798	139.591	15.385	141.064	15.607	138.531	15.639	139.544	15.667
3.	Classroom Climate	139.151	14.239	146.503	11.799	144.726	13.129	139.103	13.580	145.000	13.161	141.732	13.588	143.039	13.507
4.	Parental Invovlement	125.209	13.936	125.579	13.127	125.510	13.248	125.160	14.119	127.688	12.984	123.882	13.647	125.405	13.508
5.	Socio-Economic Status	73.096	21.719	69.025	22.682	67.342	22.218	79.347	20.212	69.188	21.175	72.113	22.987	70.943	22.315
6.	Scholastic Motivation	114.790	12.317	118.238	11.488	116.884	12.118	115.983	11.727	118.791	12.111	115.162	11.718	116.613	12.003

4.2 INVESTIGATION OF GROUP DIFFERENCES

In this section of analysis, investigation of sex, locale, and management differences for the independent and dependent variables were computed.

The intention was to find out whether any significant difference exists in the mean scores of independent and dependent variables for the sub samples of Boys and Girls, Rural and Urban, Government and Private samples. For this purpose, means and standard deviations of the variables were calculated separately and were subjected to two-tailed test of significance of differences. The whole sample were treated as large and independent.

4.2.1 Investigation of Gender Differences

In order to study the sex difference in the total sample, the means and standard deviation of the independent variables and dependent variable of Boys and Girls were subjected to two-tailed test of significance of difference between means.

The statistical data used and the result of the test of significance of the mean scores of the independent and dependent variables for Boys and Girls are given in Table 4.3.

TABLE 4.3

**Data and Results of the Test of Significance of the Mean
Scores of Independent and Dependent Variables for Boys and Girls**

Sl. No.	Variables	Boys (N = 457)		Girls (N = 513)		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	33.917	9.335	31.869	10.395	3.23	0.01
2.	Self-Concept	139.786	15.448	139.329	15.872	0.45	NS
3.	Classroom Climate	139.151	14.239	146.503	11.779	8.69	0.01
4.	Parental Involvement	125.209	13.936	125.579	13.127	0.42	NS
5.	Socio-Economic Status	73.096	21.719	69.025	22.682	2.85	0.01
6.	Scholastic Motivation	114.790	12.317	118.238	11.488	4.49	0.01

NS: Not Significant.

The critical ratios indicated that boys and girls differ significantly for the independent variables- Intelligence, Classroom Climate and Socio-Economic Status and for the dependent variable Scholastic Motivation. Since the value of the critical ratios exceed 2.58, the difference is significant at 0.01 level.

The values of the critical ratios obtained for Self-Concept and Parental Involvement are below 1.96 which is the critical limit set for 0.05 level of significance. This indicates that there is no significant difference between boys and girls for these two independent variables

4.2.2. Investigation of Locale Differences

Comparison of the mean scores of the independent and dependent variables for Rural-Urban groups were computed using two-tailed test of significance of difference between means.

The data and the results of the mean scores are given in Table 4.4.

TABLE 4.4
Data and Results of the
Test of Significance of the Mean Scores of the
Independent and Dependent Variables for Rural and Urban Sample

Sl. No.	Variables	Rural Subjects (N = 679)		Urban Subjects (N = 291)		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	31.709	10.209	35.457	8.820	5.78	0.01
2.	Self-Concept	139.524	15.798	139.591	15.385	0.06	NS
3.	Classroom Climate	144.726	13.129	139.103	13.580	5.97	0.01
4.	Parental Involvement	125.510	13.248	125.160	14.119	0.36	NS
5.	Socio-Economic Status	67.342	22.218	79.347	20.212	8.22	0.01
6.	Scholastic Motivation	116.884	12.118	115.983	11.727	1.08	NS

NS: Not Significant.

The critical ratios indicated that rural and urban subjects differ significantly for the independent variables - Intelligence, Classroom Climate, and Socio-Economic Status at 0.01 level.

The other two independent variables namely Self-Concept and Parental Involvement and the dependent variable Scholastic Motivation were found to be not significant even at 0.05 level.

4.2.3. Investigation of Management Difference

Comparison of the mean scores of the independent and dependent variables of Government and Private School pupils were attempted.

The data and the results of the test of significance of the mean scores are given in Table 4.5.

TABLE 4.5
Data and Results of the Test of
Significance of the Mean Scores of the Independent and
Dependent Variables for Government and Private School Samples

Sl. No.	Variables	Govt. School pupils (N = 388)		Private School pupils (N = 582)		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	31.887	9.458	33.466	10.236	2.46	0.05
2.	Self-Concept	141.064	15.607	138.531	15.639	2.47	0.05
3.	Classroom Climate	145.000	13.161	141.732	13.588	3.74	0.01
4.	Parental Involvement	127.688	12.984	123.882	13.647	4.38	0.01
5.	Socio-Economic Status	69.188	21.175	72.113	22.987	2.04	0.05
6.	Scholastic Motivation	118.791	12.111	115.162	11.718	4.63	0.01

Significant mean difference at 0.01 level were noticed between government and private school pupils for independent variables Classroom Climate and Parental Involvement and for the dependent variable Scholastic Motivation where as significant difference at 0.05 level were obtained for the independent variables, Intelligence, Self-Concept and Socio-Economic status.

4.3 COMPARISON OF THE PUPILS BELONGING TO THREE DIFFERING LEVELS OF SCHOLASTIC MOTIVATION FOR EACH OF THE INDEPENDENT VARIABLES

This part of the analysis was intended to examine the ability of the independent variables to discriminate between three nearly identical groups of secondary school pupils categorised based on Scholastic Motivation.

The total sample (N=970) was divided into Low-Scholastic Motivation group (N=173), Average- Scholastic Motivation group (640), and High-Scholastic Motivation group (N=157). The details of the classifications is described in Chapter III Methodology.

The analysis involved are comparison of the Low-, Average-, and High- Scholastic Motivation groups (taken in pairs) with respect to the mean scores of the independent variables.

4.3.1 Comparison of 'Low'- and 'Average'- Scholastic Motivation groups with respect to Independent Variables

The comparison of 'Low' - 'Scholastic' Motivation groups (LSM) and 'Average' 'Scholastic Motivation groups (ASM) was done by testing the significance of mean difference for each of the five independent variables. The difference between the means was tested using the two-tailed test.

The results of the test of significance of mean difference for LSM and ASM groups for the five independent variables are presented in Table. 4.6.

TABLE 4.6

**Data and Results of the
Test of Significance of the Difference
Between the Mean Scores of Independent Variables
of 'Low' and 'Average' Scholastic Motivation Groups**

Sl. No.	Variables	LSM (N = 173)		ASM (N = 640)		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	32.133	9.829	32.425	9.904	0.35	NS
2.	Self-Concept	128.792	13.067	138.792	13.607	8.85	0.01
3.	Classroom Climate	134.734	14.261	143.163	12.447	7.08	0.01
4.	Parental Involvement	116.500	13.289	125.466	12.157	8.01	0.01
5.	Socio-Economic Status	69.884	23.215	69.297	21.007	0.30	NS

LSM - Low Scholastic Motivation group

ASM - Average Scholastic Motivation group

From the table it is observed that three independent variables namely Self-Concept, Classroom Climate and Parental Involvement show significant mean difference beyond 0.01 level. The other variables namely Intelligence and Socio-Economic Status do not show significant differences in the mean scores between Low- Scholastic Motivation group and Average- Scholastic Motivation group. Although the two-tailed test is not intended to throw light on the direction of mean difference, it may be noted that the measures of Average-Scholastic Motivation group were found to be higher than the measures of the Low-Scholastic Motivation group for three independent

variables namely, Self-Concept, Parental Involvement and Classroom Climate. In the case of Intelligence and Socio-Economic Status, Low-Scholastic Motivation group and Average-Scholastic Motivation group are identical. The critical ratio of these two variables are very nominal (0.35 and 0.30 respectively). The variables which discriminate between Low-Scholastic Motivation group and Average-Scholastic Motivation group are presented below in the descending order with respect to the magnitude of the absolute values of the critical ratios obtained.

Self-Concept	(C.R) = 8.85
Parental Involvement	(C.R) = 8.01
Classroom Climate	(C.R) = 7.08
Intelligence	(C.R) = 0.35
Socio-Economic Status	(C.R) = 0.30

4.3.2 Comparison of 'Low'- Scholastic Motivation group and 'High'- Scholastic Motivation group with Respect to Independent Variables

The comparison of 'Low'- Scholastic Motivation group (LSM) and 'High'- Scholastic Motivation group (HSM) was done by computing the test of significance of mean differences for the independent variables. The results are presented in Table 4.7.

TABLE 4.7

**Data and Results of the Test of
Significance of the Difference Between the Mean Scores of
Independent Variables of 'Low' and 'High' Scholastic Motivation Groups**

Sl. No.	Variables	LSM (N = 173)		HSM (N = 157)		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	32.133	9.829	35.274	10.018	2.87	0.01
2.	Self-Concept	128.792	13.067	154.459	14.954	16.53	0.01
3.	Classroom Climate	134.734	14.261	151.688	11.076	12.12	0.01
4.	Parental Involvement	116.500	13.289	134.968	12.387	13.07	0.01
5.	Socio-Economic Status	69.884	23.215	78.822	24.827	3.37	0.01

LSM - Low Scholastic Motivation group

HSM - High Scholastic Motivation group

From the Table 4.7 it can be found that all independent variables namely, Intelligence, Self-Concept, Classroom Climate, Parental Involvement, and Socio-Economic Status show significant mean difference beyond 0.01 level. That is Low- Scholastic Motivation group and High-Scholastic Motivation group are not identical with respect to the all independent variables. Since the higher mean scores are attached with High-Scholastic Motivation group, they can be considered superior over Low-Scholastic Motivation group.

The variables are presented below in descending order with respect to the magnitude of absolute values of the critical ratio, obtained for 'High-Scholastic Motivation group and 'Low Scholastic Motivation group.

Variables	C.R.
Self-Concept	16.53
Parental Involvement	13.07
Classroom Climate	12.12
Socio-Economic Status	3.37
Intelligence	2.87

4.3.3 Comparison of 'Average' and 'High' Scholastic Motivation groups with respect to Independent Variables

The comparison of 'Average- Scholastic Motivation group (ASM) and 'High- Scholastic Motivation group (HSM) was done by computing the test of significance of mean differences for the five independent variables. The results are summarised in Table 4.8.

TABLE 4.8

**Data and Results of the
Test of Significance of the Difference
Between the Mean Scores of Independent Variables
of 'Average' and 'High' Scholastic Motivation Groups**

Sl. No.	Variables	ASM		HSM		Critical Ratio	Level of Significance
		Mean	S.D.	Mean	S.D.		
1.	Intelligence	32.425	9.904	35.274	10.018	3.20	0.01
2.	Self-Concept	138.792	13.607	154.459	14.954	11.97	0.01
3.	Classroom Climate	143.163	12.447	151.688	11.076	8.43	0.01
4.	Parental Involvement	125.466	12.157	134.968	12.387	8.65	0.01
5.	Socio-Economic Status	69.297	21.007	78.822	24.827	4.43	0.01

ASM - Average-Scholastic Motivation group

HSM - High-Scholastic Motivation group

The results in Table 4.8 clearly indicates that all the five independent variables, studied show significant mean differences beyond 0.01 level. Hence Average- Scholastic Motivation group and High- Scholastic Motivation group are not identical with respect to the five independent variables namely, Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status. Since the high mean scores are attached with High- Scholastic Motivation group they are considered superior over Average- Scholastic Motivation group.

The variables are presented below in descending order with respect to the magnitude of the values of the critical ratios obtained.

Variables	Critical Ratios
Self-Concept	11.97
Parental Involvement	8.65
Classroom Climate	8.43
Socio-Economic Status	4.43
Intelligence	3.20

Interpretation Based on the Levels of Significance of the Difference Between Mean Scores of the Independent Variables of the Three Differing Scholastic Motivation Groups (LSM, ASM, HSM)

In order to facilitate the interpretation of the comparison of the mean scores of the three differing Scholastic Motivation groups (Low-Average and High). Summary of the tests of significance is presented in Table 4.9.

TABLE 4.9

Summary of the Tests of Significance for the Three Scholastic Motivation Levels

Sl. No.	Independent Variables	LSM-ASM C.R.	LSM-HSM C.R.	ASM-HSM C.R.
1.	Intelligence	0.35	2.87**	3.20**
2.	Self-Concept	8.85**	16.53**	11.97**
3.	Classroom Climate	7.08**	12.12**	8.43**
4.	Parental Involvement	8.01**	13.07**	8.65**
5.	Socio-Economic Status	0.30	3.37**	4.43**

Note: ** Significant at 0.01 level.

From the table 4.9 it is evident that out of five independent variables, three variables namely, Self-Concept, Classroom Climate and Parental Involvement discriminate between the three Scholastic Motivation levels. The highly significant critical ratio obtained (well beyond 0.01 level) for all the comparisons indicate that the three levels of Scholastic Motivation groups ('Low'- 'Average' - and 'High') are essentially dissimilar with respect to the above three variables. The findings obviously confirm that the above variables can be treated as motivation determining and motivation facilitating. Hence it is likely that the differences in these independent variables, attribute significant differences for Scholastic Motivation.

The two independent variables namely Intelligence and Socio-Economic Status are found to be potent enough in differentiating the two extreme pairs of groups, 'Low-Scholastic Motivation group' (LSM) from 'High-Scholastic Motivation' group (HSM) and 'Average-Scholastic Motivation group' (ASM) from 'High- Scholastic Motivation group' (HSM).

4.4 ESTIMATION OF THE RELATIONSHIP BETWEEN EACH OF THE INDEPENDENT VARIABLES AND SCHOLASTIC MOTIVATION

An attempt was made to examine the nature and extent of the relationship between 'Scholastic Motivation' and each of the independent variables. The correlation for each pair was found out using Person's Product Moment Coefficient of Correlation.

The extent of correlation between 'Scholastic Motivation' and each of the independent variables separately for the sample of Boys and Girls, Rural and Urban subjects, Government and Private school samples and for the Total sample was examined. The criteria for assessing the level of influence of each of the independent variable on 'Scholastic Motivation' was determined

based on the magnitude and sign of 'r'. The correlation analysis was discussed separately for the select independent variables.

4.4.1. Relation Between 'Scholastic Motivation' and the Independent Variables for Sub Samples

The details of correlation obtained between 'Scholastic Motivation' and each of the independent variables for the sub samples of Boys, Girls, Rural, Urban, Government, Private and the Total Sample together with the t-value SEr, the limits of the 0.05 confidence interval and shared variance are summarised in Table 4.10, 4.11, 4.12, 4.13, 4.14, 4.15 and 4.16 respectively.

4.4.1.1. Correlation of 'Scholastic Motivation' with Independent Variables for Boys

The correlation between 'Scholastic Motivation' and the independent variables for Boys in the sample are presented in Table 4.10.

TABLE 4.10

**Correlation of 'Scholastic Motivation'
with Independent Variables for Boys (N = 457)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SEr	Confidence interval at 0.05 level		Percentage overlap $r^2 \times 100$
					Lower Limit	Upper Limit	
1	Intelligence	0.089*	1.906	0.05	-0.002	0.180	0.79
2	Self-Concept	0.523**	13.089	0.03	0.456	0.590	27.35
3	Classroom Climate	0.400**	9.309	0.04	0.323	0.477	16.00
4	Parental Involvement	0.418**	9.815	0.04	0.342	0.494	17.47
5	Socio-Economic Status	0.150**	3.236	0.05	0.060	0.240	2.25

** Indicates significance at 0.01 level

* Indicates significance at 0.05 level

The correlations obtained for four out of five independent variables for Boys, were well in excess of the level set for significance at 0.01 level as the t-values computed exceed 2.58. But 'Intelligence' is significant only at 0.05 level. This fact shows that, for Boys, there is real association between 'Scholastic Motivation' and each of the independent variables. The positive sign of the coefficients indicates that these variables and 'Scholastic Motivation' increase or decrease together.

The confidence intervals at 0.05 level were worked out for each 'r'. The values show that the population 'r's are expected to fall within the corresponding limits at the 0.05 level of probability.

The correlations were again interpreted using the descriptive categories suggested by Garrett (1979). 'Indifferent' or 'Negligible' correlation was obtained for the variables 'Socio-Economic Status' and 'Intelligence'. 'Substantial' or 'Marked' correlation was obtained for the variables 'Self-Concept', 'Parental Involvement' and 'Classroom Climate'.

The overlap of 'Scholastic Motivation' with each of the independent variables (shared variance) were worked out and are presented in descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	27.35
Parental Involvement	17.47
Classroom Climate	16.00
Socio-Economic Status	2.25
Intelligence	0.79

This shows that nearly 27 percent of the variance (the highest shared variance) of 'Scholastic Motivation' for Boys is to be attributed to 'Self-Concept', 17 percent to Parental Involvement, 16 percent to Classroom climate and two percent to Socio-Economic status. The lowest variance is noticed for 'Intelligence' (0.79) which is less than one percent

4.4.1.2. Correlation of 'Scholastic Motivation' with Independent Variables for Girls

The details of the correlation between 'Scholastic Motivation' and each of the independent variables for Girls in the sample is presented in Table 4.11.

TABLE 4.11
**Correlation of 'Scholastic Motivation'
 with Independent Variables for Girls (N = 513)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence Interval at 0.05 level		Percentage overlap $r^2 \times 100$
					Lower limit	Upper limit	
1.	Intelligence	0.124**	2.82	0.04	0.039	0.209	1.54
2	Self-Concept	0.587**	16.39	0.03	0.530	0.644	34.46
3	Class room Climate	0.342**	8.23	0.04	0.266	0.418	11.70
4	Parental Involvement	0.492**	12.77	0.03	0.426	0.558	24.21
5	Socio-Economic Status	0.141**	3.22	0.04	0.056	0.226	1.99

** Indicates significance at 0.01 level

The obtained correlation coefficients were found to be well in excess of the level set for significance at 0.01 level for all the independent variables. This fact shows that, for Girls there is real association between each of the independent variables and 'Scholastic Motivation'. The positive signs of the coefficients indicates that these variables and 'Scholastic Motivation' increase or decrease together.

The confidence interval at 0.05 level were worked out for each 'r'. The values show that the population 'r's are expected to fall within the corresponding limits at the 0.05 level of probability. The correlations were again interpreted using the descriptive categories suggested by Garrett.

'Indifferent' or 'Negligible' Correlation was obtained for the variables Socio-Economic Status and Intelligence.

'Low' or 'Slight' correlation was obtained for Classroom Climate and 'Substantial' or 'Marked' correlation was obtained for Self-Concept and Parental Involvement.

The percentage overlap of 'Scholastic Motivation' and each of the independent variables worked out are presented below in the descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	34.46
Parental Involvement	24.21
Classroom Climate	11.70
Socio-Economic Status	1.99
Intelligence	1.54

In the case of Girls, the maximum shared variance is to be attributed to 'Self-Concept' (nearly 34 per cent). The lowest value of shared variance is for 'Intelligence' (below 2 percent).

4.4.1.3 Correlation of 'Scholastic Motivation' with Independent Variables for Rural Sample

The obtained correlations for Rural sample are presented in the Table 4.12.

TABLE 4.12

**Correlation of 'Scholastic Motivation' with
Independent Variables for Rural Sample (N = 679)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence Interval at 0.05 level		Percentage overlap $r^2 \times 100$
					Lower limit	Upper limit	
1.	Intelligence	0.090*	2.35	0.04	0.015	0.165	0.81
2	Self -Concept	0.533**	16.39	0.03	0.479	0.587	28.41
3	Classroom Climate	0.382**	10.75	0.03	0.318	0.446	14.59
4	Parental Involvement	0.451**	13.15	0.03	0.391	0.511	20.34
5	Socio-Economic Status	0.174**	4.60	0.04	0.101	0.247	3.03

** Indicates significance at 0.01 level

* Indicates significance at 0.05 level.

The coefficient of correlation obtained for four out of five independent variables for Rural subjects were well in excess of the level set for significance at 0.01 level as the t-values computed exceed 2.58. But 'Intelligence' is significant only at 0.05 level. This fact shows that, for Rural subjects, there is real association between 'Scholastic Motivation', and each of the independent variables. The positive sign of the coefficients indicates that these variables and 'Scholastic Motivation' increase or decrease together.

The estimated confidence intervals at 0.05 level were worked out for all the five correlations and the limits within which the population r's are expected to fall at 0.05 level of probability are given along with the value of r's in Table 4.12.

'Indifferent' or 'Negligible' correlation was obtained for Socio-Economic Status and Intelligence. 'Low' or 'Slight' correlation was obtained for Classroom Climate, and 'Substantial' or 'Marked' correlation was obtained for Self-concept and Parental Involvement.

The overlap of 'Scholastic Motivation' with the independent variables (shared variance expressed as a percentage) are presented as follows.

Variables	Percentage of Shared Variance
Self-Concept	28.41
Parental Involvement	20.34
Classroom Climate	14.59
Socio-Economic Status	3.03
Intelligence	0.81

For Rural sample, the high value of shared variance is for Self-Concept (nearly 28 percent) and the lowest shared variance is attributed to 'Intelligence' (below one per cent).

4.4.1.4 Correlation of 'Scholastic Motivation' with Independent Variables for Urban Sample

The value of the correlations for dependent and independent variables for the Urban sample are presented in Table 4.13.

TABLE 4.13
**Correlation of 'Scholastic Motivation'
 with Independent Variables for Urban Sample (N = 291)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence interval at 0.05 level		Percentage overlap $r^2 \times 100$
					Lower limit	Upper limit	
1.	Intelligence	0.124*	2.12	0.06	0.011	0.237	1.54
2	Self-Concept	0.586**	12.29	0.04	0.511	0.661	34.34
3	Classroom Climate	0.424**	7.96	0.05	0.330	0.518	17.98
4	Parental Involvement	0.455**	8.69	0.05	0.364	0.546	20.70
5	Socio-Economic Status	0.059	1.01	0.06	-0.055	0.173	0.35

** Indicates significance at 0.01 level.

* Indicates significance at 0.05 level.

The correlations obtained for three out of five independent variables for Urban subjects were well in excess of the level set for significance at 0.01 level as the t-values computed exceed 2.58. 'Intelligence' is significant only at 0.05 level. But for the Socio-Economic Status the 'r' failed to reach the level set even at 0.05 level of significance. It shows that except for Socio-Economic Status there is real association between 'Scholastic Motivation' and each of the four independent variables. Further, the positive sign of four correlation coefficients indicates that these four variables and 'Scholastic Motivation' increase or decrease together. The confidence interval at 0.05 level were worked out for each 'r'.

The correlations were interpreted using the descriptive categories suggested by Garrett (1979). 'Indifferent' or 'Negligible' correlation was

obtained for Intelligence, and Socio-Economic status and 'Substantial' or 'Marked' correlation was obtained for other independent variables, Self-concept, Parental involvement and Classroom Climate.

The overlap of 'Scholastic Motivation' with each of the independent variables are given below in descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	34.34
Parental Involvement	20.70
Classroom Climate	17.98
Intelligence	1.54
Socio-Economic Status	0.35

This shows that nearly 34 per cent of the variance (the highest shared variance) of Scholastic Motivation for Urban subjects is to be attributed to Self-Concept. The lowest shared variance is noticed for 'Socio-Economic Status' (below one per cent).

4.4.1.5. Correlation of 'Scholastic Motivation' with Independent Variables for Government School Samples

The value of the correlations between Scholastic Motivation and the independent variables for Government School Subjects in the total sample are presented in Table 4.14.

TABLE 4.14

**Correlation of 'Scholastic Motivation' with
Independent Variables for Government School Samples (N=388)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence interval at 0.05 level		Percentage overlap $r^2 \times 100$
					Lower limit	Upper limit	
1.	Intelligence	0.267**	5.44	0.05	0.175	0.360	7.13
2	Self -Concept	0.531**	12.31	0.04	0.460	0.602	28.20
3	Classroom Climate	0.341**	7.13	0.04	0.253	0.429	11.63
4	Parental Involvement	0.408**	8.78	0.04	0.325	0.491	16.65
5	Socio-Economic Status	0.160**	3.18	0.05	0.630	0.257	2.56

** Indicates significance at 0.01 level

The obtained correlation coefficients were found to be well in excess of the level set for significance at 0.01 level. This fact shows that, for Government school samples there is real association between each of the independent variables and 'Scholastic Motivation'. The positive signs of the coefficients indicates that these variables and 'Scholastic Motivation' increase or decrease together.

The confidence interval at 0.05 level were worked out for each 'r'. The values show that the population 'r's are expected to fall within the corresponding limits at the 0.05 level of probability.

'Indifferent' or 'Negligible' Correlation was obtained for Socio Economic Status. 'Low' or 'Slight' correlation was obtained for Classroom

Climate and Intelligence and 'Substantial' or 'Marked' correlation was obtained for Self-Concept and Parental Involvement.

The percentage overlap of 'Scholastic Motivation' and each of the independent variables ie., shared variance expressed as a percentage were worked out and are presented below in the descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	28.20
Parental Involvement	16.65
Classroom climate	11.63
Intelligence	7.13
Socio-Economic Status	2.56

In the case of Government school samples, the maximum shared variance is to be attributed to 'Self-Concept' (below 29 percent). The lowest value of shared variance is 'Socio-Economic Status' (nearly 3 percent).

4.4.1.6 Correlation of 'Scholastic Motivation' with Independent Variables for Private School Samples

The details of correlation obtained for Private school samples are presented in the Table 4.15.

TABLE 4.15

**Correlation of 'Scholastic Motivation' with
Independent Variables for Private School Samples (N= 582)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence interval at 0.05 level		Percentage overlap r ² x100
					Lower limit	Upper limit	
1.	Intelligence	0.001	0.02	0.04	-0.080	0.082	0.01
2	Self -Concept	0.553**	15.98	0.03	0.497	0.609	30.58
3	Classroom Climate	0.411**	10.86	0.03	0.343	0.479	16.89
4	Parental Involvement	0.463**	12.58	0.03	0.399	0.527	21.44
5	Socio-Economic Status	0.129**	3.13	0.04	0.049	0.209	1.66

** Indicates significance at 0.01 level

The obtained correlations between 'Scholastic Motivation' and the independent variables are well in excess of the level set for significance at 0.01 level (t-value exceed 2.58) except for the variable 'Intelligence'. For the variable 'Intelligence' the 'r' is not significant even at 0.05 level. It shows that except for 'Intelligence' there is real association between 'Scholastic Motivation' and each of the four independent variables. Further, the positive sign of these four correlation coefficients indicates that these four variables and 'Scholastic Motivation' increase or decrease together. The confidence interval at 0.05 level were worked out for each 'r'.

'Indifferent' or 'Negligible' correlation was obtained for Socio-Economic Status and Intelligence and 'Substantial' or 'Marked' correlation was obtained for Self-Concept, Parental Involvement and Classroom Climate.

The overlap of 'Scholastic Motivation' with each of the independent variables are given below in descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	30.58
Parental Involvement	21.44
Classroom Climate	16.89
Socio-Economic Status	1.66
Intelligence	0.01

This shows that nearly 31 percent of the variance of 'Scholastic Motivation' is to be attributed to Self-Concept of the sample for Management schools. The lowest variance is noticed for Intelligence (0.01) of the sample for Management schools less than one per cent.

4.4.2 Correlation of 'Scholastic Motivation' with Independent Variables for Total Sample

The details of correlation obtained for the Total sample together with the limits of the 0.05 confidence interval were worked out and the results are summarised in Table 4.16.

TABLE 4.16
**Correlation of 'Scholastic Motivation' with
 Independent Variables for the Total Sample (N= 970)**

Sl. No.	Independent Variables	Correlation with Scholastic Motivation	't' value	SE _r	Confidence interval at 0.05 level		Percentage overlap r ² x100
					Lower limit	Upper limit	
1.	Intelligence	0.091**	2.84	0.03	0.03	0.15	0.83
2	Self-Concept	0.548**	20.37	0.02	0.50	0.59	30.01
3	Classroom Climate	0.393**	13.31	0.03	0.34	0.45	15.47
4	Parental Involvement	0.452**	15.77	0.03	0.40	0.50	20.43
5	Socio-Economic Status	0.130**	4.07	0.03	0.07	0.19	1.68

** Indicates significance at 0.01 level

The coefficient of correlation between 'Scholastic Motivation' and the independent variables for the Total sample are well in excess of the level set for significance at 0.01. This shows that, for Total sample, there is real association between each of the select independent variables and 'Scholastic Motivation'. The positive signs of the coefficient indicate that these variables and 'Scholastic Motivation' increase or decrease together.

The confidence interval at 0.05 level were worked out for each 'r'. 'Indifferent' or 'Negligible' correlation was obtained for Intelligence and Socio-Economic Status.

'Low' or 'Slight' correlation was obtained for Classroom Climate, and 'Substantial' or 'Marked' relationship was obtained for Parental Involvement and self-concept.

The overlap of 'Scholastic Motivation' with each of the independent variables (shared variance expressed as a percentage) were worked out and are presented below in the descending order of importance.

Variables	Percentage of Shared Variance
Self-Concept	30.01
Parental Involvement	20.43
Classroom climate	15.47
Socio-Economic Status	1.68
Intelligence	0.83

This shows that 30 percent of the variance (the highest shared variance) of the Scholastic Motivation is to be attributed to 'Self-Concept' in the total sample. The lowest shared variance is noticed for 'Intelligence' (less than one per cent).

Discussion of Results and Interpretation

The results of the correlation between 'Scholastic Motivation' and each of the independent variables for the sub-samples Boys, Girls, Rural, Urban, Government, Private and the Total sample are summarised in Table 4.17.

TABLE 4.17

**Summary of the Correlation Between Scholastic
Motivation and Each of the Independent Variables for the
sub-samples Boys, Girls, Rural, Urban, Govt., Private and the Total Sample**

Sl. No.	Independent Variables	Boys (N= 457)	Girls (N= 513)	Rural (N= 679)	Urban (N= 291)	Govt. (N= 388)	Private (N=582)	Total Sample (N= 970)
		Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation	Value of 'r' and Verbal Interpretation
1	Intelligence	0.089 Negligible	0.124 Negligible	0.090 Negligible	0.124 Negligible	0.267 Slight	0.001 Negligible	0.091 Negligible
2	Self-Concept	0.523 Marked	0.587 Marked	0.533 Marked	0.586 Marked	0.531 Marked	0.553 Marked	0.548 Marked
3	Classroom Climate	0.400 Marked	0.342 Slight	0.382 Slight	0.424 Marked	0.341 Slight	0.411 Marked	0.393 Slight
4	Parental Involvement	0.418 Marked	0.492 Marked	0.451 Marked	0.455 Marked	0.408 Marked	0.463 Marked	0.452 Marked
5	Socio-Economic Status	0.150 Negligible	0.141 Negligible	0.174 Negligible	0.059 Negligible	0.160 Negligible	0.129 Negligible	0.130 Negligible

The results reveal that all the independent variables have significant and positive relationship with 'Scholastic Motivation'. The correlations were found to lie within the range of 0.001 to 0.587, which indicate 'Negligible' to 'Marked' correlation between the dependent variable and each of the independent variables. The study helps to assess the extent of influence that the independent variables have on 'Scholastic Motivation'.

Using correlations for six sub-samples and the total samples, it is possible to make a ranking (even though crude) of the variables according to the order of importance (of the extent of relationship) by noting the magnitude of 'r' and the verbal interpretation. Variables ranked in the order of descending importance is presented below.

Self-Concept

Parental Involvement

Classroom Climate

Socio-Economic Status

Intelligence.

It is revealed that the 'Self-Concept' influence most the 'Scholastic Motivation'; the value of 'r' ranged from 0.523 to 0.587 for the given seven samples studied.

'Parental Involvement' and 'Classroom Climate' are the next two variables which influence the 'Scholastic Motivation'. The value of 'r' ranged from 0.408 to 0.492 and 0.341 to 0.424 respectively.

The variables which influence the 'Scholastic Motivation' to a low extent are 'Socio-Economic Status' and 'Intelligence'. The value of 'r' ranged from 0.059 to 0.174 and 0.001 to 0.267 respectively.

The results reveal that of the five independent variables selected for study, 'Self-Concept' influences the 'Scholastic Motivation' of the pupils to the highest extent. The totality of attitudes, judgements and values of an individual relating to his behaviours, abilities and qualities may be decisive factor of 'Scholastic Motivation' of a pupil.

'Parental Involvement' of pupils also influences the 'Scholastic Motivation' to a great extent. It may be in the form of emotional support, expectation and aspirations, structuring home environment, dealing friends, recreation, health care, discipline, encouragement, communication, and participation in school activities.

Studies of Gottfried *et al.* (1994) and Wendy and Maria (1994) pointed out the role of parental involvement in children's academic intrinsic motivation.

'Classroom Climate' is the next factor which influences the 'Scholastic Motivation' of a child. The good atmosphere and general environment in the classroom may help motivation of a child. Kumar (1984) and Riley (1986) pointed out that the 'Classroom Climate' is positively related to Academic Motivation.

Socio-Economic Status of the family which include parents' educational, occupational, and income level also influence the Scholastic Motivation of a child to a low extent. The least influencing factor affecting 'Scholastic Motivation' of pupils in the sample was found to be 'Intelligence.'

4.5 PREDICTION OF 'SCHOLASTIC MOTIVATION' USING INDEPENDENT VARIABLES

This part of the analysis has been taken with a view to predict in the descending order of the influence of the select independent variables on 'Scholastic Motivation'.

In this section, stepwise regression analysis by ANOVA approach has been done not only to select the set of variables that best predicts the criterion variable, but also to eliminate superfluous predictor variables. The analysis has been done using computer and the details of relevant results at each step are presented. The results are described separately.

Criterion Variable (dependent variable)	:	Scholastic Motivation
Predictor Variables (independent variables)	:	1. Intelligence 2.. Self-Concept 3. Classroom Climate 4. Parental Involvement 5. Socio-Economic Status

The input data to the above analysis viz., means, standard deviations (of the criterion and predictor variables) and the correlation matrix (zero order r's) of the criterion variables with the predictor variables are reproduced in Table 4.18 and 4.19 respectively.

TABLE 4.18

**Means and Standard Deviations
of Scholastic Motivation (Criterion variable)
and Independent Variables (Predictor Variable)**

Sl. No.	Variables	Mean	Standard Deviation
	Criterion Variable		
Y	Scholastic Motivation	116.613	12.003
	Predictor Variables		
X ₁	Self-Concept	139.544	15.667
X ₂	Parental Involvement	125.405	13.508
X ₃	Classroom Climate	143.039	13.507
X ₄	Socio-Economic Status	70.943	22.315
X ₅	Intelligence	32.834	9.958

TABLE 4.19
Correlation Matrix for Dependent and Independent Variables

Sl. No.	Variables	Scholastic Motivation Y	Self- Concept X ₁	Parental Involvement X ₂	Classroom Climate X ₃	Socio- Economic Status X ₄	Intelligence X ₅
Y	Scholastic Motivation	1.000	0.548	0.452	0.393	0.130	0.091
X ₁	Self-Concept		1.000	0.464	0.354	0.113	0.147
X ₂	Parental Involvement			1.000	0.365	0.202	0.127
X ₃	Classroom Climate				1.000	-0.137	-0.073
X ₄	Socio-Economic Status					1.000	0.280
X ₅	Intelligence						1.000

The indices of correlations reported in Table 4.19 indicates that, 'Self-Concept' (Variable X_1) has the highest correlation ($r = 0.548$) with the criterion variable and hence it is selected to enter first in the analysis.

The results of the step 1 analysis is given in Table 4.20.

TABLE 4.20

Results of the Step wise Regression Analysis - Step I

Variable entered X_1		R = 0.548		
Percentage Variation		= 30.007		
β_1		= 0.548		
SE		= 0.021		
Source	D.F	S.S.	M.S.S.	F
Total	969	139614.020		
REG	1	41893.898	41893.898	
ERR	968	97720.128	100.951	414.994

The results shown in Table 4.20 suggests that the percentage variance accounted for by the variable 'Self-Concept' (X_1) in predicting Scholastic Motivation is 30.007. The β weight of this variable in writing the regression equation is 0.548, the standard error being 0.021. Therefore it is to be concluded that the regression X_1 is significant. The equation to the regression line in this case is

$$Y - \bar{Y} = \beta_1(X_1 - \bar{X}_1)$$

on simplifying this

$$(Y - 116.61) = 0.548 (X_1 - 139.54)$$

$$Y = 0.548 X_1 - (0.548 \times 139.54) + 116.61$$

$$Y = 0.548 X_1 + 40.142$$

Further analysis was taken up to see whether there is any increment in the percentage variation accounted.

Step 2

The next predictor variable in the equation is 'Parental Involvement' (X_2). The results are shown in Table 4.21.

TABLE 4.21
Results of Step 2 Analysis

Variable entered X_1	R = 0.592			
Variable entered X_2				
Percentage Variation	= 34.990			
β_1	= 0.431		SE = 0.022	
β_2	= 0.252		SE = 0.026	
Source	D.F	S.S.	M.S.S.	F
Total	969	139614.026		
REG	2	48850.483	24425.241	260.228
ERR	967	90763.543	93.861	

The results after Step 2 show that the percentage variation is 34.990. That is the percentage variation accounted for by the variables 'Self-Concept' (X_1) and 'Parental Involvement' (X_2) in predicting 'Scholastic Motivation' is 34.990.

This further suggests that by adding variable X_2 to X_1 , the percentage variation has been raised to 34.990 from 30.007., the increment in the percentage variation being 4.983. The β weight of the variables X_1 and X_2 are 0.431 and 0.252 respectively.

Regression equation therefore can be written as

$$\begin{aligned}
 Y - \bar{Y} &= \beta_1 (X_1 - \bar{X}_1) + \beta_2 (X_2 - \bar{X}_2) \\
 &= (Y-116.61) = 0.431 (X_1 - 139.54) + 0.252 (X_2 - 125.41) \\
 Y &= 0.431 X_1 - 60.142 + 0.252 X_2 - 31.603 + 116.61 \\
 Y &= 0.43 X_1 + 0.252 X_2 + 24.865
 \end{aligned}$$

After Step 2, the increment in percentage variation is revealed from the Table 4.22.

TABLE 4.22

Increment in Percentage Variation after Step 2 Analysis

Step	Variables entered	R ² x 100	Increase in R ² x 100	R
1	X ₁	30.007	4.983	0.548
2	X ₂	34.990		0.592

Step 3

The third predictor variable entered in the equation is 'Classroom Climate '(X₃)

The results are presented in Table 4.23.

TABLE 4.23
Results of Step 3 Analysis

Variable entered X_1				
Variable entered X_2				R = 0.614
Variable entered X_3				
Percentage Variation		=		37.674
$\beta_1 = 0.388$		SE =		0.023
$\beta_2 = 0.206$		SE =		0.026
$\beta_3 = 0.181$		SE =		0.025
Source	DF	S.S.	M.S.S.	F
Total	969	139614.026		
REG	3	52598.502	17532.834	194.640
ERR	966	87015.524	90.078	

The results after step 3 show that the percentage variation is 37.674. That is the percentage variation accounted for by the variables X_1 , X_2 and X_3 in predicting 'Scholastic Motivation' is 37.674

This further suggests that by adding the third predictor variable X_3 to X_2 and X_1 , the percentage variation has been raised to 37.674 from 34.990. The increment in the percentage variation from Step 2 is 2.684.

The β weights of the variables X_1 , X_2 and X_3 are 0.388, 0.206 and 0.181 respectively.

$$(Y - \bar{Y}) = \beta_1 (X_1 - \bar{X}_1) + \beta_2 (X_2 - \bar{X}_2) + \beta_3 (X_3 - \bar{X}_3)$$

$$(Y - 116.61) = 0.388 (X_1 - 139.54) + 0.206 (X_2 - 125.41) + 0.181 (X_3 - 143.04)$$

$$Y = 0.388 X_1 - 54.142 + 0.206 X_2 - 25.834 + 0.181 X_3 - 25.890 + 116.61$$

$$Y = 0.388 X_1 + 0.206 X_2 + 0.181 X_3 + 10.744$$

The increments in percentage variation after Step 3 is revealed from the Table 4.24.

TABLE 4.24

Increment in Percentage Variation after Step 3 Analysis

Step	Variables entered	R ² x 100	Increase in R ² x 100	R
1	X ₁	30.007	4.983	0.548
2	X ₂	34.990		0.592
3	X ₃	37.674	2.684	0.614

Step 4

In step 4, the predictor variable entered in the equation is 'Socio-Economic Status' (X₄).

The results of this step is presented in Table 4.25.

TABLE 4.25

Results of Step 4 Analysis

Variable entered X ₁				
Variable entered X ₂				R = 0.618
Variable entered X ₃				
Variable entered X ₄				
Percentage Variation		=		38.199
β ₁ = 0.382		SE =		0.023
β ₂ = 0.186		SE =		0.027
β ₃ = 0.201		SE =		0.026
β ₄ = 0.076		SE =		0.014
Source	DF	S.S.	M.S.S.	F
Total	369	139614.026		
REG	4	53331.732	13332.933	149.118
ERR	365	86282.294	89.412	

The results after step 4 show that the percentage variation is 38.119. The percentage variations accounted for by the variables X_1 , X_2 , X_3 and X_4 is predicting 'Scholastic Motivation' is 38.119.

It again suggests that by adding variable X_4 to X_3 , X_2 and X_1 , the percentage variation has been raised to 38.119 from 37.674, the increment in the percentage variation being 0.445.

The β weights of the variables X_1 , X_2 , X_3 and X_4 are 0.382, 0.186, 0.201 and 0.076 respectively.

Regression equation is

$$(Y - \bar{Y}) = \beta_1(X_1 - \bar{X}_1) + \beta_2(X_2 - \bar{X}_2) + \beta_3(X_3 - \bar{X}_3) + \beta_4(X_4 - \bar{X}_4)$$

$$(Y - 116.61) = 0.382(X_1 - 139.54) + 0.186(X_2 - 125.41) + 0.201(X_3 - 143.04) + 0.076(X_4 - 70.94)$$

$$Y = 0.382 X_1 - 53.304 + 0.186 X_2 - 23.326 + 0.201 X_3 - 28.751 + 0.076 X_4 - 5.391 + 116.61$$

$$Y = 0.382 X_1 + 0.186 X_2 + 0.201 X_3 + 0.076 X_4 + 5.838$$

Table 4.26 reveals the increment in percentage variation after Step 4.

TABLE 4.26

Increment in Percentage Variation after Step 4 Analysis

Step	Variables entered	$R^2 \times 100$	Increase in $R^2 \times 100$	R
1	X_1	30.007		0.548
2	X_2	34.990	4.983	0.592
3	X_3	37.674	2.684	0.614
4	X_4	38.199	0.525	0.618

Thus after step 4, by entering variables X_1 , X_2 , X_3 and X_4 respectively, 38.199 percent of the variance in Scholastic Motivation can be accounted for by the four independent variables: Self-Concept, Parental Involvement, Classroom Climate, and Socio-Economic Status. Intelligence does not further contribute to the percentage variation accounted for by the other four variables. The details regarding increase in percentage variation is summarised in Table 4.27.

TABLE 4.27

Details Regarding Increase in Percentage Variation

Sl. No.	Step	Variables entered	$R^2 \times 100$	Increase in $R^2 \times 100$	R	Increase in R
1	X_1	Self-Concept	30.007		0.548	
2	X_2	Parental Involvement	34.990	4.983	0.592	0.044
3	X_3	Classroom Climate	37.674	2.684	0.614	0.022
4	X_4	Socio-Economic Status	38.119	0.525	0.618	0.004

The data summarised and presented in Table 4.27 reveals that the asymptote of predictive accuracy is reached using four predictor variables and that further addition of predictor variables has not much to contribute to the percentage variation or to R.

Thus it can be said that the predictor variables selected from the five predictor variables to predict the criterion variable 'Scholastic Motivation' are the following.

1. X_1 – Self-Concept
2. X_2 – Parental Involvement
3. X_3 – Classroom Climate and
4. X_4 – Socio-Economic Status

Equation to the regression line to predict 'Scholastic Motivation' by means of X_1 , X_2 , X_3 and X_4 are as follows.

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Substituting the values of Y,

X_1 , X_2 , X_3 and X_4 and simplifying, this equation will be reduced to the form.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

This equation will help us to find the individual predictor values of Y given the individual values of X_1 , X_2 , X_3 and X_4 .

4.6. INVESTIGATION OF THE EFFECT OF EACH OF THE INDEPENDENT VARIABLES ON SCHOLASTIC MOTIVATION

This section of the analysis was taken up to investigate the effect of each of the independent variables namely Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status on 'Scholastic Motivation'. One-way Analysis of Variance was used to study the effects of five independent variables on the dependent variable Scholastic Motivation.

Three levels of 'Intelligence' (High-, Average- and Low- Intelligence groups); three levels of 'Self-Concept' (High-, Average- and Low- Self Concept groups); three levels of 'Classroom Climate' (High-, Average- and Low- Classroom Climate groups); three levels of 'Parental Involvement' (High-, Average- and Low- Parental Involvement groups), and three levels of 'Socio-Economic Status' (High-, Average- and Low- Socio-Economic Status groups) constituted the design.

The entire computational process was carried out by using computer facility with the help of the software, 'Statistical Package for Social Sciences' (SPSS). The details of results and discussions are presented in this section.

4.6.1. Effect of Select Independent Variables on Scholastic Motivation for Total Sample

The analysis was done in such a way that the sum of squares along with their degrees of freedom, the mean squares of variance and the corresponding F-values for the effects were computed. The tabled values of the F-ratios were consulted to ascertain the significance of the effects.

One-way ANOVA of Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status by Scholastic Motivation were worked out separately for the total sample.

4.6.1.1. Effect of Intelligence on Scholastic Motivation for Total Sample (N = 970)

The data and results of the effect of intelligence on Scholastic Motivation for Total sample are presented in Table 4.28.

TABLE 4.28

Summary of One-way ANOVA of Intelligence by Scholastic Motivation for the Total Sample (N = 970)

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F-value	Level of Significance
Between groups	1679.667	2	839.833	5.888	0.01
Within groups	137934.359	967	142.642		
Total	139614.026	969			

The Table 4.28 indicates that 'F' value for between groups and within groups of Intelligence on Scholastic Motivation is 5.888 which is greater than the table value for the corresponding degrees of freedom at 0.01 level. The 'F' value for 2df (2, 967) is 4.62.

This implies that Intelligence is having a significant effect on Scholastic Motivation.

4.6.1.2 Effect of Self-Concept on Scholastic Motivation for Total sample

The data and result of the effect of Self-Concept on Scholastic Motivation for Total Sample are presented in Table 4.29.

TABLE 4.29

**Summary of One-way ANOVA
of Self-Concept by Scholastic Motivation for the Total Sample (N= 970)**

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F-value	Level of Significance
Between groups	35827.134	2	17913.567	166.904	0.01
Within groups	103786.892	967	107.329		
Total	139614.026	969			

Table 4.29 shows that the 'F' value obtained for the between groups and within groups of Self-Concept on Scholastic Motivation is 166.904. The degrees of freedom for between group is 2 and within group is 967. The 'F' value is beyond the table value for the corresponding degrees of freedom at 0.01 level. The 'F' value for 2df (2,967) is 4.62.

This implies that Self-Concept is able to discriminate significantly on Scholastic Motivation.

So it can be concluded in the results that Scholastic Motivation is influenced by Self-Concept for Total sample.

4.6.1.3. Effect of Classroom Climate on Scholastic Motivation for Total Sample (N =970).

The data and result of the effect of Classroom Climate on Scholastic Motivation for Total Sample is given in Table 4.30.

TABLE 4.30

**Summary of One-way ANOVA of
Classroom Climate by Scholastic Motivation for the Total Sample
(N= 970)**

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F-value	Level of Significance
Between groups	15716.754	2	7858.377	61.334	0.01
Within groups	123897.272	967	128.125		
Total	139614.026	969			

Results from the Table 4.30 reveals that 'F' value obtained for the between group and within group variance of Classroom Climate on Scholastic Motivation is 61.334. The F value for 2df (2,967) is 4.62. 'F' value is greater than the Table value for the corresponding degrees of freedom at 0.01 level.

This implies that Classroom Climate is able to discriminate significantly on Scholastic Motivation. So it can be concluded that Scholastic Motivation is influenced by Classroom Climate for the Total sample.

4.6.1.4. Effect of Parental Involvement on Scholastic Motivation for Total Sample (N = 970)

The data and result of the effect of parental involvement on Scholastic Motivation for Total Sample is given in Table 4.31.

TABLE 4.31

**Summary of One-way ANOVA of
Parental Involvement by Scholastic Motivation for the Total Sample
(N = 970)**

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F-value	Level of Significance
Between groups	22673.110	2	11336.555	93.744	0.01
Within groups	116940.916	967	120.932		
Total	139614.026	969			

From the table 4.31 the 'F' value obtained for the effect of Parental Involvement on Scholastic Motivation is 93.744. The 'F' value for 2df (2,967) is 4.62. 'F' value is greater than the tabled value for the corresponding degrees of freedom at 0.01 level.

This implies that Parental Involvement is able to discriminate significantly on Scholastic Motivation.

So it can be concluded that Scholastic Motivation is influenced by Parental Involvement in the case of Total sample.

4.6.1.5. Effect of Socio-Economic Status on Scholastic Motivation for Total Sample (N=970)

The data and result of the effect of Socio-Economic Status on Scholastic Motivation for Total Sample is given in Table 4.32.

TABLE 4.32

**Summary of One-way ANOVA of Socio-Economic
Status by Scholastic Motivation for the Total Sample (N= 970)**

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F-value	Level of Significance
Between groups	2201.861	2	1100.930	7.748	0.01
Within groups	137412.165	967	142.102		
Total	139614.026	969			

Table 4.32 indicates that F-value of Socio-Economic Status on Scholastic Motivation is 7.748 which is greater than tabled value for corresponding degrees of freedom at 0.01 level. The F value for 2df (2,967) is 4.62.

This implies that Socio-Economic Status is able to discriminate significantly on Scholastic Motivation. So it can be concluded in the results that Scholastic Motivation is influenced by Socio-Economic Status for Total sample.

Overall Summary of the One-way ANOVA is presented in Table 4.33.

TABLE 4.33

**Summary of One-way
ANOVA of Intelligence, Self-Concept,
Classroom Climate, Parental Involvement and Socio-
Economic Status by Scholastic Motivation for the Total Sample (N =970)**

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares of Variance	F-value	Level of Significance
Intelligence	1679.667	2	839.833	5.888	0.01
Self-Concept	35827.134	2	17913.567	166.904	0.01
Classroom Climate	15716.754	2	7858.377	61.334	0.01
Parental Involvement	22673.110	2	11336.555	93.744	0.01
Socio-Economic Status	2201.861	2	1100.930	7.748	0.01

Summary of the One-way ANOVA reveals that the effect of independent variables i.e., Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status on 'Scholastic Motivation' are significant beyond 0.01 level in the Total sample.

4.7. INVESTIGATION OF GROUP DIFFERENCES IN SCHOLASTIC MOTIVATION FOR THE TOTAL SAMPLE

Group differences in 'Scholastic Motivation' was investigated as the obtained 'F' value were significant in all the cases. This was attempted in order to identify the groups for which significant mean difference in Scholastic Motivation exist.

Scheffe's Test of Multiple Comparison was used for comparing the different groups based on different level of the independent variables.

For comparison the 'F' ratio between pairs of mean were calculated by using the within group variance estimate developing Scheffe's procedure (Ferguson, 1976). Table of F was consulted to obtain the value of 'F' required for significance at 0.05 and 0.01 level for $df_1 = (K-1)$ and $df_2 = N-K$. Using the formula $F^1 = (K-1) F$, the quantity of F^1 was calculated the value of F and F^1 were compared. For any difference to be significant at the required level, F, must be greater than or equal to F^1 .

Group difference with respect to the mean scores of Scholastic Motivation was studied separately for the total sample. Hence investigation of group differences in 'Scholastic Motivation' formed due to three levels of independent variables; Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status using Scheffe's procedure was done for the total sample.

4.7.1. Investigation of Group Differences in Scholastic Motivation for Groups Formed on the Basis of 'Intelligence' for Total Sample

The mean scores on 'Scholastic Motivation' of the Total sample categorized into three groups based on their 'Intelligence' namely Low-Intelligence group (LIG), Average-Intelligence group (AIG), and High-Intelligence group (HIG) were compared and the results were examined.

Data and results obtained for the comparison of mean scores of 'Scholastic Motivation' for the three groups based on 'Intelligence' are presented in Table 4.34.

TABLE 4.34

**Data and Results of the Scheffe'
Test of Multiple Comparison Between
Means of Scholastic Motivation for the Total
Sample (N=970) Based on Three Groups of Intelligence**

Groups compared	Means		F-value	Value of F ¹		Level of Significance
	M ₁	M ₂		0.05	0.01	
LIG-AIG	114.540	117.520	9.569	6	9.24	0.01
LIG-HIG	114.540	117.374	8.700	6	9.24	0.05
HIG-AIG	117.374	117.520	0.026	6	9.24	N.S

LIG - Low Intelligence Group
AIG - Average Intelligence Group
HIG - High Intelligence Group

As per Table 4.34 the F-ratio obtained for LIG-AIG for Scholastic Motivation to the total sample is 9.569 which is greater than the value of F¹ (9.24) required for significance at 0.01 level for 2,967 degrees of freedom. Hence significant difference at 0.01 level exists between LIG-AIG with regard to their 'Scholastic Motivation'. For LIG-HIG, significant difference at 0.05 level is noticed, since the obtained F-value (8.700) is greater than the value of F¹ at 0.05 level of significance. No significant difference was noticed for HIG-AIG, since the obtained F-ratio (0.026) is less than the value of F¹ required for 0.05 level of significance.

4.7.2. Investigation of Group Differences in Scholastic Motivation for Groups Formed on the Basis of Self-Concept for Total Sample

The mean scores of 'Scholastic Motivation' of the total sample belonging to the three levels of 'Self-Concept' namely, Low-Self-Concept group (LSC), Average-Self-Concept group (ASC), and High-Self-Concept group (HSC) were compared and the results were examined for significance.

Data and results of the Scheffe' Test of Multiple Comparison of Mean Scores of 'Scholastic Motivation' for the three groups of the Total sample formed on the basis of 'Self-Concept' are presented in Table 4.35.

TABLE 4.35

**Data and Results of the Scheffe'
Test of Multiple Comparison Between
Means of 'Scholastic Motivation for the Total
Sample (N=970) Based on Three Groups of Self-Concept**

Groups compared	Means		F-value	Value of F ¹		Level of Significance
	M ₁	M ₂		0.05	0.01	
LSC-ASC	109.243	117.252	100.855	6	9.24	0.01
LSC-HSC	109.243	124.277	331.896	6	9.24	0.01
HSC-ASC	124.277	117.252	72.468	6	9.24	0.01

LSC - Low Self-Concept group
 ASC - Average Self-Concept group
 HSC - High Self-Concept group

As per table 4.35 the F-ratios obtained for the LSC-ASC; LSC-HSC and HSC-ASC groups for 'Scholastic Motivation' for the total sample are 100.855, 331.896 and 72.468 respectively. All the F-values are greater than the value of F¹ (9.24) required for significance at 0.01 level for 2,967 degrees of freedom. Hence significant difference at 0.01 level exist between LSC-ASC, LSC-HSC and HSC-ASC groups with regard to their 'Scholastic Motivation'.

4.7.3. Investigation of Group Differences in Scholastic Motivation for Groups Formed on the Basis of Classroom Climate for Total Sample

The mean scores on 'Scholastic Motivation' of the total sample belonging to the three nearly identical levels of 'Classroom Climate' were compared and the results were studied.

Results of the Scheffe' Test of Multiple Comparison of Mean Scores of 'Scholastic Motivation' between Low-Classroom Climate group (LCC), Average-Classroom Climate group (ACC), and High-Classroom Climate group (HCC) are Summarized and presented in Table 4.36.

TABLE 4.36

**Data and Results of the Scheffe'
Test of Multiple Comparison Between
Means of 'Scholastic Motivation for the Total
Sample (N=970) Based on Three Groups of Classroom Climate**

Groups compared	Means		F-value	Value of F ¹		Level of Significance
	M ₁	M ₂		0.05	0.01	
LCC-ACC	109.589	116.477	44.466	6	9.24	0.01
LCC-HCC	109.589	124.218	122.290	6	9.24	0.01
HCC-ACC	124.218	116.477	56.478	6	9.24	0.01

LCC - Low Classroom Climate group

ACC - Average Classroom Climate group

HCC - High Classroom Climate group

As per Table 4.36 the F-ratios obtained for the LCC-ACC, LCC-HCC and HCC-ACC groups for 'Scholastic Motivation' for the total Sample are 44.466, 122.290 and 56.478 respectively. All the F-values are greater than the value of F¹ (9.24) required for significance at 0.01 level for 2,967 degrees of freedom. Hence significant difference at 0.01 level exists between LCC-

ACC, LCC-HCC and HCC-ACC groups with regard to their 'Scholastic Motivation'.

4.7.4 Investigation of Group Differences in Scholastic Motivation for Groups Formed on the Basis of Parental Involvement for Total Sample

Mean 'Scholastic Motivation' scores of the total sample belonging to the three levels of 'Parental Involvement' namely Low-Parental Involvement group (LPI), Average-Parental Involvement group (API) and High-Parental Involvement group (HPI) were compared and the results were examined for significance.

Data and results of the Scheffe' Test of Multiple Comparison of Mean Scores of 'Scholastic Motivation' for the three groups of the total sample formed on the basis of 'Parental Involvement' are presented in Table 4.37.

TABLE 4.37

Data and Results of the Scheffe' Test of Multiple Comparison Between Means of Scholastic Motivation for the Total Sample (N=970) Based on Three Groups of Parental Involvement

Groups compared	Means		F-value	Value of F ¹		Level of Significance
	M ₁	M ₂		0.05	0.01	
LPI-API	110.615	115.531	31.304	6	9.24	0.01
LPI-HPI	110.615	122.801	181.584	6	9.24	0.01
HPI-API	122.801	115.531	76.157	6	9.24	0.01

- LPI - Low Parental Involvement group
- API - Average Parental Involvement group
- HPI - High Parental Involvement group

As per table 4.37 the F-ratios obtained for the significance of mean difference for the LPI-API, LPI-HPI and HPI-API groups are 31.304, 181.584 and 76.157 respectively which far exceeds the value of F^1 (9.24) at 0.01 level of significance. Hence significant difference at 0.01 level exists between LPI-API, LPI-HPI and HPI-API groups with regard to their 'Scholastic Motivation'.

4.7.5 Investigation of Group Differences in Scholastic Motivation for Groups Formed on the Basis of Socio-Economic Status for Total Sample

Mean scores of 'Scholastic Motivation' of the total sample belonging to the three levels of 'Socio-Economic Status' namely Low-Socio-Economic status group (LSES), Average-Socio-Economic Status group (ASES) and High-Socio-Economic Status group (HSES) were subjected to the Scheffe' Test of Multiple Comparison.

Data and results obtained for the comparison of mean scores of 'Scholastic Motivation' for the three groups based on 'Socio-Economic Status' are presented in Table 4.38.

TABLE 4.38

Data and Results of the Scheffe' Test of Multiple Comparison Between Means of 'Scholastic Motivation for the Total Sample (N=970) Based on Three Groups of Socio-Economic Status

Groups compared	Means		F-value	Value of F^1		Level of Significance
	M_1	M_2		0.05	0.01	
LSES-ASES	114.931	116.805	4.423	6	9.24	N.S
LSES-HSES	114.931	118.752	15.352	6	9.24	0.01
HSES-ASES	118.752	116.805	3.941	6	9.24	N.S

LSES - Low Socio-Economic Status group

ASES - Average Socio-Economic Status group

HSES - High Socio-Economic Status group

As per Table 4.38 the F-value obtained (15.352) for the comparison LSES-HSES was found to be greater than the value of F^1 (9.24) at 0.01 level of significance. Hence significant difference exists between these groups with regard to their mean 'Scholastic Motivation'. Since the F-values obtained for the LSES-ASES and HSES-ASES groups are not significant even at 0.05 level no significant difference exists between these groups with respect to their 'Scholastic Motivation'.

DISCUSSION

Results of the multiple comparisons with regard to the mean scores in 'Scholastic Motivation' of the three groups belonging to the three nearly identical levels of Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status for the Total sample were analysed.

a) Group Differences Based on Intelligence

The multiple comparison using Scheffe' procedure undertaken for the mean scores in 'Scholastic Motivation' for Total sample belonging to the three levels of 'Intelligence' namely LIG, AIG and HIG revealed the following:

Significant mean difference in 'Scholastic Motivation' was noticed between LIG-AIG and LIG-HIG. No significant difference was obtained for the mean scores of HIG-AIG.

It is to be concluded that the performance of students belonging to LIG-AIG and LIG-HIG are dissimilar and the mean 'Scholastic Motivation' varies when the level of 'Intelligence' changes. High mean scores in 'Scholastic Motivation' associated with Average-Intelligence Group and High-Intelligence Group suggest their advantage over the Low-Intelligence Group.

b) Group Differences Based on Self-Concept

The multiple comparison with regard to the mean scores in 'Scholastic Motivation' belonging to the three levels of Self-Concept namely, LSC, ASC and HSC reveals that in the total sample significant mean difference exists for LSC-ASC, LSC-HSC and HSC-ASC groups in 'Scholastic Motivation'. Results leads to the conclusion, that the performance of students belonging to LSC-ASC, LSC-HSC and HSC-ASC are dissimilar and the mean 'Scholastic Motivation' varies when the level of 'Self-Concept' changes. High mean scores in 'Scholastic Motivation' associated with High-Self-Concept group suggest their advantage over the Average-Self-Concept group and Low-Self-Concept group.

c) Group Differences Based on Classroom Climate

The multiple comparisons with regard to the mean scores in 'Scholastic Motivation' for Total sample belonging to the three levels of 'Classroom Climate' namely LCC, ACC and HCC reveals significant mean difference in 'Scholastic Motivation' between compared.

It is revealed that performance of students in LCC-ACC, LCC-HCC and HCC-ACC Groups are dissimilar and the 'Scholastic Motivation' varies when the level of 'Classroom Climate' changes. High mean scores in 'Scholastic Motivation' associated with High-Classroom Climate group suggest their advantage over the Average-Classroom Climate group and Low Classroom Climate group.

d) Group Differences Based on Parental Involvement

The multiple comparison with regard to the mean scores in 'Scholastic Motivation' belonging to the three levels of 'Parental Involvement' namely, LPI, API and HPI reveals that in the total sample, significant mean difference

exists for LPI-API, LPI-HPI and HPI-API groups for their 'Scholastic Motivation'.

The study leads to the conclusion that the performance of students belonging to LPI-API, LPI-HPI and HPI-API groups are dissimilar and the mean 'Scholastic Motivation' varies when the level of 'Parental Involvement' changes. High mean scores in 'Scholastic Motivation' associated with High 'Parental Involvement' group suggest their advantage over the Average-Parental Involvement group and Low-Parental Involvement group.

e) Group Differences Based on Socio-Economic Status

The multiple comparison with regard to the mean scores in 'Scholastic Motivation' belonging to the three levels of Socio-Economic-Status namely, LSES, ASES and HSES reveals significant mean difference exist for LSES-HSES group in 'Scholastic Motivation'. No significant difference were obtained for the mean scores of LSES-ASES and HSES-ASES groups. High mean scores in Scholastic Motivation associated with High-Socio-Economic Status group suggest their advantage over the Low-Socio-Economic Status group.

Chapter V

SUMMARY, FINDINGS AND SUGGESTIONS

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- ❖ *Overview of the Study*
 - ❖ *Major Findings*
 - ❖ *Tenability of Hypotheses*
 - ❖ *Suggestions for Improving Educational Practice*
 - ❖ *Suggestions for Further Research*
-

SUMMARY, FINDINGS AND SUGGESTIONS

An overview of the important aspects of the stages of conducting the study, the major findings, their educational implications and suggestions for further research in the concerned area are presented in this chapter.

5.1. RESTATEMENT OF THE PROBLEM

The present investigation was intended to find out the relation and effect of each of the select independent variables on dependent variable, and to evolve a multiple regression equation to predict Scholastic Motivation in terms of Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status. Hence the problem for the present study was stated as SCHOLASTIC MOTIVATION OF SECONDARY SCHOOL PUPILS IN RELATION TO INTELLIGENCE, SELF-CONCEPT, CLASSROOM CLIMATE AND PARENTAL INVOLVEMENT.

5.2. VARIABLES OF THE STUDY

The following independent and dependent variables were selected for the study.

a. Independent Variables

Independent variables in the present study were

- i) Intelligence
- ii) Self-Concept
- iii) Classroom Climate
- iv) Parental Involvement
- v) Socio-Economic Status

b. Dependent Variable

'Scholastic Motivation' was treated as the dependent variable of the study.

5.3. OBJECTIVES OF THE STUDY

The study was designed to test the following objectives:

1. To compare the mean scores of the independent and dependent variables for the sub-samples formed on the basis of Sex, Locale, and School Management.
2. To identify the independent variables which influence Scholastic Motivation in terms of their ability to discriminate between Low, Average and High groups when taken in pairs.
3. To estimate the relationship between each of the independent variables and Scholastic Motivation for the Total sample and sub-samples based on Sex, Locale and School Management.
4. To find out the best predictor of Scholastic Motivation from the set of five independent variables viz., Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status.
5. To develop a prediction equation for Scholastic Motivation in terms of independent variables.
6. To determine the effect of each of the independent variables on dependent variable for the Total sample.
7. To find out the group differences (High, Average, Low) in Scholastic Motivation for the Total sample.

5.4. HYPOTHESES OF THE STUDY

The hypotheses of the study based on the above objectives were:

1. There will be significant difference in the mean scores of independent and dependent variables for the sub-samples formed on the basis of Sex, Locale, and School Management.
2. There will be significant difference between Low, Average and High Scholastic Motivation groups (taken in pairs) with respect to the mean scores of independent variables.
3. There will be significant positive relation between each of the independent variables and Scholastic Motivation for Total sample and sub-samples based on Sex, Locale, and School Management.
4. Scholastic Motivation can be predicted using the set of five independent variables viz., Intelligence, Self-Concept, Classroom climate, Parental Involvement and Socio-Economic Status.
5. The effect of each of the independent variables on Scholastic Motivation will be significant for the Total sample.
6. There will be significant group difference in Scholastic Motivation for the Total sample.

5.5. METHODOLOGY

The methodology employed for the present investigation is briefly described below.

5.5.1. TOOLS USED FOR THE STUDY

The following tools were used to measure the independent and dependent variables.

- i) Standard Progressive Matrices (Raven, 1958)
- ii) Scale of Self-Concept (Sumangala and Sujatha, 1994).
- iii) Scale of Classroom Climate (Usha and Sunitha, 1997)
- iv) Parental Involvement Inventory (Usha and Kuruvilla, 1999)
- v) General Data Sheet
- vi) Scale of Scholastic Motivation (Usha and Ramakrishnan, 2002).

5.5.2. SAMPLE FOR THE STUDY

The study was conducted on a representative sample of 970 students of standard IX from twenty five schools of Kerala. Stratified random sampling technique was used with representation given to factors like Sex, Locale and School Management.

5.5.3. STATISTICAL TECHNIQUES USED

The following statistical techniques were used for the analysis of data of the present investigation.

- i) Preliminary Analysis
- ii) Test of Significance of Mean Difference for Large Independent Samples.
- iii) Pearson's Product Moment Coefficient of Correlation
- iv) Stepwise Regression Analysis
- v) One-way Analysis of Variance
- vi) Scheffe's Test of Multiple Comparison.

5.6. MAJOR FINDINGS

The important findings of the preset investigation are given below.

5.6.1. GROUP DIFFERENCE

The following major findings were obtained as a result of test of significance of mean difference for independent and dependent variables undertaken for the sub-samples based on sex, locale and school management.

1. The critical ratios indicated that Boys and Girls differ significantly for the independent variables Intelligence, Classroom Climate and Socio-Economic Status and for the dependent variable Scholastic Motivation at 0.01 level. There is no significant difference between Boys and Girls for the independent variables Self-Concept and Parental Involvement.
2. The critical ratios indicated that Rural and Urban subjects differ significantly for the independent variables Intelligence, Classroom Climate and Socio-Economic Status at 0.01 level. The other independent variables Self-Concept and Parental Involvement and the dependent variable Scholastic Motivation were not found significant.
3. Significant mean difference at 0.01 level were noticed between Government and Private school pupils for independent variables Classroom Climate and Parental Involvement and for the dependent variable Scholastic Motivation. Significant difference at 0.05 level were obtained for the independent variables Intelligence, Self-Concept and Socio-Economic Status.

5.6.2. COMPARISON OF THE PUPILS BELONGING TO THREE DIFFERING LEVELS OF SCHOLASTIC MOTIVATION FOR EACH OF THE INDEPENDENT VARIABLES

Comparison of the Low, Average, and High-Scholastic Motivation groups (taken in pairs) were done by testing the significance of mean

difference for each of the five independent variables. Out of the fifteen comparisons made, thirteen were found to be significantly different. There is no difference between LSM-ASM groups with respect to the independent variables Intelligence and Socio-Economic Status.

5.6.3. RELATIONSHIP BETWEEN EACH OF THE INDEPENDENT VARIABLES AND SCHOLASTIC MOTIVATION

The correlation between each of the independent variables and Scholastic Motivation was found out using Pearsons Product Moment Coefficient of Correlation for sub-samples based on sex, locale and school management and for the Total sample. In the total sample the coefficients of correlation of Scholastic Motivation with Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status were found to be 0.091, 0.548, 0.393, 0.452 and 0.130 respectively. All the correlations were positive and significant at 0.01 level.

Out of the thirty correlation coefficients obtained in the sub-samples of Boys and Girls, Rural and Urban, Government and Private twenty eight were found to be significant. All the correlations were positive. The correlations which were not significant were the Socio-Economic Status of the Urban sample and Intelligence of the private samples.

5.6.4. PREDICTION OF SCHOLASTIC MOTIVATION USING INDEPENDENT VARIABLES

Stepwise regression analysis has been done to select the set of variables that best predicts the criterion variable 'Scholastic Motivation'.

Given below is a list of independent variables in the descending order of correlation coefficients with 'Scholastic Motivation'.

X₁ Self - Concept

X ₂	Parental Involvement
X ₃	Classroom Climate
X ₄	Socio - Economic Status
X ₅	Intelligence

From the five independent variables, four variables were selected in the prediction equation to have a multiple correlation of 0.618. The obtained prediction equation is:

$$Y (\text{Scholastic Motivation}) = 0.382X_1 + 0.186X_2 + 0.201X_3 + 0.076X_4 + 5.838$$

5.6.5. THE EFFECT OF INDEPENDENT VARIABLES ON SCHOLASTIC MOTIVATION

For finding out the effect of each independent variable on Scholastic Motivation five ANOVA was utilized. For this each independent variable was classified into to High, Average and Low based on mean and standard deviation. All the five 'F' ratios were found to be significant at 0.01 level. The obtained 'F' ratios of the Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic Status were 5.888, 166.904, 61.334, 93.744 and 7.748 respectively.

5.6.6. GROUP DIFFERENCE IN SCHOLASTIC MOTIVATION FOR THE TOTAL SAMPLE

Each analysis of variance done above is further subjected to Scheffe's test of significance. The results are summarized below.

1. In the case of Intelligence, the means scores of Scholastic Motivation of Low, Average, and High groups were 114.540, 117.520 and 117.374 respectively. Average group was significantly different from Low group at 0.01 level but not significant from High group. High group was significantly different from Low group at 0.05 level.

2. In the case of Self-Concept, mean scores of Scholastic Motivation of Low, Average and High groups were 109.243, 117.252 and 124.277 respectively. All the groups were significantly different from each other at 0.01 level.
3. In the case of Classroom Climate, mean scores of Scholastic Motivation of Low, Average and High groups were 109.589, 116.477 and 124.218 respectively. All the groups were significantly different from each other at 0.01 level.
4. In the case of Parental Involvement, mean scores of Scholastic Motivation of Low, Average and High groups were 110.615, 115.531 and 122.801 respectively. All the groups were significantly different from each other at 0.01 level.
5. In the case of Socio-Economic Status mean scores of Scholastic Motivation of Low, Average and High groups were 114.931, 116.805 and 118.752 respectively. Average group was not significantly different from the other two, even though High group and Low group differ significantly at 0.01 level.

5.7. TENABILITY OF HYPOTHESES

Based on the major findings of the present study the tenability of the hypotheses set for the present investigation was examined.

Hypothesis 1. There will be a significant difference in the mean scores of independent and dependent variables for the sub-samples based on Sex, Locale, and School Management.

Based on the major findings of 5.6.1, it can be concluded that out of the eighteen comparisons made, thirteen were found to be significant. Hence, this hypothesis is partially substantiated.

Hypothesis 2. There will be significant difference between Low, Average and High Scholastic Motivation groups (taken in pairs) with respect to the mean scores of independent variables.

Comparison of the three levels of Scholastic Motivation for each of the independent variables revealed that out of fifteen comparisons made, thirteen were found to be significant. Therefore the second hypothesis can be considered to be substantial.

Hypothesis 3. There will be significant positive relation between each of the independent variables and Scholastic Motivation for total sample and sub-samples based on Sex, Locale and Schools Management.

In the total sample the coefficients of correlation of the dependent variable with each of the independent variables were positive and significant. Out of the thirty correlation coefficients obtained for the Total samples and sub-samples, all the correlations were significant except two. Hence this hypotheses is also accepted.

Hypothesis 4. Scholastic Motivation can be predicted using the set of five independent variables viz; Intelligence, Self-Concept, Classroom Climate, Parental Involvement and Socio-Economic status.

A prediction equation was formulated based on four out of five independent variables to have a multiple R of 0.618.

Hypothesis 5. The effect of independent variables on Scholastic Motivation will be significant for the Total sample.

The effect of all the five independent variables on Scholastic Motivation were found to be significant. Therefore the fifth hypothesis is considered to be verified.

Hypothesis 6. There will be significant group difference in Scholastic Motivation for the Total sample.

Comparison of the mean scores in Scholastic Motivation belonging to the three levels of each independent variables have revealed significant difference in each of the independent variables except in HIG-AIG, LSES-ASES, and HSES-ASES groups. Therefore the sixth hypothesis can be considered to be substantiated partially.

5.8 SUGGESTIONS FOR IMPROVING EDUCATIONAL PRACTICE

In the light of the findings of the present investigation, the following suggestions are being made for the improvement of the existing teaching - learning procedures in the schools of Kerala.

1. The relationship between Intelligence and Scholastic Motivation presents an important phenomenon : Average and High Intelligent students do not differ significantly in scholastic Motivation. Steps should be taken to improve the 'Scholastic Motivation' of highly intelligent students. For that high intelligent students should be given divergent and challenging learning activities.
2. Self-Concept has emerged as the most important predictor of Scholastic Motivation. The implication is that if the Self-Concept is low the Scholastic Motivation tends to be low. A student's academic Self-Concept is generally formed in the early years of education. Success in this stage is the most important criteria. So the study indicates that the learning experience of children in the elementary schools should be characterized by success which lays the foundation for the future Scholastic Motivation.

3. At higher level also educators should develop appropriate strategies to strengthen the self-concept of the children. Which is an important predictor of Scholastic Motivation.
4. Teachers as facilitators should make frequent change of leadership in the group work in every learning activities which may help the students to develop academic Self-Concept.
5. Most of the students lack a permanent instructional setting of their style preference at home and school. For the optimum use of the time and resources of the students, attention must be focused on learning environmental conditions with the help of parents.
6. To enhance the Scholastic Motivation of students, educators may recognise each and every progressive steps of the students by means of gestures, words, praise, grading etc.
7. The teacher may adopt necessary strategies to create a feeling of need for learning in the minds of children that leads to motivation.
8. Teachers should provide multi-level learning activities to different categories of students such as high, Average and low groups in the class according to their needs.
9. To promote student motivation, the teaching-learning activities may include enough chances for self learning activities, conducting experiments and observations.
10. As the contextual variables such as Classroom Climate and Parental Involvement were found to be significantly related with 'Scholastic Motivation', the necessary measures should be taken by the educators to strengthen them.

11. Identification and remediation of students with low Scholastic Motivation are important concerns of educationists. The tools and the prediction equation of the present study can be utilized for the identification purpose. The study points the need to make relevant changes in the Classroom Climate and in Parental Involvement.
12. Parental education programme should be organised to strengthen the academic climate of the child.
13. Make the school libraries more elaborated and take necessary measures to inspire parents to utilize the school libraries which may help to build a strong parent-school interaction.
14. The study revealed that Parental Involvement influence the motivation of the students. Therefore, there is a necessity to organise mother's forums in each and every schools and work for its smooth functioning.
15. Encourage the parents of the students to participates in their children's academic and non-academic activities.
16. The relationship between Socio-Economic Status and Scholastic Motivation suggests that measures should be taken for the improvement of Scholastic Motivation of Low-Socio-Economic Status students.
17. Conduct cultural programmes, seminars, health classes and immunisation camps for the public under the auspices of school clubs, which may motivate the students to take part in the learning activities effectively.
18. Ensure the community participation in the educational activities by forming local advisory bodies in each school.

19. To develop high Scholastic Motivation, a shift in the evaluation system is necessary. Therefore the grading system introduced in the schools should be strengthened. For that frequent and continuous training programmes to be formulated and implemented for the teachers.
20. Teachers with high academic profile and talent could become a motivating power. Therefore while recruiting teachers, candidates with good teaching skills and imagination are to be given priority. The team-work of teachers of different faculties can formulate strategies to motivate students.

5.9. SUGGESTIONS FOR FURTHER RESEARCH

The findings of the present study are reasonably limited in scope due to certain methodological and conceptual limitations. Refinements necessary to advance our knowledge in this area can be made if only further researches are carried out. The following areas are suggested for further research in this aspect.

1. As all the five independent variables were found to be significantly related with Scholastic Motivation, the selection of these variables is clearly justified. But the multiple correlation is found to be only 0.618. Which means that approximately 38 percent of the variance in Scholastic Motivation can be explained by these variables. The rest 62 percent has to be explained by other variables. It is important to identify the other personal and contextual factors which determine Scholastic Motivation.
2. As Self-Concept was emerged as the most important predictor of Scholastic Motivation, the formation of Self-Concept in the elementary stage has to be studied in detail.

3. From this study it is revealed that Average and High Intelligence students do not differ significantly in Scholastic Motivation. The reasons for this trend have to be studied in depth.
4. The study clearly points out the importance of Classroom Climate in enhancing motivation of students. It is important to find out the dimensions of Classroom Climate which facilitate Scholastic Motivation and also the methods that can be utilized for reconceptualising and redesigning Classroom Climate have to be given sufficient importance in future research.
5. Even though the Intelligence for the total sample and for the government school samples were positively correlated with Scholastic Motivation, Intelligence in the sample of private school students is not significantly correlated with Scholastic Motivation. The reason for the insignificant correlation has to be studied in detail.
6. Socio-Economic Status of the rural sample and for the total sample were significantly correlated with Scholastic Motivation. But in the urban sample, the correlation is insignificant. The intervening variables in between should be studied in detail.
7. The combined effect of Parental Involvement and Socio-Economic Status on Scholastic Motivation should be studied.
8. Similar studies can be extended to primary schools and higher secondary schools.

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APPENDICES

APPENDIX IA

STANDARD PROGRESSIVE MATRICES**RESPONSE SHEET****SETS A, B, C, D, & E**

Name..... Ref. No.

Place Date.

Age Birthday.....

Test begun Test ended

A			B			C			D			E		
1			1			1			1			1		
2			2			2			2			2		
3			3			3			3			3		
4			4			4			4			4		
5			5			5			5			5		
6			6			6			6			6		
7			7			7			7			7		
8			8			8			8			8		
9			9			9			9			9		
10			10			10			10			10		
11			11			11			11			11		
12			12			12			12			12		

APPENDIX IB

STANDARD PROGRESSIVE MATRICES TEST

SCORING KEY

	SET				
	A	B	C	D	E
1	4	2	8	3	7
2	5	6	2	4	6
3	1	1	3	3	8
4	2	2	8	7	2
5	6	1	7	8	1
6	3	3	4	6	5
7	6	5	5	5	1
8	2	6	1	4	6
9	1	4	7	1	3
10	3	3	6	2	2
11	4	4	1	5	4
12	5	5	2	6	5

APPENDIX II A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SELF-CONCEPT

Dr. (Mrs.) Sumangala. V (Reader, Department of Education)
Mrs. K.B. Sujatha (Cochin Refineries School)

നിർദ്ദേശങ്ങൾ:

നിങ്ങൾക്ക് നിങ്ങളെ സംബന്ധിച്ചു തന്നെയുള്ള കാഴ്ചപ്പാട് ഏതു രീതിയിലാണ് എന്ന് മനസ്സിലാക്കുന്നതിനുള്ള ചില പ്രസ്താവനകളാണ് ഇതോടൊപ്പം തന്നിട്ടുള്ളത്.

ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിക്കുക.

ഇതോടൊപ്പം തന്നിരിക്കുന്ന ഉത്തരക്കടലാസിൽ തീർത്തും ഇങ്ങനെയൊന്നാണ്, ഇങ്ങനെയല്ല, നിശ്ചയമില്ല, ഇങ്ങനെയല്ല, തീർത്തും ഇങ്ങനെയല്ല എന്നിങ്ങനെ അഞ്ച് പ്രതികരണങ്ങൾ കൊടുത്തിരിക്കുന്നു. ഓരോ പ്രസ്താവനയ്ക്കുമെതിരെ നിങ്ങളുടെ പ്രതികരണം ഉത്തരക്കടലാസിൽ അതാതു ചോദ്യ നമ്പറിനു നേരെയുള്ള കള്ളിയിൽ 'X' ചിഹ്നം കൊണ്ടു രേഖപ്പെടുത്തുക.

1. ഏത് ചുറ്റുപാടിലും ജീവിക്കുവാൻ എനിക്ക് സാധിക്കും.
2. ഞാൻ എല്ലാവരെയും വെറുക്കപ്പെട്ടവനാണ്.
3. ഞാൻ ഒരു നല്ല ക്ലാസ്സ് ലീഡറാണ്.
4. എന്റെ കഴിവുകളേയും നേട്ടങ്ങളേയുംകുറിച്ച് എനിക്ക് ബോധമില്ല.
5. പല കാര്യങ്ങളിലും എനിക്ക് മറ്റു കുട്ടികളേക്കാൾ കഴിവ് കുറവാണ്.
6. പുതിയ ആശയങ്ങൾക്കും രീതികൾക്കും അനുസരിച്ച് ജീവിക്കാനാണ് എനിക്കിഷ്ടം.
7. അദ്ധ്യാപകരുടെ തെറ്റുകൾപോലും ചൂണ്ടിക്കാണിക്കാൻ തക്ക കഴിവ് എനിക്കുണ്ട്.
8. ഒരു സദസ്സിനെ അഭിമുഖീകരിച്ച് പരിശ്രമമില്ലാതെ പ്രസംഗിക്കുവാൻ എനിക്ക് കഴിയും.
9. എന്റെ അഭിപ്രായങ്ങൾ ശരിയായാലും തെറ്റായാലും തുറന്നു പറയാറുണ്ട്.
10. മറ്റുള്ളവർ എന്നെപ്പറ്റി കളിയാക്കിയാലും എനിക്ക് വിഷമം തോന്നാറില്ല.
11. ക്ലാസ്സിൽ അദ്ധ്യാപകൻ ആരോടെങ്കിലും ചോദ്യം ചോദിക്കുമ്പോൾത്തന്നെ ഞാൻ പരിഭ്രമിക്കാറുണ്ട്.

12. എനിക്ക് ധാരാളം കൂട്ടുകാരുണ്ട്.
13. മറ്റുള്ളവരുടെ കുറ്റങ്ങളും കുറവുകളും മാത്രമേ എന്റെ ശ്രദ്ധയിൽപ്പെടാറുള്ളൂ.
14. ഞാനാഗ്രഹിക്കുന്ന രീതിയിൽ തന്നെ മറ്റുള്ളവരുമായി ഇടപഴകാൻ എനിക്കു സാധിക്കാറുണ്ട്.
15. മറ്റുള്ളവർ എന്നെ ഇഷ്ടപ്പെടാൻ പ്രയാസമാണ്.
16. പെട്ടെന്ന് ദേഷ്യം പ്രകടിപ്പിക്കുന്ന സ്വഭാവമാണ് എനിക്കുള്ളത്.
17. മറ്റുള്ളവരുടെ വിഷമങ്ങൾ മനസ്സിലാക്കാനുള്ള കഴിവ് എനിക്കുണ്ട്.
18. എന്തു ചെയ്യുമ്പോഴും എന്നെപ്പറ്റി മറ്റുള്ളവർ എന്തു വിചാരിക്കും എന്ന തോന്നലാണ് എനിക്കുള്ളത്.
19. എന്നോട് മറ്റുള്ളവർ പെരുമാറുന്ന രീതികളിൽ ഞാൻ സന്തുഷ്ടനാണ്.
20. സന്തോഷവും സംതൃപ്തിയും നിറഞ്ഞ ഒരു കുടുംബത്തിലെ അംഗമാണ് ഞാൻ.
21. വീട്ടുജോലികളിൽ ഞാൻ മാതാപിതാക്കളെ സഹായിക്കാറുണ്ട്.
22. നിസ്സാര കാര്യത്തിനു വരെ ശാസിക്കുന്നവരാണ് എന്റെ മാതാപിതാക്കൾ.
23. വീട്ടിലെ മറ്റംഗങ്ങളോടു ഞാൻ മോശമായാണ് പെരുമാറുന്നത്.
24. കളികളിലും മറ്റും ഞാനാണ് ഒന്നാമൻ.
25. ആകർഷണീയമായ രൂപ സൗന്ദര്യം എനിക്കുണ്ട്.
26. എന്റെ ശത്രുക്കളെ അടിയറവുപറയിക്കുന്നതിനുള്ള കഴിവ് എനിക്കുണ്ട്.
27. പഠനത്തിൽ ഞാൻ ക്ലാസ്സിൽ ഒന്നാമനാണ്.
28. മറ്റുള്ളവർ പ്രശംസിക്കുന്ന വിധത്തിലുള്ള സംഭാഷണ ചാതുരി എനിക്കുണ്ട്.
29. ഗൃഹപാഠങ്ങളും മറ്റും കൃത്യസമയത്തു തന്നെ ഞാൻ ചെയ്തു തീർക്കുന്നു.
30. പഠനകാര്യത്തിൽ ഏറ്റവും മോശമായ വിദ്യാർത്ഥിയാണ് ഞാൻ.
31. എന്നേക്കാളും ഉയർന്ന മാർക്കുകൾ വാങ്ങുന്ന കുട്ടികളോടു എനിക്ക് അസൂയയാണ്.
32. പഠനത്തിൽ ശ്രദ്ധ കേന്ദ്രീകരിക്കാൻ എനിക്ക് കഴിയാറില്ല.

- 33. ഞാനെഴുതുന്ന ഉത്തരങ്ങളാണ് അദ്ധ്യാപകൻ ക്ലാസ്സിൽ മാതൃകയായി വായിക്കുന്നത്.
- 34. എത്ര സമയം പഠിച്ചാലും എനിക്ക് മുഷിച്ചിൽ വരാറില്ല.
- 35. പഠനം മാത്രം കാര്യമായി എടുത്തിട്ടുള്ള കുട്ടികളോട് എനിക്ക് പുച്ഛമാണ്.
- 36. പഠനത്തിൽ ഉന്നത നിലവാരത്തിലെത്താൻ വേണ്ട ബുദ്ധിശക്തി എനിക്കില്ല.
- 37. സമൂഹം അംഗീകരിക്കുന്ന കാര്യങ്ങൾ മാത്രമേ ഞാൻ ചെയ്യാറുള്ളൂ.
- 38. മതപരമായ കാര്യങ്ങളിൽ എനിക്കു നിഷ്കർഷയുണ്ട്.
- 39. മുതിർന്ന ആളുകളുടെ അഭിപ്രായങ്ങൾ ഒരു കാര്യത്തിനും ഞാൻ കണക്കിലെടുക്കാറില്ല.
- 40. മറ്റുള്ളവർക്ക് ഞാൻ വിശ്വസ്തനല്ല.

APPENDIX IIB

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SELF-CONCEPT

RESPONSE SHEET

പേര് ക്ലാസ്സ്
സ്കൂൾ ആൺ / പെൺ

ക്രമ നമ്പർ	തീർത്തും ഇങ്ങനെ തന്നെയാണ്	ഇങ്ങനെയാണ്	നിശ്ചയമില്ല	ഇങ്ങനെല്ല	തീർത്തും ഇങ്ങനെല്ല
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ക്രമ നമ്പർ	തീർത്തും ഇങ്ങനെ തന്നെയാണ്	ഇങ്ങനെയാണ്	നിശ്ചയമില്ല	ഇങ്ങനെല്ല	തീർത്തും ഇങ്ങനെല്ല
21	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF CLASSROOM CLIMATE

Dr. P. Usha,
Lecturer,
Department of Education
University of Calicut

Sunitha.E.P
M.Ed. Student
Department of Education
University of Calicut

നിർദ്ദേശങ്ങൾ:

താഴെ കൊടുത്തിരിക്കുന്ന പ്രസ്താവനകൾ നിങ്ങളുടെ ക്ലാസ്സുമുറിയിലെ പഠനവുമായി ബന്ധപ്പെട്ടവയാണ്. ഓരോ പ്രസ്താവനയ്ക്കും മൂന്നു വീതം പ്രതികരണങ്ങൾ തന്നിട്ടുണ്ട്. 1 മുതൽ 20 വരെയുള്ള പ്രസ്താവനകൾക്ക് യോജിക്കുന്നു, തീർച്ചയില്ല, വിയോജിക്കുന്നു എന്നീ പ്രതികരണങ്ങളും 21 മുതൽ 58 വരെയുള്ള പ്രസ്താവനകൾക്ക് എല്ലായ്പ്പോഴും ഉണ്ട്, ചിലപ്പോൾ മാത്രം ഉണ്ട്, ഒരിക്കലുമില്ല എന്നീ പ്രതികരണങ്ങളുമാണ് തന്നിട്ടുള്ളത്.

ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിച്ച് അതിൽ പറയുന്ന കാര്യങ്ങൾ നിങ്ങളെ സംബന്ധിച്ചിടത്തോളം യഥാർത്ഥത്തിൽ എത്രമാത്രം ശരിയാണെന്ന് തീരുമാനിക്കുക. ആ പ്രതികരണമാണ് തന്നിരിക്കുന്ന ഉത്തരകടലാസിൽ രേഖപ്പെടുത്തേണ്ടത്.

തന്നിരിക്കുന്ന ഉത്തരകടലാസിൽ അതാത് പ്രസ്താവനകളുടെ നമ്പറിനെതിരെ നിങ്ങളുടെ ശരിയായ പ്രതികരണത്തിന് ചുവടെയുള്ള കോളത്തിൽ 'X' ചിഹ്നം രേഖപ്പെടുത്തുക. നിങ്ങൾ ആദ്യം അടയാളപ്പെടുത്തിയ 'X' ചിഹ്നം തെറ്റായ സ്ഥാനത്താണെങ്കിൽ അതിനുചുറ്റും വൃത്തം വരയ്ക്കുകയും പുതിയ സ്ഥാനത്ത് 'X' ചിഹ്നം രേഖപ്പെടുത്തുകയും ചെയ്യുക.

എല്ലാ പ്രസ്താവനകൾക്കും പ്രതികരണം രേഖപ്പെടുത്തുവാൻ മറക്കരുത്.

1. കുട്ടികൾക്ക് അധ്യാപകരോട് സ്വതന്ത്രമായി ഇടപെടുവാൻ കഴിയാറുണ്ട്.
2. ചില കുട്ടികളെ പ്രത്യേക പ്രാധാന്യത്തോടെയാണ് അധ്യാപകൻ കാണാറുള്ളത്.
3. എല്ലാ കുട്ടികൾക്കും കാണുവാൻ കഴിയുന്ന വിധത്തിലാണ് ക്ലാസ്സിൽ ബോർഡ് സ്ഥാപിച്ചിട്ടുള്ളത്.
4. ക്ലാസ്സിലെ ഗ്രൂപ്പുകളുടെ പ്രവർത്തനം വിലയിരുത്തുവാൻ ഗ്രൂപ്പ് ലീഡർമാർക്ക് സ്വാതന്ത്ര്യമുണ്ട്.
5. എല്ലാ കുട്ടികൾക്കും വ്യക്തമായി കേൾക്കേണ്ട രീതിയിലാണ് അധ്യാപകൻ ക്ലാസ്സിൽ നിർദ്ദേശങ്ങൾ നൽകാറുള്ളത്.
6. അധ്യാപകനോട് സംശയം ചോദിക്കുവാൻ കുട്ടികൾക്ക് പേടിയാണ്.

7. പഠന പ്രവർത്തനങ്ങൾ അവതരിപ്പിക്കുമ്പോൾ അദ്ധ്യാപകൻ ഞങ്ങളെ ഓരോരുത്തരെയും ശ്രദ്ധിക്കുന്നതുപോലെ തോന്നാറുണ്ട്.
8. ക്ലാസ്സിലെ ചില കുട്ടികൾ നിസ്സാരവഴക്കുകൾക്ക് കാരണകാരായിത്തീരാറുണ്ട്.
9. കുട്ടികൾക്ക് ക്ലാസ്സിൽ സ്വന്തമായി പഠന പ്രവർത്തനങ്ങൾ സംഘടിപ്പിക്കാനുള്ള സ്വാതന്ത്ര്യമുണ്ട്.
10. ക്ലാസ്സിൽ ആവശ്യത്തിന് വെളിച്ചം ലഭിക്കുന്നുണ്ട്.
11. എനിക്ക് എന്റെ അദ്ധ്യാപകരെ ഇഷ്ടമാണ്.
12. ഈ ക്ലാസ്സിൽ നിന്നും മാറി മറ്റേതെങ്കിലും ക്ലാസ്സിൽ ചേർന്നു പഠിക്കുവാനാണ് എനിക്ക് താല്പര്യം.
13. എന്റെ ക്ലാസ്സിലെ ചില കുട്ടികൾ ആരാലും ശ്രദ്ധിക്കപ്പെടാത്തവരാണ്.
14. ക്ലാസ്സിലെ പ്രവർത്തനവുമായി സഹകരിക്കാത്ത ചില കുട്ടികൾ എന്റെ ക്ലാസ്സിലുണ്ട്.
15. ക്ലാസ്സിലെ മികച്ച കുട്ടിയായിത്തീരുവാൻ ഓരോരുത്തരും മത്സരിക്കാറുണ്ട്.
16. എന്റെ ക്ലാസ്സിനുവേണ്ടി എന്തും ചെയ്യാൻ ഞാൻ തയ്യാറാണ്.
17. എന്റെ ക്ലാസ്സിലുള്ളതിനേക്കാൾ കൂട്ടുകാർ എനിക്ക് മറ്റു ക്ലാസ്സുകളിലാണുള്ളത്.
18. ക്ലാസ്സിൽ പഠനസാമഗ്രികൾ സൂക്ഷിക്കുവാനുള്ള സൗകര്യമുണ്ട്.
19. ക്ലാസ്സ് മുറിയിൽ എല്ലാ കുട്ടികൾക്കും ഇരിക്കുവാനുള്ള സൗകര്യമുണ്ട്.
20. അദ്ധ്യാപകന് ക്ലാസ്സിലെ കുട്ടികളിൽ വിശ്വാസം കുറവാണ്.
21. അദ്ധ്യാപകൻ ക്ലാസ്സിൽ സൗഹാർദ്ദപൂർവ്വം പെരുമാറാറുണ്ട്.
22. പാഠഭാഗങ്ങൾ നന്നായി അവതരിപ്പിക്കുവാനായി അദ്ധ്യാപകൻ ചാർട്ടുകൾ, മോഡലുകൾ ആദിയായ പഠനോപകരണങ്ങൾ ക്ലാസ്സിൽ ഉപയോഗിക്കാറുണ്ട്.
23. ക്ലാസ്സിൽ കുട്ടികളുടെ തെറ്റുകൾ അദ്ധ്യാപകൻ തിരുത്താറുണ്ട്.
24. ഓരോ പാഠഭാഗം പഠിക്കുമ്പോഴും നിത്യജീവിതത്തിൽ അവയുടെ പ്രാധാന്യം അദ്ധ്യാപകൻ മനസ്സിലാക്കിത്തരാറുണ്ട്.
25. കുട്ടികളുടെ കഴിവുകൾ പ്രകടിപ്പിക്കുവാൻ അദ്ധ്യാപകൻ ക്ലാസ്സിൽ അവസരം ഒരുക്കി തരാറുണ്ട്.
26. പഠനസംബന്ധമായ പല പ്രവർത്തനങ്ങളും സ്വയം ചെയ്യുവാൻ അദ്ധ്യാപകൻ കുട്ടികളെ സഹായിക്കാറുണ്ട്.
27. പാഠഭാഗം അവതരിപ്പിക്കുമ്പോൾ എല്ലാ കുട്ടികളും അദ്ധ്യാപകനെ ശ്രദ്ധിച്ചിരിക്കാറുണ്ട്.
28. അദ്ധ്യാപകൻ ക്ലാസ്സിൽ കൃത്യസമയത്ത് എത്താറുണ്ട്.

- 29. കുട്ടികളുടെ വികാരങ്ങൾക്ക് അധ്യാപകൻ പരിഗണന നൽകാറുണ്ട്.
- 30. ഓരോ ഗ്രൂപ്പിലേയും കുട്ടികളുടെ പഠനം, ഹോംവർക്ക് എന്നിവ അധ്യാപകൻ ശ്രദ്ധിക്കാറുണ്ട്.
- 31. പാഠപുസ്തകങ്ങൾക്കു പുറമേ വിജ്ഞാനപ്രദമായ പല പുസ്തകങ്ങളും വായിക്കുവാൻ അധ്യാപകർ പ്രേരിപ്പിക്കാറുണ്ട്.
- 32. ക്ലാസ്സിൽ കുട്ടികൾക്കിടയിലുള്ള പ്രശ്നങ്ങൾ ദുരീകരിക്കുവാൻ അധ്യാപകൻ സഹായിക്കാറുണ്ട്.
- 33. വിഷമമുള്ള പാഠഭാഗങ്ങൾ അധ്യാപകൻ വളരെ വിശദമായി പറഞ്ഞു തരാറുണ്ട്.
- 34. ക്ലാസ്സിലെ കുട്ടികൾ പരസ്പരം സഹായിക്കാറുണ്ട്.
- 35. പഠനത്തിൽ പിന്നോക്കം വരുന്ന കുട്ടികൾക്ക് അധ്യാപകൻ പ്രത്യേക പരിശീലനം നൽകാറുണ്ട്.
- 36. പഠനപ്രവർത്തനങ്ങൾക്കിടയിൽ പഠനപുരോഗതി അറിയുവാൻ അധ്യാപകൻ ചോദ്യങ്ങൾ ചോദിക്കാറുണ്ട്.
- 37. കുട്ടികളുമായി സംസാരിക്കുവാൻ അധ്യാപകൻ സമയം കണ്ടെത്താറുണ്ട്.
- 38. വളരെ വൃത്തിയോടും ചിട്ടയോടും കൂടിയാണ് അധ്യാപകൻ ബോർഡിൽ എഴുതുന്നത്.
- 39. ക്ലാസ്സിലെ മിടുക്കരായ കുട്ടികളെ മറ്റുള്ള കുട്ടികൾ അഭിനന്ദിക്കാറുണ്ട്.
- 40. ക്ലാസ്സ്മുറി വൃത്തിയായി സൂക്ഷിക്കുവാൻ കുട്ടികൾ ഒരുമിച്ച് പ്രവർത്തിക്കാറുണ്ട്.
- 41. വിജ്ഞാനപ്രദമായ പല കാര്യങ്ങളും അധ്യാപകൻ ക്ലാസ്സിൽ പറഞ്ഞുതരാറുണ്ട്.
- 42. ചാർട്ടുകൾ, മോഡലുകൾ തുടങ്ങിയ പഠനസഹായികൾ നിർമ്മിക്കുവാൻ അധ്യാപകൻ കുട്ടികളെ പരിശീലിപ്പിക്കാറുണ്ട്.
- 43. കുട്ടികൾ പറയുന്ന കാര്യങ്ങൾ അധ്യാപകൻ ശ്രദ്ധാപൂർവ്വം കേൾക്കാറുണ്ട്.
- 44. ചിന്തോദ്ദീപകമായ പല ചോദ്യങ്ങളും അധ്യാപകൻ ക്ലാസ്സിൽ ചോദിക്കാറുണ്ട്.
- 45. ശാസ്ത്ര സംബന്ധമായ പ്രവർത്തനങ്ങൾ സ്വമേധയാ ഏറ്റെടുത്ത് നടത്തുന്നതിന് ക്ലാസ്സിലെ കുട്ടികൾ മുന്നോട്ട് വരാറുണ്ട്.
- 46. ക്ലാസ്സിലെ ചർച്ചകളിൽ എല്ലാ കുട്ടികളും അഭിപ്രായം പറയാറുണ്ട്.
- 47. എനിക്ക് അധ്യാപകരോട് ദേഷ്യം തോന്നാറുണ്ട്.
- 48. ക്ലാസ്സിലെ മത്സരങ്ങളിൽ വിജയിക്കുന്നവർക്ക് അധ്യാപകൻ പ്രോത്സാഹനം നൽകാറുണ്ട്.
- 49. ക്ലാസ്സിലെ കൂട്ടുകാരോട് ഞാൻ സ്നേഹപൂർവ്വം പെരുമാറാറുണ്ട്.

- 50. ക്ലാസ്സിലെ കുട്ടികൾ പരസ്പരം കലഹിക്കാറുണ്ട്.
- 51. അധ്യാപകൻ ക്ലാസ്സിൽ അച്ചടക്കം നിലനിർത്താൻ ശ്രദ്ധിക്കാറുണ്ട്.
- 52. ക്ലാസ്സുകളുടെ ആരംഭത്തിൽ തന്നെ പാഠഭാഗങ്ങളോട് ബന്ധപ്പെട്ട മൂന്നറിവ് അധ്യാപകൻ പരിശോധിക്കാറുണ്ട്.
- 53. താൻ ചെയ്യുന്നതെല്ലാമാണ് ശരിയെന്ന് അധ്യാപകൻ കരുതാറുണ്ട്.
- 54. ക്ലാസ്സിലെ കുട്ടികൾ അധ്യാപകനെ അനുസരിക്കാറുണ്ട്.
- 55. എന്നെ ഈ വർഷം പഠിപ്പിക്കുന്ന അധ്യാപകൻ അടുത്തുവർഷവും പഠിപ്പിക്കണമെന്ന് ഞാനാഗ്രഹിക്കാറുണ്ട്.
- 56. എന്റെ ക്ലാസ്സിലെ കുട്ടികൾ എന്നോട് മോശമായാണ് പെരുമാറുള്ളത്.
- 57. പൊതുവായ പല കാര്യങ്ങളും കുട്ടികൾ ക്ലാസ്സിൽ ചർച്ച ചെയ്യാറുണ്ട്.
- 58. കുട്ടികൾ ക്ലാസ്സിൽ ഇരിക്കുന്ന സ്ഥാനം, അധ്യാപകൻ വ്യത്യസ്തപ്പെടുത്താറുണ്ട്.

APPENDIX IIIB

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF CLASSROOM CLIMATE

RESPONSE SHEET

നിങ്ങളുടെ പേര് സ്കൂളിന്റെ പേര്
സ്കൂൾ സ്ഥിതിചെയ്യുന്ന സ്ഥലം : പഞ്ചായത്ത് / മുനിസിപ്പാലിറ്റി ഓൺ / പെൺ

ക്രമ നമ്പർ	യോജിക്കുന്നു	തീർച്ചയല്ല	വിയോജിക്കുന്നു
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ക്രമ നമ്പർ	എല്ലായ്പ്പോഴും ഉണ്ട്	ചിലപ്പോൾ മാത്രം ഉണ്ട്	ഒരിക്കലുമില്ല
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ക്രമ നമ്പർ	എല്ലായ്പ്പോഴും ഉണ്ട്	ചിലപ്പോൾ മാത്രം ഉണ്ട്	ഒരിക്കലുമില്ല
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APPENDIX IV A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

PARENTAL INVOLVEMENT INVENTORY

Dr. P. Usha & Moly Kuruvila

നിർദ്ദേശങ്ങൾ:

താഴെ കൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കുക. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസിൽ "അച്ഛൻ" "അമ്മ" എന്നീ കോളങ്ങളുടെ താഴെ "മിക്കവാറും" "ചിലപ്പോഴൊക്കെ" "ചുരുക്കമായി" എന്നിങ്ങനെ മൂന്നു പ്രതികരണങ്ങൾ വീതം കൊടുത്തിരിക്കുന്നു. ഓരോ ചോദ്യത്തിനും അച്ഛനെ സംബന്ധിച്ചുള്ള പ്രതികരണവും, അമ്മയെ സംബന്ധിച്ചുള്ള പ്രതികരണവും അടയാളപ്പെടുത്തണം. നിങ്ങളുടെ പ്രതികരണങ്ങൾ അതാതു ചോദ്യ നമ്പറിനു നേരെയുള്ള കളിയിൽ 'X' ചിഹ്നം കൊണ്ടു രേഖപ്പെടുത്തുക.

1. നിങ്ങൾ ഭാവിയിൽ ആരാകണമെന്നതിനെക്കുറിച്ച് അച്ഛനമ്മമാർ നിങ്ങളുമായി ചർച്ച ചെയ്യാറുണ്ടോ?
2. ഓരോ ദിവസവും നിങ്ങൾ സ്കൂളിൽനിന്നും വരുമ്പോൾ സ്കൂളിലെ അനുഭവങ്ങൾ പങ്കുവയ്ക്കാൻ മാതാപിതാക്കൾ നിങ്ങളെ പ്രേരിപ്പിക്കാറുണ്ടോ?
3. അച്ഛൻ/അമ്മ നിങ്ങളോടൊപ്പമിരുന്ന് ടി.വി/റേഡിയോ പരിപാടികൾ ശ്രദ്ധിക്കാറുണ്ടോ?
4. മാതാപിതാക്കൾ അദ്ധ്യാപകരോട് നിങ്ങളുടെ പഠനപുരോഗതി അന്വേഷിക്കാറുണ്ടോ?
5. അച്ഛനമ്മമാർ തങ്ങളുടെ ഓഫീസ് കാര്യങ്ങളെപ്പറ്റിയോ, സഹപ്രവർത്തകരെക്കുറിച്ചോ, കൂട്ടുകാരെക്കുറിച്ചോ നിങ്ങളോട് സംസാരിക്കാറുണ്ടോ?
6. പരീക്ഷയിൽ മാർക്ക് കുറഞ്ഞുപോയാൽ അച്ഛൻ/അമ്മ നിങ്ങളെ ശിക്ഷിക്കാറുണ്ടോ?
7. വീട്ടിൽ സുപ്രധാന തീരുമാനങ്ങളെടുക്കേണ്ടി വരുന്ന സന്ദർഭങ്ങളിൽ നിങ്ങളുടെ അഭിപ്രായം അച്ഛനമ്മമാർ ചോദിക്കാറുണ്ടോ?
8. മത്സര പരീക്ഷയിലെ ഉന്നത വിജയം, കലാകായിക മത്സരങ്ങളിൽ സമ്മാനം തുടങ്ങിയ പ്രശംസാർഹമായ നേട്ടങ്ങൾ കൈവരിക്കുമ്പോൾ നിങ്ങൾക്കു പാരിതോഷികങ്ങൾ നൽകാറുണ്ടോ?
9. നിങ്ങളുടെ വിഷമഘട്ടങ്ങളിൽ അച്ഛൻ/അമ്മ നിങ്ങളെ ശ്രദ്ധിക്കുന്നില്ലെന്നു തോന്നാറുണ്ടോ?
10. മാതാപിതാക്കൾ അവരുടെ ഒഴിവുസമയങ്ങളിൽ നിങ്ങളോട് കൂശലം പറയുകയും നിങ്ങളുമായി കളികളിൽ ഏർപ്പെടുകയും ചെയ്യാറുണ്ടോ?

11. സയൻസ് ടാലന്റ് ടെസ്റ്റുകൾ സ്കോളർഷിപ്പ് പരീക്ഷകൾ കിസ് മത്സരങ്ങൾ എന്നിവയിൽ പങ്കെടുക്കാൻ മാതാപിതാക്കൾ നിങ്ങളെ സഹായിക്കാറുണ്ടോ?
12. സ്കൂളിലെ നിയമങ്ങൾ കൃത്യമായിത്തന്നെ പാലിക്കുവാൻ മാതാപിതാക്കൾ നിങ്ങളെ സഹായിക്കാറുണ്ടോ?
13. നിങ്ങൾക്കുണ്ടാകുന്ന പ്രശ്നങ്ങൾ പരിഹരിക്കുന്നതിൽ മാതാപിതാക്കൾ മാർഗ്ഗനിർദ്ദേശം നൽകാറുണ്ടോ?
14. വിനോദങ്ങൾക്ക് ഒട്ടും സമയം ചെലവഴിക്കാതെ എപ്പോഴുമിരുന്ന് പഠിക്കണമെന്ന് മാതാപിതാക്കൾ ശഠിക്കാറുണ്ടോ?
15. അച്ഛൻ/അമ്മ നിങ്ങളുടെ പുസ്തകങ്ങളും നോട്ടുബുക്കുകളും പരിശോധിക്കുകയും തെറ്റുകൾ തിരുത്താൻ സഹായിക്കുകയും ചെയ്യാറുണ്ടോ?
16. സ്കൂളിലെ കലാകായിക മത്സരങ്ങളിൽ പങ്കെടുക്കാൻ മാതാപിതാക്കൾ നിങ്ങളെ പ്രേരിപ്പിക്കാറുണ്ടോ?
17. മുഖക്കുരു, താരൻ, പേൻ തുടങ്ങി നിങ്ങളെ അലട്ടുന്ന പ്രശ്നങ്ങൾ പരിഹരിക്കാൻ മാതാപിതാക്കൾ നിർദ്ദേശങ്ങൾ തരാറുണ്ടോ?
18. അച്ഛനുമമ്മയും നിങ്ങളോടൊപ്പമിരുന്ന് ഉല്ലാസകരമായാണോ ഭക്ഷണം കഴിക്കുന്നത്?
19. നിങ്ങളുടെ തെറ്റുകൾ, ദുഃസ്വഭാവങ്ങൾ എന്നിവ കാര്യകാരണ സഹിതം പറഞ്ഞു തന്ന് അവ തിരുത്താൻ അച്ഛൻ/അമ്മ ഉപദേശിക്കാറുണ്ടോ?
20. പുസ്തകമേളകൾ/പുഷ്പഫലപ്രദർശനങ്ങൾ, ശാസ്ത്രമേളകൾ മുതലായവ കാണുവാൻ മാതാപിതാക്കൾ നിങ്ങളെ കൊണ്ടുപോകാറുണ്ടോ?
21. നിങ്ങളുടെ സഹായങ്ങൾ ദുരീകരിക്കുന്നതിനോ ഗൃഹപാഠങ്ങൾ ചെയ്യുന്നതിനോ മാതാപിതാക്കൾ സഹായിക്കാറുണ്ടോ?
22. പാഠ്യ-പാഠ്യേതര വിഷയങ്ങളിൽ നിങ്ങൾക്കുള്ള കഴിവുകൾ എങ്ങനെ മെച്ചപ്പെടുത്താമെന്ന് മാതാപിതാക്കൾ സ്കൂളധികൃതരുമായി ചർച്ച ചെയ്യാറുണ്ടോ?
23. നിങ്ങൾക്കു സമീകൃതഹാരം നൽകുന്ന കാര്യത്തിൽ അച്ഛനമ്മമാർ ശ്രദ്ധാലുക്കളാണോ?
24. നിങ്ങൾ ഉറ്റമിത്രങ്ങളുടെ വീട്ടിൽ പോകുന്നത് മാതാപിതാക്കൾ അനുവദിക്കാറുണ്ടോ?
25. കൂടുതൽ വിശദീകരണം ആവശ്യപ്പെടാതെ താൻ പറയുന്നതു അക്ഷരപ്രതി അനുസരിക്കണമെന്ന് അച്ഛനമ്മമാർ നിങ്ങളോട് നിഷ്കർഷിക്കാറുണ്ടോ?
26. മാതാപിതാക്കളിൽനിന്ന് നിങ്ങൾക്ക് വേണ്ടത്ര സ്നേഹവും ലാളനയും ലഭിക്കാറുണ്ടോ?
27. ലഘുപാഠ്യങ്ങൾ, മധുരപലഹാരങ്ങൾ വറുത്തസാധനങ്ങൾ എന്നിങ്ങനെ നിങ്ങളുടെ ആരോഗ്യത്തിനും സൗന്ദര്യത്തിനും ദോഷകരമായ വസ്തുക്കൾ അമിതമായി ഉപയോഗിക്കരുതെന്ന് ഉപദേശിക്കാറുണ്ടോ?

- 28. വിശ്രമവേളകളിൽ വായിക്കുവാൻ നിങ്ങൾക്കിഷ്ടമുള്ള പുസ്തകങ്ങൾ മാതാപിതാക്കൾ വാങ്ങിത്തരാറുണ്ടോ?
- 29. സ്കൂളിലെ അദ്ധ്യാപക രക്ഷാകർതൃസമിതിയുടെ മീറ്റിംഗുകളിൽ അച്ഛൻ/അമ്മ സംബന്ധിക്കാറുണ്ടോ?
- 30. നിങ്ങൾ കൂട്ടുകാരുമായി സംസാരിക്കുന്നത് മാതാപിതാക്കൾ രഹസ്യമായി ശ്രദ്ധിക്കാറുണ്ടോ?
- 31. നിങ്ങളുടെ കൂട്ടുകാരോട് അച്ഛൻ/അമ്മ സൗഹൃദപരമായി സംഭാഷണം നടത്താറുണ്ടോ?
- 32. പത്രമാസികകളിൽ വരുന്ന സമകാലീന സംഭവങ്ങൾ അച്ഛൻ/അമ്മ നിങ്ങളുമായി ചർച്ച ചെയ്യാറുണ്ടോ?
- 33. എല്ലാ ദിവസവും നിശ്ചിത സമയത്തുതന്നെ പഠിക്കുന്നതിന് അച്ഛനമ്മമാർ നിങ്ങളെ പ്രേരിപ്പിക്കാറുണ്ടോ?
- 34. നിങ്ങൾ പങ്കെടുക്കുന്ന കലാകായിക മത്സരങ്ങളും മറ്റു പരിപാടികളും കാണുവാൻ മാതാപിതാക്കൾ സ്കൂളിൽ വരാറുണ്ടോ?
- 35. വീടിനടുത്തുള്ള ലൈബ്രറി/സ്‌പോർട്സ് ക്ലബ്ബ്/റേഡിയോ ക്ലബ്ബ് ഇവയിലേതിലെങ്കിലും അംഗത്വമെടുക്കാൻ നിങ്ങളെ പ്രേരിപ്പിക്കാറുണ്ടോ?
- 36. അമിതാഹാരം, പുകവലി, മയക്കുമരുന്ന് തുടങ്ങിയവയുടെ ദുഷ്യഫലങ്ങളെപ്പറ്റി പറഞ്ഞു തരാറുണ്ടോ?
- 37. മറ്റുള്ളവരുടെ മുന്നിൽ വെച്ച് അച്ഛൻ/അമ്മ നിങ്ങളെ ശകാരിക്കുകയോ ശിക്ഷിക്കുകയോ ചെയ്യാറുണ്ടോ?
- 38. ടി.വി. യിലും റേഡിയോയിലും വരുന്ന വാർത്തകളും വിദ്യാഭ്യാസപരിപാടികളും ശ്രദ്ധിക്കാൻ മാതാവ്/പിതാവ് നിർബന്ധിക്കാറുണ്ടോ?
- 39. നിങ്ങളുടെ പൊതുവിജ്ഞാനത്തെ വർദ്ധിപ്പിക്കുന്നതിനാവശ്യമായ പത്രമാസികകൾ വരുത്തുന്നതിൽ അച്ഛനമ്മമാർ തല്പരരാണോ?
- 40. അച്ഛന്റെ/അമ്മയുടെ പ്രതീക്ഷയ്ക്കൊത്തു നിങ്ങൾ ഉയരേണ്ടതിനാവശ്യമായ സൗകര്യങ്ങൾ അവർ ഒരുക്കിത്തരാറുണ്ടോ?
- 41. പാട്ട്, നൃത്തം, പെയിന്റിംഗ് തുടങ്ങിയ നിങ്ങളുടെ നൈസർഗിക കഴിവുകളെ മാതാപിതാക്കൾ വേണ്ടത്ര ശ്രദ്ധിക്കുന്നില്ലായെന്നു തോന്നാറുണ്ടോ?
- 42. നിങ്ങളെയും കൂട്ടി വിനോദയാത്രകൾക്കു പോകുന്നതിൽ അച്ഛനുമമ്മയും ഉത്സാഹം കാണിക്കാറുണ്ടോ?
- 43. നിങ്ങളുടെ പഠനത്തിനാവശ്യമായ പഠനമുറി, മേശ, കസേര തുടങ്ങിയ സൗകര്യങ്ങൾ ഒരുക്കിത്തരുന്നതിൽ അച്ഛനുമമ്മയും ശ്രദ്ധാലുക്കളാണോ?
- 44. സ്വന്തമായി തീരുമാനങ്ങളെടുക്കാൻ അച്ഛൻ/അമ്മ നിങ്ങളെ പ്രേരിപ്പിക്കാറുണ്ടോ?

- 45. നിങ്ങൾക്കു ബുദ്ധിമുട്ടനുഭവപ്പെടുന്ന വിഷയങ്ങളിൽ ട്യൂഷനോ മറ്റു സൗകര്യങ്ങളോ ഏർപ്പെടുത്തിത്തരുന്നതിൽ അച്ഛൻ/അമ്മ ശ്രദ്ധാലുവാണോ?
- 46. ഏതെങ്കിലും കാരണവശാൽ നിങ്ങൾ മാതാപിതാക്കളിൽ നിന്നും ദൂരെയായാൽ ഫോണിൽക്കൂടിയോ കത്തുകളിൽക്കൂടിയോ നിങ്ങളുമായി ബന്ധപ്പെടാൻ അച്ഛൻ/അമ്മ ശ്രദ്ധിക്കാറുണ്ടോ?
- 47. അച്ഛനമ്മമാർക്കു നിങ്ങളുടെ ഭാവിയിെക്കുറിച്ചു പ്രത്യേക ചിന്തയൊന്നുമില്ലായെന്നു തോന്നാറുണ്ടോ?
- 48. അച്ഛൻ/അമ്മയ്ക്ക് നിങ്ങളോട് ഉള്ളുനിറയെ സ്നേഹമുണ്ടെങ്കിലും അതു പുറമെ കാണിക്കാൻ ഇഷ്ടപ്പെടുന്നില്ലായെന്ന് തോന്നാറുണ്ടോ?
- 49. മാതാപിതാക്കളുടെ ഒഴിവുസമയങ്ങളിൽ ചെറിയ പരീക്ഷണങ്ങൾ, മറ്റു പഠനപ്രവർത്തനങ്ങൾ എന്നിവ ചെയ്യാൻ അവർ നിങ്ങളെ സഹായിക്കാറുണ്ടോ?
- 50. അച്ഛൻ/അമ്മയ്ക്ക് നിങ്ങളെക്കാൾ സ്നേഹം നിങ്ങളുടെ സഹോദരങ്ങളോടാണെന്ന് തോന്നാറുണ്ടോ?
- 51. നിങ്ങൾ പഠിക്കുന്ന സ്കൂളിന്റെ നിലവാരം ഉയർത്താനുള്ള പരിശ്രമങ്ങളിൽ മാതാപിതാക്കൾ സഹകരിക്കാറുണ്ടോ?
- 52. അച്ഛനമ്മമാർ നിങ്ങളുടെ നിർബന്ധത്തിനു വഴങ്ങാറുള്ളതുകൊണ്ട് അവരിൽനിന്നും എന്തുകാര്യവും സാധിക്കാമെന്നു തോന്നാറുണ്ടോ?
- 53. നിങ്ങളുടെ കൂട്ടുകാരുടെ വീട്ടിൽ പോകുന്നതിനും അവരുടെ മാതാപിതാക്കളെ പരിചയപ്പെടുന്നതിനും അച്ഛൻ/അമ്മ താല്പര്യം കാണിക്കാറുണ്ടോ?
- 54. നിങ്ങളെ വിഷമിപ്പിക്കുന്ന കാര്യങ്ങൾ സങ്കോചം കൂടാതെ അച്ഛനോട്/അമ്മയോട് തുറന്നു പറയാനുള്ള സ്വാതന്ത്ര്യം അവർ തന്നിട്ടുണ്ടോ?

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APPENDIX IVB

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

PARENTAL INVOLVEMENT INVENTORY

RESPONSE SHEET

പേര് ക്ലാസ്സ്
വയസ്സ് സ്കൂൾ ആൺ / പെൺ

ക്രമ നമ്പർ	അച്ഛൻ			അമ്മ		
	മിക്കവാറും	ചിലപ്പോഴൊക്കെ	ചുരുക്കമായി	മിക്കവാറും	ചിലപ്പോഴൊക്കെ	ചുരുക്കമായി
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ക്രമ നമ്പർ	അച്ഛൻ			അമ്മ		
	മിക്കവാറും	ചിലപ്പോഴൊക്കെ	ചുരുക്കമായി	മിക്കവാറും	ചിലപ്പോഴൊക്കെ	ചുരുക്കമായി
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**UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION**

GENERAL DATA SHEET

DIRECTIONS:- This data sheet is meant to collect your personal details for the purpose of research work. You are therefore requested to fill up the data as correctly as possible.

1. Name :
2. Boy/Girl :
3. Age :
4. Religion :
5. Caste :
6. Number of elder brothers/sisters
7. Number of younger brothers/sisters
8. Standard :
9. Name of the School :
10. Place where the school is located :
11. Panchayat/Municipality/Corporation :
12. Family Details : (Put a 'X' mark in the appropriate column)

		Father/Guardian	Mother	Brothers/Sisters
A	Education			
	Illiterate			
	Primary Education			
	Upper Primary Education			
	High School Education			
	Inter mediate, T.T.C. Pre-degree etc.			
	B.A. B.Sc, B.Com, Engineering diploma etc.			
	M.A., M.Sc., M.Com, M.B.B.S. Engineering Degree, etc.			
	Job			
	Monthly Income of the parent			
	Below 1000			
	1001 - 2000			
	2001 - 3000			
	3001 - 4000			
	4001 - 5000			
	Above 5000			

APPENDIX VI A

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SCHOLASTIC MOTIVATION
(DRAFT)

Dr. P. Usha & Ramakrishnan. K

നിർദ്ദേശങ്ങൾ:

താഴെ കൊടുത്തിരിക്കുന്ന ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിക്കുക. പ്രസ്താവനകളെല്ലാം 'പഠന ഉൾപ്രേരണ' യുമായി ബന്ധപ്പെട്ടതാണ്. ഓരോ പ്രസ്താവനയ്ക്കും 1. എല്ലായ്പ്പോഴും, 2. ചിലപ്പോൾ മാത്രം, 3. ഒരിക്കലും ഇല്ല എന്നിങ്ങനെ മൂന്നു വീതം പ്രതികരണങ്ങൾ കൊടുത്തിരിക്കുന്നു. ഓരോ പ്രസ്താവനയിലും പറയുന്ന കാര്യം നിങ്ങളെ സംബന്ധിച്ചിടത്തോളം യഥാർത്ഥത്തിൽ എത്രമാത്രം ശരിയാണെന്ന് തീരുമാനിക്കുക. ആ പ്രതികരണമാണ് രേഖപ്പെടുത്തേണ്ടത്. ഉത്തരക്കടലാസ് പ്രത്യേകം തന്നിട്ടുണ്ട്. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസിൽ അതാത് പ്രസ്താവനകളുടെ നമ്പറിനെതിരെ, നിങ്ങളുടെ ശരിയായ പ്രതികരണത്തിന് ചുവടെയുള്ള കള്ളിയിൽ 'X' ചിഹ്നം രേഖപ്പെടുത്തുക. പ്രസ്താവനകളുടെ ക്രമനമ്പർ നോക്കി ഉത്തരക്കടലാസിലെ അതേ നമ്പറിനു നേരെയുള്ള കള്ളിയിൽ വേണം 'X' ചിഹ്നം രേഖപ്പെടുത്താൻ. എല്ലാ പ്രസ്താവനകൾക്കും പ്രതികരണം രേഖപ്പെടുത്താൻ പ്രത്യേകം ശ്രദ്ധിക്കുമല്ലോ.

1. പരീക്ഷകളിൽ തോൽക്കാതിരിക്കാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.
2. പ്രതീക്ഷിച്ച മാർക്കുകൾ എനിക്ക് കിട്ടാറുണ്ട്.
3. മിക്ക വിഷയങ്ങളും പഠിക്കാൻ എനിക്ക് വളരെ പ്രയാസമായിട്ടാണ് തോന്നാറുള്ളത്.
4. ക്ലാസിലെ മറ്റുള്ളവരുമായി ഒത്തുനോക്കുമ്പോൾ പഠനത്തിൽ ഞാൻ വളരെ മോശമാണ്.
5. ഒരു മുന്നറിയിപ്പുമില്ലാതെ ഒരു പരീക്ഷ നടത്തുകയാണെങ്കിൽപ്പോലും എനിക്ക് ഒരു വിധം നന്നായി എഴുതുവാൻ കഴിയും.
6. പരീക്ഷകളിൽ തോൽക്കുമെന്ന് പേടിച്ചിട്ടാണ് ഞാൻ കൂടുതൽ സമയം പഠിക്കാൻ ഇരിക്കുന്നത്.
7. വിജയിക്കുവാനുള്ള ആന്തരികമായ പ്രേരണയാണ് എന്നെ പഠിക്കുവാൻ പ്രേരിപ്പിക്കുന്നത്.
8. വിഷമമുള്ള പാഠഭാഗങ്ങൾ പഠിക്കാൻ ഞാൻ കൂടുതൽ സമയം ചെലവഴിക്കാറുണ്ട്.
9. കഴിഞ്ഞ പരീക്ഷയിൽ കിട്ടിയതിനേക്കാൾ കൂടുതൽ മാർക്ക് വാങ്ങാൻ ഞാൻ ഓരോ തവണയും ശ്രമിക്കാറുണ്ട്.

- 10. വളരെ എളുപ്പമുള്ള പാഠഭാഗങ്ങൾ പഠിക്കുന്നതിനേക്കാൾ എനിക്കിഷ്ടം കുറച്ചു പ്രയാസമുള്ളവ പഠിക്കുവാനാണ്.
- 11. പരീക്ഷകളിൽ കുറെക്കൂടി എളുപ്പമുള്ള ചോദ്യങ്ങളാണ് ചോദിക്കേണ്ടതെന്ന് എനിക്ക് തോന്നാറുണ്ട്.
- 12. സ്വയം പ്രശ്നപരിഹാരം കണ്ടെത്തുന്ന തരത്തിലുള്ള പഠനത്തിലാണ് എനിക്ക് താല്പര്യം.
- 13. ഒരു പാഠഭാഗം പഠിക്കുന്നത് എന്തിനെന്ന് മനസ്സിലാക്കിയാൽ അത് പഠിക്കാൻ എനിക്ക് വളരെ ഉത്സാഹമാണ്.
- 14. പഠനപ്രവർത്തനങ്ങൾ നന്നായി ചെയ്യാൻ കഴിയുന്നതിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.
- 15. പഠനകാര്യങ്ങൾ കൃത്യമായി ചെയ്തുതീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്.
- 16. ക്ലാസ്സിലെ മറ്റുകുട്ടികളെക്കാൾ പഠനകാര്യങ്ങൾ നന്നായി ചെയ്യാൻ എനിക്കു കഴിയും.
- 17. പരീക്ഷയെ കുറിച്ചുള്ള ചിന്ത എന്നെ വ്യാകുലപ്പെടുത്താറുണ്ട്.
- 18. പഠനത്തിൽ നന്നായി ശ്രദ്ധിക്കുന്നതിനാൽ ഉയർന്ന മാർക്ക് നേടാൻ കഴിയുമെന്ന് എനിക്ക് തോന്നാറുണ്ട്.
- 19. തെറ്റുകൾ വരുത്തുമ്പോൾ അതിന്റെ മൂലകാരണം സ്വയം കണ്ടെത്തുന്നതിൽ ഞാൻ താല്പര്യം കാണിക്കാറുണ്ട്.
- 20. പഠിക്കാൻ ബുദ്ധിമുട്ട് തോന്നുന്ന പാഠഭാഗങ്ങൾ ഒഴിവാക്കാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 21. ഏതു പ്രവൃത്തിയിലും എന്റെ കഴിവിന്റെ പരമാവധി ഉപയോഗപ്പെടുത്താൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.
- 22. ഓരോ ദിവസവും പഠിപ്പിക്കുന്ന ഭാഗങ്ങൾ ഞാൻ അതാതു ദിവസം തന്നെ പഠിക്കാറുണ്ട്.
- 23. ഞാനൊരു മടിയനാണെന്ന തോന്നൽ എനിക്കുണ്ട്.
- 24. കൂടുതൽ അദ്ധ്വാനം ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 25. എനിക്ക് ചെയ്യാൻ കഴിയുന്നതിലും വളരെ കുറച്ച് ജോലി മാത്രമേ ഞാൻ ചെയ്യാറുള്ളൂ എന്ന് തോന്നാറുണ്ട്.
- 26. പഠനത്തിൽ ഇനിയും ഉയരാൻ ഞാൻ ആഗ്രഹിക്കാറുണ്ട്.
- 27. മത്സരപരീക്ഷകളിൽ മറ്റുള്ളവരേക്കാൾ മുൻപന്തിയിൽ എത്താൻ ഞാൻ കഠിനമായി പ്രയത്നിക്കാറുണ്ട്.
- 28. എന്റെ പ്രവൃത്തിയുടെ ഫലത്തെ ഞാൻ വിലയിരുത്തുന്നത് അത് മറ്റുള്ളവർ ചെയ്യുന്നതിനേക്കാൾ നല്ലതാണോയെന്നു നോക്കിയാണ്.
- 29. മറ്റുള്ളവർ നേടാനാവാതെയിരുന്ന സമയം ചെലവഴിക്കുമ്പോഴും കൂടുതൽ അറിവ് നേടാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.

- 30. പഠനത്തിൽ നേട്ടമുണ്ടാക്കുന്ന എല്ലാ അവസരവും ഞാൻ ഉപയോഗപ്പെടുത്താറുണ്ട്.
- 31. പഠനത്തിൽ ഉയർച്ചയുണ്ടായതിന്റെ പിന്നിൽ നേട്ടങ്ങളുടെ ഒരു ചരിത്രം തന്നെ എനിക്ക് ഉണ്ട്.
- 32. കൂടുതൽ നേട്ടം ഉണ്ടാവുന്നു എന്ന ബോധമാണ് എന്നെ നന്നായി പഠിക്കാൻ പ്രേരിപ്പിക്കുന്നത്.
- 33. സാങ്കേതികജ്ഞാനം കൂടുതൽ ആവശ്യമുള്ള പ്രവർത്തനങ്ങൾ ചെയ്യുവാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 34. ഉയർന്ന ബുദ്ധിശക്തിയും നിപുണതയും ആവശ്യമായ പഠനപ്രവൃത്തികൾ ചെയ്യാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 35. നല്ല മാർക്കോടെ തന്നെ എസ്.എസ്.എൽ.സി. വിജയിക്കും എന്ന പ്രതീക്ഷ എനിക്കുണ്ട്.
- 36. പത്താംക്ലാസ്സുവരെ പഠിച്ചാൽ മതി എന്ന് എനിക്ക് തോന്നാറുണ്ട്.
- 37. വിദ്യാഭ്യാസമുണ്ടായാലും ജോലി കിട്ടാൻ ബുദ്ധിമുട്ടായതിനാൽ വിദ്യാഭ്യാസം തികച്ചും അർത്ഥശൂന്യമാണ് എന്ന് എനിക്ക് തോന്നാറുണ്ട്.
- 38. പരീക്ഷകളിൽ നല്ല മാർക്ക് കിട്ടാറുള്ളത് കൊണ്ട് തുടർന്നുള്ള വിദ്യാഭ്യാസത്തിന് ബുദ്ധിമുട്ടുണ്ടാവില്ല എന്ന് ഞാൻ വിചാരിക്കുന്നു.
- 39. പഠനകാര്യങ്ങളിൽ വേണ്ടത്ര ശ്രദ്ധ വെക്കാൻ കഴിയാത്ത സമയങ്ങളിൽ ഞാൻ ഉത്കണ്ഠാകുലനാകാറുണ്ട്.
- 40. ഞാൻ ശരിയായി ഉത്തരമെഴുതിയാൽ പോലും പല അധ്യാപകരും എനിക്ക് മാർക്ക് തരാൻ വൈമനസ്യം കാണിക്കുന്നു.
- 41. കുട്ടികൾ യന്ത്രങ്ങളോ മറ്റോ ആണെന്ന മട്ടിൽ 'പഠിപ്പി' 'പഠിപ്പി' എന്നു മാത്രമാണ് അധ്യാപകരുടെ പല്ലവി.
- 42. കുട്ടികുടെ കാര്യത്തിൽ ശ്രദ്ധയില്ലാത്ത അധ്യാപകരോട് എനിക്ക് വെറുപ്പാണ്.
- 43. ഗൃഹപാഠങ്ങൾ ചെയ്യാൻ എനിക്ക് മടിയാണ്.
- 44. അധ്യാപകൻ ക്ലാസ്സെടുക്കുമ്പോൾ സംശയം ചോദിക്കുവാൻ ഞാൻ ധൈര്യം കാണിക്കാറുണ്ട്.
- 45. വിഷയങ്ങൾ പഠിപ്പിക്കുവാൻ അധ്യാപകൻ സമയത്തിന് എത്തിയില്ലെങ്കിൽ എനിക്ക് യാതൊരു ഇരിപ്പിടംവെച്ചിട്ടുമില്ല.
- 46. പഠനനിലവാരമാണ് ക്ലാസ്സിലെ കുട്ടികളുടെ സ്ഥാനമാനങ്ങൾക്ക് അടിസ്ഥാനമെന്നെനിക്കു തോന്നാറുണ്ട്.
- 47. വിദ്യാഭ്യാസത്തിലൂടെ സ്വന്തം കാലിൽ നിൽക്കാൻ കഴിയുമെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.

- 48. പഠനകാര്യത്തിൽ സംശയങ്ങളുണ്ടാകുമ്പോഴൊക്കെ ക്ലാസ്സിലെ സുഹൃത്തുക്കൾ സഹായത്തിനെത്താറുണ്ട്.
- 49. നല്ല സഹപാഠികളെ കിട്ടിയതുകൊണ്ട് പഠിക്കാൻ എനിക്ക് നല്ല ഉത്സാഹമാണ്.
- 50. സഹപാഠികളുമായി ചേർന്ന് പഠനപ്രവർത്തനം നടത്തുന്നതുകൊണ്ട് പഠനനിലവാരം ഉയർത്താമെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 51. എന്നെപ്പോലെ നന്നായി പഠിക്കുന്നവരോട് കൂട്ടുകൂടാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 52. മറ്റുള്ളവർ എന്നെ മാതൃകയാക്കുന്ന തരത്തിലുള്ള പ്രവർത്തനങ്ങൾ കാഴ്ചവെക്കാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 53. എന്റെ ക്ലാസ്സിലെ എല്ലാവരും ഇഷ്ടപ്പെടുന്ന വ്യക്തിയാവാൻ ഞാൻ ആഗ്രഹിക്കുന്നു.
- 54. എന്റെ കഴിവിനെ എല്ലാവരും അംഗീകരിക്കണമെന്ന് ഞാൻ ആഗ്രഹിക്കുന്നു.
- 55. സംശയനിവാരണത്തിന് ക്ലാസ്സിലെ മറ്റു കുട്ടികൾ എന്റെ അടുത്തുവരണമെന്ന് ഞാൻ ആഗ്രഹിക്കുന്നു.
- 56. എന്റെ അഭിപ്രായങ്ങൾ ഏറ്റവും വിലപ്പെട്ടതാകുവാൻ ഞാൻ താല്പര്യപ്പെടാറുണ്ട്.
- 57. ഉന്നതവ്യക്തികളുമായി ഇടപഴകുവാൻ ഞാൻ ഉത്സാഹിക്കാറുണ്ട്.
- 58. എന്റെ നല്ല രീതിയിലുള്ള പ്രവർത്തനത്തെ എല്ലാവരും അഭിനന്ദിക്കണമെന്ന് ഞാൻ ആഗ്രഹിക്കുന്നു.
- 59. ക്ലാസ്സിൽ ഒന്നാം സ്ഥാനം ലഭിക്കണമെന്ന ആഗ്രഹത്തോടെ ഞാൻ പഠിക്കാറുണ്ട്.
- 60. വിജയം എനിക്കുതന്നെ എന്നുറപ്പുള്ള കാര്യങ്ങൾ ചെയ്യുവാനാണ് എനിക്ക് ഉത്സാഹം.
- 61. പഠനകാര്യങ്ങൾ സഹപാഠികളോട് ചർച്ച ചെയ്യുന്നതിന് ഞാൻ മുൻകൈ എടുക്കാറുണ്ട്.
- 62. സഹപാഠികളിൽ സ്വാധീനം ചെലുത്തുവാൻ കഴിയുന്നത് എനിക്ക് സന്തോഷമുള്ള കാര്യമാണ്.
- 63. ഞങ്ങൾ ഏതെങ്കിലും സംഘപ്രവർത്തനങ്ങൾക്ക് രൂപംകൊടുക്കുമ്പോൾ അത് എന്റെ നേതൃത്വത്തിൽ നടക്കുന്നതിലാണ് എനിക്ക് താൽപര്യം.
- 64. സഹപാഠികൾക്ക് പഠനസംബന്ധമായ നിർദ്ദേശം കൊടുക്കുവാനും അതനുസരിച്ച് കാര്യങ്ങൾ നടത്തുവാനും എനിക്കിഷ്ടമാണ്.
- 65. പഠനത്തെക്കുറിച്ച് ഒരു വേവലാതിയുമില്ലാതെ സ്വസ്ഥമായി ഞാൻ ഞായറാഴ്ചകൾ കഴിച്ചുകൂട്ടുന്നു.
- 66. ഉന്നതനിലവാരം പുലർത്തുന്ന ചോദ്യങ്ങൾക്ക് ഉത്തരം കണ്ടെത്തുന്നതിൽ എനിക്ക് വലിയ ഉത്സാഹമാണ്.
- 67. കഥകളും കവിതകളും മറ്റും ആസ്വദിക്കുന്നതിൽ ഞാൻ ആനന്ദം കണ്ടെത്താറുണ്ട്.

- 68. രണ്ടു ദിവസത്തെ അവധി കഴിഞ്ഞ് തിങ്കളാഴ്ചയാകുമ്പോൾ മനസ്സിൽ എനിക്ക് ഒരു ഭയമാണ് അനുഭവപ്പെടാറുള്ളത്.
- 69. പഠനകാര്യത്തെക്കാൾ സ്കൂളിൽ പോകാൻ എനിക്ക് ഉത്സാഹം തരുന്നത് ചങ്ങാതിമാരുമൊത്തുള്ള കളികളാണ്.
- 70. പ്രോത്സാഹനങ്ങളും സമ്മാനങ്ങളും ലഭിക്കുമ്പോൾ മാത്രമേ ഞാൻ പഠനത്തിൽ താല്പര്യം കാണിക്കാറുള്ളൂ.
- 71. ആത്മസംതൃപ്തിക്കു വേണ്ടിയാണ്, അല്ലാതെ മറ്റുള്ളവരുടെ അംഗീകാരത്തിനോ പ്രോത്സാഹനത്തിനോ വേണ്ടിയല്ല ഞാൻ കൂടുതൽ മാർക്കുനേടാൻ ശ്രമിക്കുന്നത്.
- 72. പഠനത്തിലുള്ള ചത്വരം എനിക്ക് ഉത്സാഹം തരാറുണ്ട്.
- 73. വിനോദയാത്രകളെക്കാൾ എനിക്കിഷ്ടം പഠനയാത്രകളാണ്.
- 74. പഠനയാത്ര നടന്നുമ്പോൾ വിജ്ഞാന പ്രദമായ കാര്യങ്ങൾ കുറിച്ചുവെക്കുന്ന ശീലം എനിക്കുണ്ട്.
- 75. നന്നായി പഠിച്ചാൽ എന്തും സ്വായത്തമാക്കാമെന്നും കൂടുതൽ കൂടുതൽ ഉയരത്തിലെത്താമെന്നും ഞാൻ വിശ്വസിക്കുന്നു.
- 76. സ്വയം പഠനപ്രവർത്തനങ്ങൾ ചെയ്യുമ്പോൾ ഞാൻ ഉത്കണ്ഠാകുലനാകാറുണ്ട്.
- 77. പഠനം ശരിയായി ചെയ്യാൻ കഴിയാതെ വരുമ്പോൾ അത് ഉപേക്ഷിക്കുവാൻ എനിക്ക് തോന്നാറുണ്ട്.
- 78. ലക്ഷ്യത്തിലെത്തിച്ചേരാൻ സഹായകരമാണോ എന്റെ പഠനരീതി എന്ന് എനിക്ക് സംശയം തോന്നാറുണ്ട്.
- 79. പത്രമാധ്യമങ്ങളിൽ വരുന്ന വിജ്ഞാനപ്രദമായ കാര്യങ്ങൾ ഗ്രഹിക്കുവാനും എഴുതിയെടുക്കുവാനും ഞാൻ താല്പര്യം കാണിക്കാറുണ്ട്.
- 80. ടെലിവിഷനിൽ വരുന്ന വിജ്ഞാനപ്രദമായ കാര്യങ്ങൾ കാണുന്നതിനായി ഞാൻ പ്രത്യേകം സമയം കണ്ടെത്താറുണ്ട്.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SCHOLASTIC MOTIVATION
(FINAL)

Dr. P. Usha & Ramakrishnan. K

നിർദ്ദേശങ്ങൾ:

താഴെ കൊടുത്തിരിക്കുന്ന ഓരോ പ്രസ്താവനയും ശ്രദ്ധാപൂർവ്വം വായിക്കുക. പ്രസ്താവനകളെല്ലാം 'പഠന ഉൾപ്രേരണ' യുമായി ബന്ധപ്പെട്ടതാണ്. ഓരോ പ്രസ്താവനയ്ക്കും 1. എല്ലായ്പ്പോഴും, 2. ചിലപ്പോൾ മാത്രം, 3. ഒരിക്കലും ഇല്ല എന്നിങ്ങനെ മൂന്നു വീതം പ്രതികരണങ്ങൾ കൊടുത്തിരിക്കുന്നു. ഓരോ പ്രസ്താവനയിലും പറയുന്ന കാര്യം നിങ്ങളെ സംബന്ധിച്ചിടത്തോളം യഥാർത്ഥത്തിൽ എത്രമാത്രം ശരിയാണെന്ന് തീരുമാനിക്കുക. ആ പ്രതികരണമാണ് രേഖപ്പെടുത്തേണ്ടത്. ഉത്തരക്കടലാസ് പ്രത്യേകം തന്നിട്ടുണ്ട്. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസിൽ അതാത് പ്രസ്താവനകളുടെ നമ്പറിനെതിരെ, നിങ്ങളുടെ ശരിയായ പ്രതികരണത്തിന് ചുവടെയുള്ള കള്ളിയിൽ 'X' ചിഹ്നം രേഖപ്പെടുത്തുക. പ്രസ്താവനകളുടെ ക്രമനമ്പർ നോക്കി ഉത്തരക്കടലാസിലെ അതേ നമ്പറിനു നേരെയുള്ള കള്ളിയിൽ വേണം 'X' ചിഹ്നം രേഖപ്പെടുത്താൻ. എല്ലാ പ്രസ്താവനകൾക്കും പ്രതികരണം രേഖപ്പെടുത്താൻ പ്രത്യേകം ശ്രദ്ധിക്കുമല്ലോ.

1. പ്രതീക്ഷിച്ച മാർക്കുകൾ എനിക്ക് കിട്ടാറുണ്ട്.
2. ക്ലാസ്സിലെ മറ്റുള്ളവരുമായി ഒത്തുനോക്കുമ്പോൾ പഠനത്തിൽ ഞാൻ വളരെ മോശമാണ്.
3. ഒരു മുന്നറിയിപ്പുമില്ലാതെ ഒരു പരീക്ഷ നടത്തുകയാണെങ്കിൽപ്പോലും എനിക്ക് ഒരു വിധം നന്നായി എഴുതുവാൻ കഴിയും.
4. വിജയിക്കുവാനുള്ള ആന്തരികമായ പ്രേരണയാണ് എന്നെ പഠിക്കുവാൻ പ്രേരിപ്പിക്കുന്നത്.
5. വിഷമമുള്ള പാഠഭാഗങ്ങൾ പഠിക്കാൻ ഞാൻ കൂടുതൽ സമയം ചെലവഴിക്കാറുണ്ട്.
6. വളരെ എളുപ്പമുള്ള പാഠഭാഗങ്ങൾ പഠിക്കുന്നതിനേക്കാൾ എനിക്കിഷ്ടം കുറച്ചു പ്രയാസമുള്ളവ പഠിക്കുവാനാണ്.
7. പരീക്ഷകളിൽ കുറെക്കൂടി എളുപ്പമുള്ള ചോദ്യങ്ങളാണ് ചോദിക്കേണ്ടതെന്ന് എനിക്ക് തോന്നാറുണ്ട്.
8. സ്വയം പ്രശ്നപരിഹാരം കണ്ടെത്തുന്ന തരത്തിലുള്ള പഠനത്തിലാണ് എനിക്ക് താല്പര്യം.

9. ഒരു പാഠഭാഗം പഠിക്കുന്നത് എന്തിനെന്ന് മനസ്സിലാക്കിയാൽ അത് പഠിക്കാൻ എനിക്ക് വളരെ ഉത്സാഹമാണ്.
10. പഠനപ്രവർത്തനങ്ങൾ നന്നായി ചെയ്യാൻ കഴിയുന്നതിൽ എനിക്ക് സംതൃപ്തിയുണ്ട്.
11. പഠനകാര്യങ്ങൾ കൃത്യമായി ചെയ്തുതീർക്കാൻ എനിക്കു കഴിയാറുണ്ട്.
12. ക്ലാസ്സിലെ മറ്റുകുട്ടികളെക്കാൾ പഠനകാര്യങ്ങൾ നന്നായി ചെയ്യാൻ എനിക്കു കഴിയും.
13. പരീക്ഷയെ കുറിച്ചുള്ള ചിന്ത എന്നെ വ്യാകുലപ്പെടുത്താറുണ്ട്.
14. പഠനത്തിൽ നന്നായി ശ്രദ്ധിക്കുന്നതിനാൽ ഉയർന്ന മാർക്ക് നേടാൻ കഴിയുമെന്ന് എനിക്ക് തോന്നാറുണ്ട്.
15. തെറ്റുകൾ വരുത്തുമ്പോൾ അതിന്റെ മൂലകാരണം സ്വയം കണ്ടെത്തുന്നതിൽ ഞാൻ താല്പര്യം കാണിക്കാറുണ്ട്.
16. പഠിക്കാൻ ബുദ്ധിമുട്ട് തോന്നുന്ന പാഠഭാഗങ്ങൾ ഒഴിവാക്കാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
17. ഓരോ ദിവസവും പഠിപ്പിക്കുന്ന ഭാഗങ്ങൾ ഞാൻ അതാതു ദിവസം തന്നെ പഠിക്കാറുണ്ട്.
18. കൂടുതൽ അധ്വാനം ഞാൻ ഇഷ്ടപ്പെടുന്നു.
19. മത്സരപരീക്ഷകളിൽ മറ്റുള്ളവരേക്കാൾ മുൻപന്തിയിൽ എത്താൻ ഞാൻ കഠിനമായി പ്രയത്നിക്കാറുണ്ട്.
20. മറ്റുള്ളവർ നേരംപോക്കിനായി സമയം ചെലവഴിക്കുമ്പോഴും കൂടുതൽ അറിവ് നേടാൻ ഞാൻ ശ്രമിക്കാറുണ്ട്.
21. പഠനത്തിൽ നേട്ടമുണ്ടാക്കുന്ന എല്ലാ അവസരവും ഞാൻ ഉപയോഗപ്പെടുത്താറുണ്ട്.
22. പഠനത്തിൽ ഉയർച്ചയുണ്ടായതിന്റെ പിന്നിൽ നേട്ടങ്ങളുടെ ഒരു ചരിത്രം തന്നെ എനിക്ക് ഉണ്ട്.
23. കൂടുതൽ നേട്ടം ഉണ്ടാവുന്നു എന്ന ബോധമാണ് എന്നെ നന്നായി പഠിക്കാൻ പ്രേരിപ്പിക്കുന്നത്.
24. ഉയർന്ന ബുദ്ധിശക്തിയും നിപുണതയും ആവശ്യമായ പഠനപ്രവൃത്തികൾ ചെയ്യാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
25. പത്താംക്ലാസ്സുവരെ പഠിച്ചാൽ മതി എന്ന് എനിക്ക് തോന്നാറുണ്ട്.

- 26. വിദ്യാഭ്യാസമുണ്ടായാലും ജോലി കിട്ടാൻ ബുദ്ധിമുട്ടായതിനാൽ വിദ്യാഭ്യാസം തികച്ചും അർത്ഥശൂന്യമാണ് എന്ന് എനിക്ക് തോന്നാറുണ്ട്.
- 27. പരീക്ഷകളിൽ നല്ല മാർക്ക് കിട്ടാറുള്ളത് കൊണ്ട് തുടർന്നുള്ള വിദ്യാഭ്യാസത്തിന് ബുദ്ധിമുട്ടുണ്ടാറില്ല എന്ന് ഞാൻ വിചാരിക്കുന്നു.
- 28. കുട്ടികൾ യന്ത്രങ്ങളോ മറ്റോ ആണെന്ന മട്ടിൽ 'പഠിപ്പ്' 'പഠിപ്പ്' എന്നു മാത്രമാണ് അധ്യാപകരുടെ പല്ലവി.
- 29. അധ്യാപകൻ ക്ലാസ്സെടുക്കുമ്പോൾ സംശയം ചോദിക്കുവാൻ ഞാൻ ധൈര്യം കാണിക്കാറുണ്ട്.
- 30. വിഷയങ്ങൾ പഠിപ്പിക്കുവാൻ അധ്യാപകൻ സമയത്തിന് എത്തിയില്ലെങ്കിൽ എനിക്ക് യാതൊരു ഇരിക്കപ്പൊറുതിയും കിട്ടാറില്ല.
- 31. വിദ്യാഭ്യാസത്തിലൂടെ സ്വന്തം കാലിൽ നിൽക്കാൻ കഴിയുമെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 32. നല്ല സഹപാഠികളെ കിട്ടിയതുകൊണ്ട് പഠിക്കാൻ എനിക്ക് നല്ല ഉത്സാഹമാണ്.
- 33. സഹപാഠികളുമായി ചേർന്ന് പഠനപ്രവർത്തനം നടത്തുന്നതുകൊണ്ട് പഠനനിലവാരം ഉയർത്താമെന്ന് ഞാൻ വിശ്വസിക്കുന്നു.
- 34. മറ്റുള്ളവർ എന്നെ മാതൃകയാക്കുന്ന തരത്തിലുള്ള പ്രവർത്തനങ്ങൾ കാഴ്ചവെക്കാൻ ഞാൻ ഇഷ്ടപ്പെടുന്നു.
- 35. സംശയനിവാരണത്തിന് ക്ലാസ്സിലെ മറ്റു കുട്ടികൾ എന്റെ അടുത്തുവരണമെന്ന് ഞാൻ ആഗ്രഹിക്കുന്നു.
- 36. എന്റെ അഭിപ്രായങ്ങൾ ഏറ്റവും വിലപ്പെട്ടതാകുവാൻ ഞാൻ താല്പര്യപ്പെടാറുണ്ട്.
- 37. എന്റെ നല്ല രീതിയിലുള്ള പ്രവർത്തനത്തെ എല്ലാവരും അഭിനന്ദിക്കണമെന്ന് ഞാൻ ആഗ്രഹിക്കുന്നു.
- 38. ക്ലാസ്സിൽ ഒന്നാം സ്ഥാനം ലഭിക്കണമെന്ന ആഗ്രഹത്തോടെ ഞാൻ പഠിക്കാറുണ്ട്.
- 39. പഠനകാര്യങ്ങൾ സഹപാഠികളോട് ചർച്ച ചെയ്യുന്നതിന് ഞാൻ മുൻകൈ എടുക്കാറുണ്ട്.
- 40. സഹപാഠികളിൽ സ്വാധീനം ചെലുത്തുവാൻ കഴിയുന്നത് എനിക്ക് സന്തോഷമുള്ള കാര്യമാണ്.
- 41. സഹപാഠികൾക്ക് പഠനസംബന്ധമായ നിർദ്ദേശം കൊടുക്കുവാനും അതനുസരിച്ച് കാര്യങ്ങൾ നടത്തുവാനും എനിക്കിഷ്ടമാണ്.

- 42. ഉന്നതനിലവാരം പുലർത്തുന്ന ചോദ്യങ്ങൾക്ക് ഉത്തരം കണ്ടെത്തുന്നതിൽ എനിക്ക് വലിയ ഉത്സാഹമാണ്.
- 43. രണ്ടു ദിവസത്തെ അവധി കഴിഞ്ഞ് തികളാഴ്ചയാകുമ്പോൾ മനസ്സിൽ എനിക്ക് ഒരു ഭയമാണ് അനുഭവപ്പെടാറുള്ളത്.
- 44. പഠനകാര്യത്തെക്കാൾ സ്കൂളിൽ പോകാൻ എനിക്ക് ഉത്സാഹം തരുന്നത് ചങ്ങാതിമാരുമൊത്തുള്ള കളികളാണ്.
- 45. പഠനത്തിലുള്ള മത്സരം എനിക്ക് ഉത്സാഹം തരാറുണ്ട്.
- 46. വിനോദയാത്രകളെക്കാൾ എനിക്കിഷ്ടം പഠനയാത്രകളാണ്.
- 47. പഠനയാത്ര നടത്തുമ്പോൾ വിജ്ഞാന പ്രദമായ കാര്യങ്ങൾ കുറിച്ചുവെക്കുന്ന ശീലം എനിക്കുണ്ട്.
- 48. പഠനം ശരിയായി ചെയ്യാൻ കഴിയാതെ വരുമ്പോൾ അത് ഉപേക്ഷിക്കുവാൻ എനിക്ക് തോന്നാറുണ്ട്.
- 49. ലക്ഷ്യത്തിലെത്തിച്ചേരാൻ സഹായകരമാണോ എന്റെ പഠനരീതി എന്ന് എനിക്ക് സംശയം തോന്നാറുണ്ട്.
- 50. പത്രമാധ്യമങ്ങളിൽ വരുന്ന വിജ്ഞാനപ്രദമായ കാര്യങ്ങൾ ഗ്രഹിക്കുവാനും എഴുതിയെടുക്കുവാനും ഞാൻ താല്പര്യം കാണിക്കാറുണ്ട്.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SCHOLASTIC MOTIVATION

(Final)

Dr. P. Usha and Ramakrishnan K.

Instructions

Read carefully each statement given below. All the statements are associated with 'Scholastic Motivation'. Each statement has three responses. *1. Always, 2. Sometimes, 3. Never.* Decide how far the matter in each statement is true, as far as you are concerned. Record the responses in the separate response sheet given to you. In the response sheet, against the number of each statement, put a 'X' mark for the response that you feel correct within the given circle. You should note that the number of statement and the number of the response corresponds. Please take care to respond to all the statements.

1. Usually I get the marks that I expect.
2. When compared with my classmates, I am poor at studies.
3. Even if an exam is conducted without any prior intimation, I can do well.
4. It is the internal inspiration for success that compels me to study.
5. I would spend more time in studying difficult lessons.
6. I prefer learning the difficult portions to the easy ones.
7. I feel that, more easy questions should be included in an examination.
8. I am more interested in problem solving type of learning.
9. I have much pleasure in learning a lesson, if I know the goal behind it.
10. I find satisfaction in performing the learning activities.
11. I can keep punctuality in doing the learning activities.

12. I am able to perform the learning activities better than anybody else in my class.
13. I am very much bothered about examinations.
14. I feel that getting high marks is not a problem for me because I can concentrate well in my studies.
15. When I commit a mistake in my learning process I am interested in finding the root cause behind it.
16. I like to avoid those lessons which I find difficult to study.
17. I usually study the daily lessons on that day itself.
18. I like hard work.
19. I work hard to be first in competitive examinations.
20. I spend my time in gaining more knowledge while others are enjoying and having fun.
21. I would utilise all the opportunities for better learning.
22. Behind the success of my accomplishments in studies, there is continuous hard work.
23. Awareness regarding the educational benefits encourage me to study well.
24. I am interested in studying materials which require high intellectual ability and skill.
25. I feel that I should study only up to tenth standard.
26. Since education does not ensure jobs, I sometimes feel that education is meaningless.
27. I feel that there will not be any difficulty in continuing my education, as I am getting high marks in the examinations.
28. Teacher keep on nagging with the chat 'learn', 'learn' and 'learn' as if students are machines.
29. I do not hesitate to clear my doubts when the teaching is going on.
30. When teachers do not come to class at the proper time, I feel restless.
31. I believe that through education, I can become self reliant.

32. As I have good classmates, I am very much interested in my studies.
33. I believe that the standard of learning can be improved through peer learning activities.
34. I like to present my activities in such a way that others consider it as a model.
35. I often wish that my classmates should approach me for clearing their doubts.
36. I want others to consider my opinions to be of great value.
37. I like others to appreciate my good activities.
38. I concentrate on my studies to achieve the top position in my class.
39. I used to take initiative in discussing study matters with my classmates.
40. I enjoy exercising influence over my classmates.
41. I like to give direction in studies to my classmates and get things going accordingly.
42. I find pleasure in answering standard questions.
43. After two holidays, on Monday mornings I feel fear in my mind.
44. More than studies it is the chance to play with my classmates that makes me go to school.
45. Tough competition in learning inspires me.
46. I prefer study tours to excursions.
47. I have the habit of taking notes during study tours.
48. When I come across difficulty in learning lessons, I give up studying them.
49. I often doubt whether my learning style will help to attain the goal.
50. I take special interest in reading, grasping and making notes on informative topics appearing in the media.

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APPENDIX VID

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION
SCALE OF SCHOLASTIC MOTIVATION

RESPONSE SHEET

പേര് ക്ലാസ്സ്
വയസ്സ് സ്കൂൾ ആൺ / ഖണ്ഡം



ക്രമ നമ്പർ	എല്ലായ്പ്പോഴും	ചിലപ്പോൾ മാത്രം	ഒരിക്കലും ഇല്ല
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