

ACADEMIC ENGAGEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS IN KERALA

VILASINI. E.K

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UNIVERSITY OF CALICUT**

2017

DECLARATION

I, Vilasini.E.K., do hereby declare that this dissertation, **ACADEMIC ENGAGEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS IN KERALA**" has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Farook Training College

Date:

VILASINI. E.K

Dr. MUMTHAS. N.S
Associate Professor
Farook Training College
Calicut

CERTIFICATE

I, Dr. MUMTHAS.N.S. do hereby certify that this dissertation,
ACADEMIC ENGAGEMENT AMONG HIGHER SECONDARY
SCHOOL STUDENTS IN KERALA is a record of bonafide study and
research carried out by **VILASINI. E.K** under my supervision and guidance.
The report has not been submitted by her for the award of any Degree,
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Farook Training College
Date:

Dr. MUMTHAS. N.S
(Supervising Teacher)

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CHAPTER I

INTRODUCTION

- *Introduction*
- *Need and significance of the study*
- *Statement of the problem*
- *Variables of the study*
- *Definition of key terms*
- *Objectives of the study*
- *Hypothesis of the study*
- *Methodology of the study*
- *Scope and limitations of the study*
- *Organisation of the research report*

Education promotes all round development of the child, which unites the soul, body and mind of the individual and helps to transmission of entire values. It is being perceived as capable of modifying the economic scenario and transforming the dreams of millions of human being for better and higher quality of life in to a reality. It is effective system resulting in the development of learner's potentialities, competencies, interest attitudes and values.

"Education is the most powerful weapon which you can use to change the world."

- Nelson Mandela

It is an important tool that is applied in the contemporary world to succeed, as it mitigates the challenges which are faced in a life. The purpose of education is to better a person is about learning for empowerment in all walks of life. What one learns should be always put to good use in order to make the world a better, fairer, safer and more sustainable place for all. Whatever is acquired in human life is the result of education.

Education should help the child to attain good health, worthy home membership, vocational efficiency, civic worthiness ethical character etc. It has been recognized as the most crucial investment in human and social development.

Every country develops its system of education to meet the challenges of changing scenario. In our situation the developing educational system must build upon the gain of the past and the present for a better future for our people and in deed of mankind.

Learning is an activity, which is designed and performed for multiple objectives in terms of changes in pupil behavior. Advancement in technology and the subsequent growth have led to the development of interactive learning environment, which create a renewed interest in the educational process. Individual can play an active role in the learning process.

Today's educational system referred to learner centred approach on learning. Educational thinkers says that, students engagement is necessary for any learning. Academic achievement is the result of student's active engagement in learning

Need and Significance

Engagement is a concept that is not restricted to technology, based leaving activities. Engagement from an educational point of view is seen as the learner participation and interaction with the learning material, learning activities and the learning community.

Engagement is a growth producing activity through which an individual allocates attention in active response to the environment

(C Sikszen Mihalyi, 1990). Engagement related to school activity has become an important concept related to multiple educational outcomes such as achievement, attendance, behavior and drop out or completion.

Student's engagement in school is an important construct that has been associated with student success. Student engagement has been identified as a primary variable in understanding dropout, particularly as gradual process operating in a student's life and interacting that final decision to withdraw.

In education, student engagement refers to the degree of attention, curiosity, interest, optimism and passion that students show when they are learning or being taught, which extends to the level of motivation that have to learn and progress in their education.

Academic engagement is an indicator that combined academic identification and academic participation when captures the students work effort both inside and outside of schools, including hours spent on home work, meeting deadlines, not skipping classes and so on.

The recent decades, student's academic engagement resulting from an increased understanding of the role that certain intellectual, emotional, behavioral, physical and social factors play in the learning process and social development. For example a wide variety of research studies on learning have revealed connection between so-called non-cognitive factors or non-cognitive skills such as motivation, interest, curiosity, responsibility,

determination, perseverance, attitude, work habits, self regulation, social skill etc. Cognitive learning results improved academic performance, test scores, information recalls, skill acquisition etc. The concept of student academic engagement typically arises when educators or educational strategies and teaching techniques that addresses the developmental, intellectual, emotional, behavioral, physical and social factors that enhance learning for students.

It should be noted that educators may hold different views on student Academic Engagement and it may be defined or interpreted differently from place to place. In one school observable behavior such as attending class, listening effectively by participating in discussions, turning in work on time and following rules and directions may be perceived as terms of engagement.

According to Fredricks, Blumenfeld and Paris (2004), the concept of student engagement encompasses, behavioral, emotional and cognitive dimensions. Behavioral engagement involves participating in school related activities, involvement in academic and learning related tasks, positive conduct and absence of disruptive behavior. Emotional Engagement involves relationship with teachers, peers etc. While cognitive engagement consists of an investment in learning and the readiness to work hard to master in difficult tasks. Student's Academic Engagement is influenced by instructional support from teachers, academic and motivational home support for learning. Active academic engagement is essential for outstanding performance by students.

The concept of student Academic Engagement typically arises when educators discuss or priorities educational strategies and teaching techniques that address the developmental, intellectual, emotional behavioral, physical and social factors that either enhance or undermine learning for students.

While the concept of students Academic Engagement seems straight forward, it can take fairly complex forms in practice. Cognitive Engagement includes student's perception and beliefs associated to school and learning. To increase Student Engagement in a subject, teachers may create lessons, assignments or projects that appeal to student's interest or that stimulate their curiosity.

Educators may use wide variety of strategies to promote positive emotions in students that will facilitate the learning process. Teachers may make a point of monitoring students moods and asking them how they are feeling or school programs may provide counselling, peer monitoring or other services that generally seek to give students support their need to succeed academically and feel positive, optimistic or excited about school and learning. The basic theory is that students will be more likely to succeed if at least one adult in the school is meeting with student regularly, inquiring about academic and non academic issues giving her advice and taking an interest in her out of school life, personal passions future aspiration and distinct learning challenges and needs.

Teachers may establish classroom routines, use consistent cues or assign student's role that foster behavior more conducive to learning. Teacher may establish consistent routines that help the students. Behavioral Engagement involves doing home works regularly, participating in the school class activities.

Today's educational system provides various chances to the students to develop their intellectual and personal development. Number of instructional strategies were recommended by Educational authority for enhancing the Academic Performance of students. Academic Engagement helps the students to think abstractly, deal effectively and behave properly in school community.

By considering all these, the investigator tries to find out the extent of Academic Engagement among Higher Secondary School students. Higher Secondary School Students are highly matured students than the secondary school students. They are also the Adolescent Students, they are mature in all aspects of development especially cognitive or intellectual and Emotional and behavioral. So they have the highly cognitive functions and they have to think intellectually and the mature emotional dealings and also they keep the mature relationship between others. The higher secondary school students have many chances to involve the Academic Engagement in their class room activities and school activities. Hence the investigator, wished to find out

how far or how much involvement in Academic Engagement in their class rooms.

Statement of the Problem

The study is entitled as "ACADEMIC ENGAGEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS IN KERALA."

Variables of the Study

The variables are the conditions or characteristics that the experimenter manipulates, control or observe. (Best,2004) The only one variable involved in this study is Academic Engagement among Higher Secondary School Students in Kerala.

Definition of the Key Terms

The key terms are defined as follows:

Academic Engagement

Academic engagement is the extent of students involvement in academic work (Alexander, W. Astin 1999). For the present study Academic Engagement is operationally defined as the sum of scores obtained by the student in the Academic Engagement Scale for the Cognitive, Emotional and Behavioural Dimension of Academic Engagement.

Higher Secondary School Students

Higher secondary school students are the students studying in plus one and plus two classes. In the present study the investigator selected plus one students as the representative of higher secondary students.

Objectives of the Study

The following are the objectives of the study.

- To find out the extent of Academic Engagement (total and component wise) among Higher Secondary School Students in the total group and in the relevant sub groups based on:
 - Gender of the students
 - Locale of the school
 - Type of management of school
 - Subject of specialisaion of students
- To find out whether there exists any significant difference in the extent of Academic Engagement (total and component wise) between the subgroups based on,
 - Gender of students
 - Locale of the school
 - Type of management of school
 - Subject of specialisation of students

Hypothesis of the Study

The following hypothesis is set for the present study.

- There exists significant difference in the extent of Academic Engagement (Total and component wise) among Higher Secondary school students between the sub groups based on
 - Gender of students
 - Locale of the school
 - Type of management of school
 - Subject of specialisation of students

Methodology of the Study

The purpose of the present study is to find out the extent of Academic Engagement among Higher Secondary School Students. To gather reliable and valid information for this study, the investigator selected survey method.

Sample

The target population for the study was Higher Secondary School Students in Kerala. The investigator is collected data from 750 students from 11 schools through stratified sampling technique.

Tool

The investigator developed the tool viz, "Academic Engagement Scale" (2016) with the help of the supervising teacher for collecting the data.

Statistical Techniques Used

Apart from preliminary analysis, following statistical techniques will be used for analysing the study.

1. Test of Significance of difference between means ('t' test)
2. Analysis of variance (Anova)

Scope and Limitations of the Study

The purpose of the present investigation is to study the extent of Academic Engagement among Higher Secondary school students in Kerala. The study was conducted on a representative stratified sample of 732 students belonging to two districts of Kerala viz; Malappuram and Kozhikode. Much care was taken to give due representative to gender of students, locale of schools, type of management of schools and subject of specialisation of students.

Even though precautions were taken to make the study accurate as possible, certain limitations have crept in to the study.

The following are some of the limitations of the study.

- Even though the study meant for Kerala state, the sample was collected only from two districts.
- The sample is collected from Higher Secondary Schools working under state syllabus only. Other streams were not considered.

In spite of all these limitations, the investigator tried her maximum to obtain valid data and to reveal valid conclusions.

Organisation of the Report

Chapter 1 included a brief introduction of the problem, need and significance of the problem, definition of the key terms, variable of the study, objectives, hypothesis, methodology, scope and limitations of the study.

Chapter II includes a theoretical overview of the variable under study and describes about the reported research studies in the area of academic engagement to have a clear cut idea, about the nature of studies in the field.

Chapter III includes methodology of the study in details, description of tools used for measurement, sample selected for the study, data collection procedure and the statistical techniques used for the analysis.

Chapter IV describes preliminary analysis, details of major statistical techniques for the analysis of data, tenability hypothesis, interpretation and conclusions.

Chapter V presents major findings, educational implications of the study and suggestions for further researches.

CHAPTER II

REVIEW OF RELATED LITERATURE

- *Theoretical overview regarding Academic Engagement*
- *Studies Related with Academic Engagement*

REVIEW OF RELATED LITERATURE

The Review of Related Literature is an important pre-requisite to actual planning and execution of any research work. It is very significant aspects of the research process. The term review means to organize the knowledge of the specific area of research to evolve an building of, knowledge to show that the proposed study would be addition to the knowledge of a particular area of investigation of any discipline, which includes theoretical, practical and its research studies.

According to Best and Kahn (2000) familiarity with the literature in any problem helps the students to discover, what is already known, what others have attempted to find out and what problem remain to be solved.

In the words of Good 1973), "The key to the vast store house of published literature may open door to sources of significant problem and explanatory hypothesis and provide helpful orientation for the definition of this problem background for selection of procedure of results. In order to be truly creative and original one must read extensively and critically as a stimulus of thinking."

The survey of related literature may be justified, because it provides a firm and objective ground to the research for identifying an meaningful

questions in the field in which the researcher wants to pursue. It is necessary that the researcher should be fully acquainted with part of the subject.

Therefore the investigator thought it is pertinent to review related researches and literatures to study the specific problem. These studies will help the investigator in planning and designing the present research. So, this chapter is divided under the following headings.

- Theoretical Overview
- Studies Related to Academic Engagement

Theoretical Overview

Concept of Academic Engagement

Engagement is "Students' cognitive involvement, active participation and emotional commitment to their learning" or Engagement is "Student's involvement with activities and conditions likely to generate high quality learning."

Student Engagement refers to the attention, curiosity, interest, optimism and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education. Generally speaking the concept of 'Student Engagement' is predicted on the belief that learning improves when student are inquisitive, interested or inspired and that learning tends to suffer when

students are bored and "disengaged". Stronger Student Engagement or improved Student Engagement are common instructional objectives expressed by educators.

Student Engagement may also refer to the ways in which school leaders, educators and other adults might 'engage' students more fully in the governance and decision making process in school. In the design of programmes and learning opportunities or in the civic life of their community students may create their own questioning, survey their peers and then present the result for school leaders or school boards to advocate for changes in programmes or policies. Some schools have created alternative forms of student governance, "Student Advisory Committees", students appointments to the school board, and other formal and informal ways for students to contribute to governance of a school or advise superintendent, principals and local policy makers. These broader forms of "Student Engagement" can take wide variety of forms.

The term 'Student Engagement' has grown in popularity in recent decades, most likely resulting from an increased understanding of the role that certain intellectual, emotional, behavioral, physical and social factors play in the learning process and social development. Student Engagement typically arises when educators discuss or prioritize educational strategies and teaching techniques that address the developmental, intellectual, emotional, behavioral,

physical and social factors that either enhance or undermine learning for students.

Academic Engagement

Academic Engagement is an indicator that combined academic identification which refers to getting along with teachers, having an interest in the subject matter and related behaviors, attitudes and academic participation. Academic Engagement may involve the students with effort both inside and outside of schools including hours spent, home work etc.

Student Academic Engagement refers to the degrees of attention curiosity, interest, optimism and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education. The concept of 'Student Engagement' is predicted on the belief that learning improves when students are inquisitive, interested or inspired. Dimensions of Academic Engagement.

Academic Engagement has number of dimensions.

Intellectual Engagement

To increase Student Engagement in a course or subject, teachers may create lessons, assignments or projects that appeal to student interests or that stimulate more curiosity. Teachers may give students more choice over the topic they are asked to write about a topic or demonstrate what they have

learned. Teachers may also introduce a unit of study with a problem or question that students need to solve. For example students might be asked to investigate the causes of a local environmental problem, determine the species of an unknown animal from a few short descriptions of its physical characteristics and behaviour or build a robot that can accomplish a specific task. In these cases, sparking students curiosity can try to answer intellectually.

Emotional Engagement

Emotional Engagement in class room learning refers to the students emotional involvement in learning activities, Educators may use varieties of strategies to promote positive emotions in students that will facilitate the learning process. They try to minimize negative behavior and keep students from dropping out.

Behavioral Engagement

Behavioral Engagement refers to the engagement with other students peers, teachers or other members in the school, students are involved in learning activities with the peers and clear the doubts by asking to the teacher. Hence the teachers provide physical activities that can stimulate and improve their learning capacity. Teachers may establish classroom routines, use consistent cues or assign students role that forster behavior more conductive to learning. The class may regularly break up in to small groups or move

their seats in to a circle for a group discussion. Brain based learning has provided to the students that results in variation, novelty, proper improvement in students behavior.

Physical Engagement

Use physical activities or routines to stimulate learning interest. Kinesthetic Learning refers to the use of physical motions and activities during the learning. Teacher asking students to answer the questions around and might ask students to walk up to the chalk board and answer the questions loudly. These are helped the students more likely to remember information when they are using multiple parts of the brain at the same time.

Social Engagement

Social Engagement refers to the students interaction with the classmates, teachers and other members in the school and also the society. Teachers use variety of strategies to stimulate engagement through social interaction. Students are paired or grouped to work collaboratively on project, that create the students competency in social interaction. Academic and Curricular activities such as debate teams, robotic clubs and science fairs also bring to gather and social interaction.

Cultural Engagement

Cultural Engagement refers to the Engagement of Students from various places. School may take active steps to make students from diverse cultural backgrounds. Recently arrived immigrant or refugee students and other families welcomed and accepted in schools. Administrators, teachers and school staff may provide special orientation session for the new population. School activities incorporate multicultural songs, dances and performances and other educational materials featured through out the school may reflect the cultural diversities of the students.

In the opinion of Fredericks, Blumenfeld and Paris 2004), the concept school engagement encompasses, behavioral, emotional and cognitive dimensions. For the present study the investigator highlights the above three dimensions given by Fredricks. Behavioral Engagement involves participating in school related activities, involvement in academic and learning related tasks positive conducts and absence of disruptive behavior. Emotional Engagement involves relationship with teachers, peer and academics while cognitive Engagement consists of investment in learning and the readiness to work hard to master in difficult tasks.

Behavioral Engagement involves doing home work regularly, participating in school club activities, managing school equipments and premises neatly, respecting teachers and non-teaching staffs etc.

Cognitive Engagement includes asking doubts to teachers, extra reading, active interest in studies, consulting experts to clarify doubts, working hard to excel in studies etc.

Emotional Engagement covers respect towards teachers, sharing happiness and sorrows with friends, trusting teachers, encouraging the talents of friends etc.

Hence in brief Academic Engagement involves three dimensions, Viz., Cognitive (that is related to intellectual involvement in classroom and academic activities, Emotional Engagement related to students feelings, attitudes, interests, curiosities etc.) and Behavioral Engagement related to the students behavior in their classroom or the school environment.

Studies Related with Academic Engagement

The purpose of the present study is to find out the extent of Academic Engagement among Higher Secondary School Students in Kerala. In this respect the investigator has made a survey of the studies relating to this area. The reviewed studies are summarised and presented below:

In the opinion of Nystrand and Gamoran (1991), Student Engagement involves the student's willingness to participate in routine school activities such as attending classes, submitting required work and following teachers direction in class.

Using National Assessment of Educational progress student data of three age group campbell, Voelkl and Donahue (1991) conducted a study and established the striking impact of engagement on reading achievement. They found that the national sample 13-Year-old students with higher engagement performed better in reading achievement test than 17 year old students with lower Engagement.

Guthrie and Wigfield (2000) established that more engaged students from low income families scored higher on reading tests than less engaged students from high income families.

Miller (2000) found that supportive teacher student relationship is positively associated with students Engagement and negatively associated with school dropouts.

Study conducted by christenson and Thurlow (2004) proved that student Engagement is influenced by instructional support from teachers and the academic and motivational home support for learning. They also found that the three dimensions of student Engagement are as behavioral, cognitive and affective dimensions, Behavioral Engagement is reflected in attendance, active participation in classes and involvement in extra-curricular activities. Cognitive Engagement refers to the interest in learning, goal setting and self regulation of performance. Affective Engagement involves a sense of belonging and connection to and support by parents, teachers and peers.

Klem and Counel (2004) in a study on teacher support, student engagement and achievement found that 40 percent of elementary school students are not engaged in school and 17 percent of middle school students are disengaged. Thirty four percent of middle school students reported optimal level of teachers support and it is 16 percent in middle school. The study also revealed that teacher support encourages school Engagement where as low level of teacher support brings a liability for engagement.

Cassidy (2005) conducted a study on leisure, coping and health: The role of society, family, school and peer relationship factors. They found that the family environment, encouragement from parents and teachers, relationship with peers and socio economic factors predict attitudes and engagement in leisure.

Furrer, Currie, Skinner and Ellen (2006) studied sense of relatedness as a factor in children's Academic Engagement and performance. The result revealed that children's sense of relatedness is a vital factor of their academic motivation from 3rd to 6th grade children. The reports of relatedness predicted changes in classroom engagement over the school year and contributed over the effect of perceived control. Regression and cumulative risk analyses revealed that relatedness to parents, teachers and peers each uniquely contributed to student's enjoyment.

In a study to examine the effect of teachers relationship quality on student Engagement and achievement. Hughes and Kwok (2007) found that teacher-parent and teacher-student relationship significantly influence measure of outcomes for students of diverse ethnic background when controlling for socio-economic status.

Shernoff and Schmidt (2008) conducted a study using a composite measure of Engagement Viz enjoyment, concentration, and interest found that even though alpha reliability of school engagement composite was low, engagement was positively related to high school students self reported grades.

Mo and Singh (2008) conducted a study on parents relationship with students and found that students with supporting parents show better performance and achievement while considering the students of non-supporting parents.

Simon and Rusan (2009) studied on peer and parent influence on school engagement among early adolescents. They found that authoritative parenting practices may foster school engagement directly and indirectly by discouraging affiliation with problem behaving friends and facilitating school adjustment.

Perdue, manzeske and Estell (2009) reported on early predictors of school engagement by exploring the role of peer relationships. The result

indicated that peer friendship quality, support from friends, aggressive behavior forward peers are uniquely relate to school engagement.

Kusum Singh, Mouique Graville (2010) conducted a study on Mathematics and Science Achievement effect on motivation, interest and Academic Engagement. The result supported positive effect of the two factors, Viz., attitude and Academic Engagement on mathematics and science Achievement.

Li, Lynch, Kelvin, Lia and Lerner (2011) conducted a study on peer relationship as a context for the development of school engagement during early adolescence. They found that peer support positively predicted behavioral and emotional school Engagement where as associating with problem behaving friends and bullying involvement associated both aspects of school Engagement.

A study was conducted by Doteror and Lowe (2011) on the classroom context, school engagement and academic achievement of adolescence. The result indicated that psychological and behavioral Engagement mediated the link between classroom context and academic achievement for students without previous achievement difficulties.

Liem and Martin (2011) investigated peer relationship and adolescents academic and non-academic out-comes. They found that perceived same sex peer relationships yielded positive direct and indirect link with academic

performance and general self esteem perceived opposite sex peer relationships yielded positive direct and indirect links with general self esteem an indirect positive link with academic performance.

Ferrell (2012) studied on class room social environment, motivational beliefs, and student Engagement and found that there is significant relationship between student perception of the class room social environment and their self rating level of engagement.

Rowan, Swan and Creager (2012) carried out a study on social cognitive support and engagement: Early adolescents math interests as precursors to choice of career. They suggested that importance of using group work and extrinsic motivation in middle school math classes to broader interest peer class room behavior was often a detractor of math interest.

Estell and Perdue (2013) conducted a study on social support and behavioral and affective Engagement. The result showed that the parent and peer support was associated with higher level of affective Engagement.

Curby Bruck and Bridget (2013) studied on teacher's emotional support consistency and children's achievement gain and social skills. This suggested that when mean levels of emotional support were controlled, within day consistency of emotional support predicted several academic outcomes in pre-kindergarten as well as social competence in kindergarten. Teacher's

consistency of emotional support is a silent aspect of children's classroom environment.

Ozdemir and Kalagei (2013) studied on examination on school engagement and metaphorical school perception: case province of Kankiri. They found that participants school Engagement and positive school perception levels were in moderate level. In addition that metaphorical school perception predicted school management.

Interrelations of Behavioral, emotional and cognitive school Engagement in high school students, a study conducted by Li and Lerner (2013) indicated that behavioral and emotional engagement were related bidirectional. In addition behavioral Engagement influenced cognitive Engagement.

Wang and Fredricks (2014) reported on the reciprocal links between school engagement youth problem behaviors and school dropout during adolescence. They found that adolescence who had declines in behavioral and emotional Engagement with school tended to have increased delinquency and substance use overtime. Finally, lowers behavioral predicted greater likelihood of dropping out of school.

Buines and Robart Romano (2015) conducted a study on "Students Engagement and Achievement in Language and art." The finding reveals that

high language students and better performance students are highly engaged in their activities related language and art performance.

John Hatic, Shulrut, Webster (2016) conducted a correlational study "Relationship between student Engagement and Academic Achievement". The study aims to identify the relationship between three domains of student Engagement: Academic, Behavioral and Emotional and Academic Achievement. The finding suggests that student Engagement is positively associated with academic achievement.

Gunue (2016) conducted a study "The Relationship between student Engagement and their Academic Achievement". The purpose of this study was to examine to relationship between student engagement and academic achievement. The result obtained revealed that there were significant relationship between the student's Academic Achievement and student Engagement as well as between their academic achievement and especially the dimensions of cognitive, behavioral and sense of belonging. In addition, it was found out the cognitive, Behavioral and Emotional Engagements Predicted Academic Achievement.

Conclusion

From the overall review of available literature mentioned above the investigator could reach the following conclusion.

However this review helped the investigator to get sufficient information regarding the present study, from this it can be seen that there are so many studies conducted in the area of Academic Achievement but only a few of them in Academic Engagement and its components. In this context, the investigator assumed that the present study is highly relevant one, in the field of education.

CHAPTER III

METHODOLOGY

- *Variables*
- *Objectives*
- *Hypothesis*
- *Tools Employed*
- *Data collection procedure*
- *Scoring and consolidation of data*
- *Statistical techniques used for analysis of data*

METHODOLOGY

Methodology is a process which reveals all the methods and techniques followed by the researcher during the course of research work. The success of any research work depends largely upon the suitability of the methods, tools and techniques followed by the researcher in collecting and processing data. Thus the role of methodology is to carry on the research work in a scientific and valid manner.

The present study is an attempt to find out the extent of Academic Engagement among Higher Secondary School Students. The methodology of study is presented below under the following heads, Viz.

- Variable
- Objectives
- Hypothesis
- Tools Employed for data collection
- Sample selected for the study
- Data collection procedure, scoring and consolidation of data
- Statistical techniques used for analysis of data

The details of each of the above is given below:

Variable

The variable in the study is Academic Engagement. The classificatory variables are gender of the students, locale of the school, type of management of school and subject of specialisation of students.

Objectives

The following are the objectives of the study.

- To find out the extent of Academic Engagement (total and component wise) among Higher Secondary School Students in the total group and in the relevant subgroups based on,
 - Gender of the students
 - Locale of school
 - Type of management of school
 - Subject of specialisation of students

- To find out whether there exists any significant difference in the extent of Academic Engagement (total and component wise) between the subgroups based on,
 - Gender of students
 - Locale of the school

- Type of management of school
- Subject of specialisation of students

Hypothesis

The following hypothesis is set for the present study.

- There exists significant difference in the extent of Academic Engagement (total and component wise) among Higher Secondary School Students between the subgroup based on
 - Gender of students
 - Locale of school
 - Type of management of school
 - Subject of specialisation of students.

Tools Employed for data Collection

The investigator developed the tool Viz, Academic Engagement scale for collecting then relevant data.

Detailed Description of the Scale:

The tool 'Academic Engagement Scale' (2016) prepared and standardised by the investigator in consultation with her supervising teacher.

The procedure followed in the construction and standardisation of the Academic Engagement Scale is described below:

Planning of the Scale

The first step in the construction and standardisation of a scale is planning of the scale. For the present study it was decided to develop a Likert type scale with responses Viz, Yes, No opinion, No. This scale is used to find out the extent of Academic Engagement among Higher Secondary School Students.

According to Fredrick Blumenfeld and Paris (2004) the concept of student Engagement encompasses, cognitive, emotional and Behavioral dimensions. So the investigator focused on the three dimensions Viz, Cognitive, Emotional and Behavioral Engagement as the major dimensions of Academic Engagement. Description of each of this dimension is given below.

Cognitive Engagement

Cognitive Engagement consists of an investment in learning and the readiness to work hard to master in difficult tasks. The activities like asking doubts to teachers, extra reading, showing active interest in studies consulting experts to clarify doubts, working hard to excel in studies etc. come under cognitive dimension of Academic Engagement. Item number 1 to 20 are come under this dimension.

Eg:- I am giving more importance in classroom learning activities.

Emotional Engagement

Educators may use wide variety of strategies to promote emotions in students, that will facilitate the learning process, minimise negative behaviors, keep student from dropping out. Teacher may make a point of monitoring students mood and asking them how they are feeling or school programme may provide counselling, peer monitoring or other services that generally seek to give students to support the need to succeed academically and feel positive, optimistic or excited about school and learning strategies.

Respect towards teachers, sharing happiness and sorrows, encouraging the talent of friends etc are the indicators of the emotional engagement. Item number 21 to 40 are come under this dimension.

Eg:- I feel happy in each and every moment in the school.

Behavioral Engagement

Behavioral Engagement involves doing home work, regularity, participating in school day activities, maintaining school equipments and premises neatly, respecting non-teaching staff etc. Item number 41 to 60 come under this dimension.

Eg:- I am a regular student in my class.

Preparation of the Scale

Based upon the above mentioned dimension the investigator developed the tool "Academic Engagement Scale". The draft scale consists of 60 items, of which 36 items are positive and 24 items are negative. Copies of the draft tool 'Academic Engagement Scale' (Malayalam and English version) are given as appendix I and II respectively.

Scoring Procedure

Each statement of the scale has three responses Viz; Yes, No opinion, No. For the positive statement the respective score for the three responses are 3, 2 and 1 respectively, and for a negative statement the scoring was done in the reverse order.

Tryout of the Preliminary Scale

The purpose of tryout of the scale is to select the items for the final scale by empirically testing the item. For try out, the preliminary scale was administered to a sample of 370 Higher Secondary School Students selected by stratified sampling techniques, giving due representation to gender of the student, locale of school, type of management of school and subject of specialisation.

The 370 response sheets obtained were scored and the total score for each sheet was calculated then these sheets were arranged in descending order of the total score and highest and lowest 27 percent were separated.

The mean and standard deviation of the score obtained for each item for the upper and lower group were calculated separately. The critical ratio for each item were calculated using the formula

$$\text{Critical Ratio} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where

\bar{X}_1 = Mean of each item in the upper group

\bar{X}_2 = Mean of each item in the lower group

σ_1 = Standard deviation of each item for the upper group

σ_2 = Standard deviation of each item for the lower group

N_1 = Sample size for the upper group

N_2 = Sample size for the lower group

The critical ratio (t-value) obtained for each item together with means and standard deviation for the two groups are given in Table 1.

Table 1

Data and Result of test of significance of difference between upper group and lower group

	M₁	M₂	σ_1	σ_2	t-value
1.	2.89	1.79	0.37	0.83	10.06
2.	2.98	.27	.20	.85	8.12
3.	2.99	1.96	0.10	0.94	10.87
4.	2.80	1.55	0.56	0.80	12.64
5.	2.82	1.55	0.53	0.80	13.06
6.	2.66	1.64	0.74	0.89	8.78
7.	2.85	1.80	0.50	0.94	9.83
8.	2.92	1.74	0.39	0.90	11.94
9.	2.92	1.62	0.30	0.77	15.58
10.	2.75	1.74	0.90	0.96	9.02
11.	2.27	1.49	0.96	0.79	6.24
12.	2.83	1.81	0.55	0.88	9.78
13.	2.79	1.57	0.60	0.84	11.73
14.	2.85	2.28	0.50	0.92	5.43
15.	2.89	1.76	0.44	0.92	11.02
16.	2.88	1.52	0.38	0.74	16.22
17.	2.98	2.33	0.20	0.89	7.05
18.	2.88	2.01	0.43	0.87	8.95
19.	2.51	1.72	0.84	0.88	6.43
20.	2.99	1.89	0.10	0.88	12.33
21.	2.96	1.66	0.28	0.83	14.81
22.	2.17	1.83	9.97	0.94	2.50
23.	2.96	2.11	0.24	0.91	8.93
24.	2.99	2.52	0.10	0.73	6.36
25.	2.98	2.56	0.20	0.76	5.28
26.	2.98	2.45	0.20	0.74	6.88
27.	2.88	1.82	0.45	0.91	10.37
28.	3.00	2.00	0.00	0.89	11.12
29.	2.94	2.40	0.31	0.82	6.09

	M₁	M₂	σ_1	σ_2	t-value
30.	2.98	2.20	0.20	0.80	9.41
31.	1.73	2.06	0.93	0.88	2.56
32.	2.89	1.93	0.44	0.91	9.44
33.	2.98	2.26	0.20	0.86	8.15
34.	2.97	2.18	0.22	0.92	8.30
35.	3.00	2.33	0.00	0.82	8.07
36.	3.00	2.50	0.00	0.74	6.70
37.	2.65	2.02	0.74	0.89	5.40
38.	2.84	2.27	0.52	0.82	5.81
39.	2.98	2.09	0.20	0.85	10.14
40.	3.00	2.52	0.00	0.68	6.96
41.	3.00	1.51	0.00	0.78	18.98
42.	2.98	1.93	0.20	0.91	11.23
43.	2.96	1.97	0.24	0.85	11.10
44.	3.00	2.23	0.00	0.83	9.17
45.	2.61	1.71	0.75	0.87	7.78
46.	2.78	1.98	0.57	0.92	7.35
47.	2.95	1.84	0.29	0.89	11.76
48.	2.99	2.49	0.10	0.79	6.22
49.	2.94	1.96	0.34	0.90	10.08
50.	2.97	2.05	2.22	0.85	10.38
51.	2.90	2.14	0.43	0.94	7.30
52.	2.96	1.72	0.24	0.80	14.74
53.	2.98	2.16	0.20	0.91	8.72
54.	2.98	2.00	0.20	0.89	10.64
55.	2.98	1.64	0.14	0.78	16.79
56.	2.92	1.52	0.36	0.81	15.74
57.	2.89	1.48	0.42	0.77	16.01
58.	2.99	1.66	0.10	0.85	15.44
59.	2.87	1.92	0.46	0.91	9.23
60.	2.88	1.94	0.43	0.89	9.43

Finalisation of the Scale

Items with critical ratio greater than 1.96, the table value of 't' at 0.01 level of significance were selected for the final scale. Thus the total 60 items were selected for the final scale, in which 36 items are positive and 24 items are negative.

Reliability

Reliability of a test is its ability to yield consistent result from one set measure to another. According to Best and Kahn (2001) "reliability is the degree of consistency that the instrument or procedure demonstrates whatever it is measuring it does so consistently".

Academic Engagement scale was administered to a group of 40 plus one students and again the scale was administered to the same group with an interval of 2 weeks. The score obtained from the first test was correlated with that of the re-test. The reliability co-efficient was founded to be 0.85 which suggests that the scale is highly reliable.

Validity

According to Best and Kahn (2001) validity is the quality of a data gathering instrument or procedure that ensure it to measure what is supposed to measure.

The validity of the present scale is ensured through face validity. A test is said to have face validity when it appears to measure whatever author had in mind, namely, what he thought, he was measuring (Garret, 1981). The items in the scale were framed in simple clear language so that the respondents can comprehend the items easily and hence the scale possess face validity.

Sample Selected for the Study

A sample may be defined as finite number of observation or cases selected from all area in a particular universe often assured to be representative of the total group or universe of which it is a part (Good, 1973).

The study planned to be carried out on a representative sample of 750 students studying in plus one class of Higher Secondary School of Malappuram and Kozhikode districts. The sample were selected under stratified sampling techniques by giving due representation to the factors like gender of the students locale of the school, type of management of school and subject of specialisation of students.

Gender of the Student

Gender has great influence on findings of research. Since it had been found that sex difference exists in many of the psychological variables, the investigator decided to give due weightage to the gender of students.

Locale of the School

Since the number of Higher Secondary Schools in rural area are more than the number of schools in urban area, the investigator decided to give due weightage to locale of school.

Type of management of Schools

The existing schools in Kerala fall in to three categories Viz, Government school which are directly managed by the Government, Aided School which are managed by private agencies with Government aid and unaided schools which are not aided by Government.

Subject of Specialisation

In the present study the investigator decided to give appropriate weightage to the three subject of specialisation of students viz., ie. Science, Humanities and Commerce.

Data Collection Procedure, scoring and consolidation of data

Administration of the Scale

After finalising the sample the investigator prepared a time schedule for visiting the school in two districts and in accordance with it, the investigator approached the concerned authorities of the above institutions and seek permission to administer the scale concerned. As a prior condition

of the administration of the tool, the investigator explained the basic aspects relating to the tool and made them acquainted with the procedure. The students were asked to respond in response sheet which was made for the purpose. The respondents were assured of the maintenance of confidentiality of their response.

Scoring and Consolidation of Data

The response sheets were scored according to the scoring procedure and thus consolidated and tabulated for statistical analysis. While scoring incomplete response sheets were rejected and hence the final sample size is reduced from 750 to 732. The breakup of the final sample is given in Table 2.

Table 2

Breakup of the Final Sample

Gender of Students		Locale of School			Type of Management of School		Subject of Specialisation		
Male (M)	Female (F)	Rural (R)	Urban (U)	Govt. (G)	Aided (A)	Unaided (UNA)	Science	Humanities	Commerce
348	384	451	281	304	381	47	261	197	274
732		732			732		732		

Statistical Techniques used for Analysing the Data

Preliminary Analysis

The important statistical properties of variable Academic Engagement were calculated and analysed as preliminary step. For this mean, median, mode, standard deviation, skewness, kurtosis were calculated for the total sample. Apart from this, the following statistical technique is used for analysing the data.

Test of significance of difference between means for large independent samples.

The mean score obtained were compared using the test of significance of difference between means for large independent samples. The formula used for finding the critical ratio is

$$\text{Critical Ratio} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where

X_1 = Arithmetic mean of the first group

X_2 = Arithmetic mean of the second group

σ_1^2 = Variance of the first group

σ_2^2 = Variance of the second group

N_1 = Sample size of the first group

N_2 = Sample size for the second group

If the obtained critical ratio 't' is greater than the required table value for significance, at 0.05 or 0.01 level of significance, the mean difference is considered to be significant.

CHAPTER IV

ANALYSIS

- *Hypothesis of the study*
- *Preliminary Analysis*
- *Extent of Academic Engagement for total sample and Relevant subsamples*
- *Comparison of the mean scores of Academic Engagement in total sample and Relevant subsamples*
- *Summary of findings*
- *Tenability of Hypothesis*

ANALYSIS

This chapter presents the details of the statistical analysis and result obtained.

Hypothesis of the Study

- There exists significant difference in the mean score of Academic engagement (total and component-wise) among Higher Secondary School students between the subgroups based on,
 - Gender of the students
 - Locale of the School
 - Type of Management of School
 - Subject of specialization of students.

Analysis and results are described under separate heading viz;

- A. Preliminary Analysis
- B. Extent of Academic engagement and Higher Secondary School students in the total sample and relevant sub samples.
- C. Comparison of the mean score of Academic Engagement (total and component-wise) of Higher Secondary School students between the relevant subsamples based on

- a) Gender of the students
- b) Locale of the school
- c) Type of Management of the school
- d) Subject of specialization of students

Summary of Findings

The preliminary analysis consists of checking of the nature of distribution of the variable Academic Engagement among Higher Secondary School students. The important statistical constants such as mean, median, mode, standard deviation, skewness and kurtosis are calculated for the total sample in order to get the general nature of scores of the variable Academic Engagement.

As the first step of analysis, the important statistical constants such as mean, median, mode, standard deviation skewness, kurtosis were calculated. This was done to see whether the variable Academic Engagement was normally distributed or not. The details of the analysis mentioned above are given in Table.3

Table 3

Descriptive statistics of the Variable Academic Engagement among Higher Secondary School Students

Sample	Mean	Median	Mode	SD	Skewness	Kurtosis
N=732	147.69	148.00	159.00	17.37	-0.47	-0.28

Table 3 reveals that the measures of central tendencies viz, mean, median, mode are approximately equal. The extent of skewness or index of symmetry is -0.47 , which indicates the distribution is slightly negatively skewed. The index of kurtosis is -0.28 , which means that the distribution is slightly leptokurtic. Graphical representation of the scores of Academic engagement for total sample is presented in figure-1

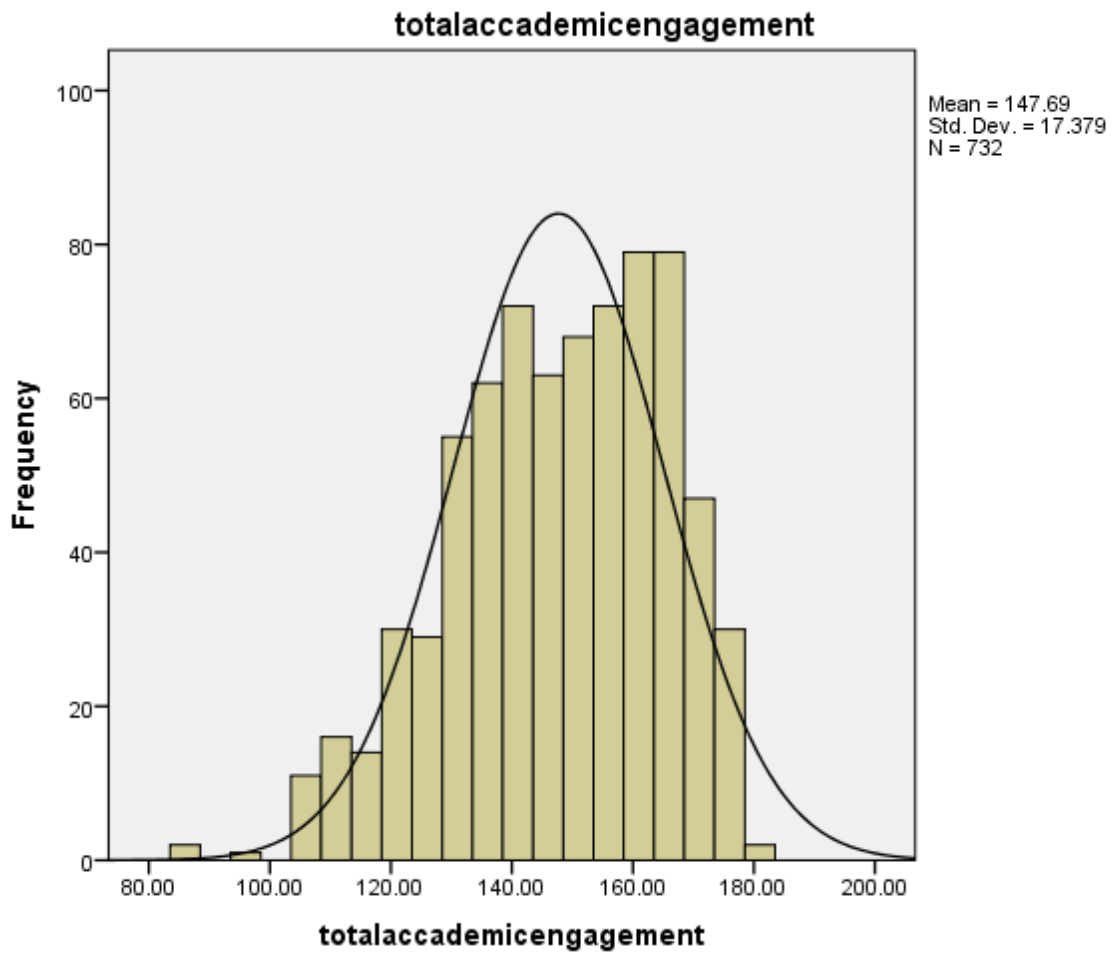


Figure 1. Frequency curve for scores of academic engagement for the total sample.

This statistical constants and the graphical representation of the variable academic engagement reveals that the distribution of the variable 'Academic Engagement' is approximately normal.

Extent of Academic Engagement Among Higher Secondary School Students in the Total Sample And Relevant Sub Samples

a) Extent of Academic Engagement among Higher Secondary School students is total sample and relevant sub samples.

Extent of Academic Engagement among Higher Secondary School students in the total sample and the relevant sub samples based on gender, locale, type of management and the subject of specialization of the students are established by calculating mean scores.

The mean scores of Academic Engagement among Higher Secondary School students in the total sample and sub samples are presented in Table-2

Table 4

Mean score of the Academic Engagement among Higher Secondary School Students in the total sample and the relevant sub samples

Total sample	Gender		Locale		Type of Management			Subject of Specialization		
	Male	Female	Rural	Urban	Govt.	Aided	Unaided	Sc.	H	C
147.69	141.44	153.35	147.34	148.24	145.82	149.98	141.12	148.22	149.38	145.76

Table 4 reveals that the mean score of Academic Engagement among Higher Secondary school students in the total sample is 147.69. This means that Academic Engagement among Higher Secondary School Students is moderate as it is greater than the neutral value 120. While the gender was

considered female students have high mean score in Academic engagement their counter parts. When we consider the locality of the schools, urban school students have higher mean score in Academic Engagement than the rural students. When the type of management of school is considered, Aided higher secondary school students have more academic engagement than that of Government and Unaided Higher Secondary School students. When the subject of specialization is considered, Science students have high mean score in Academic Engagement than the humanities and commerce students.

Discussion

When considering the total sample, the level of Academic Engagement among Higher Secondary School student is moderate. The female students have more Academic Engagement than the male students. When we consider the sub sample based on gender, urban students are more academically engaged than the rural students, when the locality of the school is considered. With respect to the type of management of school, aided school students have more academic engagement than the Government and Unaided students. In the case of subject of specialization, science students have more Academic Engagement than the Humanities and commerce students.

Comparison of the Mean Scores of Academic engagement (Total and Component-wise) at Higher Secondary School Students BASED ON Relevant Subsamples

Based on Gender of students

The investigator tested the significance of difference between the mean scores of the variable Academic Engagement based on Gender of the students using two tailed test of significance of difference between means for large independent samples. The results are given in Table 4.

Table 5

Data and results of the test of significance of difference between the mean scores of the Academic Engagement based on gender students

Variable compared			Mean score	Standard deviation	Critical ratio
Academic	Male (N=348)		141.44	17.78	-9.84**
Engagement	Female (N=384)		153.35	14.90	
Cognitive	Male		44.74	8.00	-8.77**
Engagement	female		49.41	6.34	
Emotional	Male		50.00	5.89	-7.80**
Engagement	Female		53.02	4.49	
Behavioral	Male		46.69	7.41	-8.14**
Engagement	Female		50.91	6.62	

Note: ** indicates $P < 0.01$

Table 5 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of male and female Higher

Secondary school students for the variable Academic Engagement is 9.84 which is greater than 2.58. The tabled value of 't' required for significance at 0.01 level. This indicates that male and female students significantly different in the extent of Academic Engagement. Also the mean scores reveals that female students have more academic engagement than their counter parts.

Table 5 also shows that the critical ratio obtained for the test of significance of difference between the mean scores of male and female students for the variable cognitive engagement is 8.77, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that male and female higher secondary school students significantly differ in the component cognitive engagement. Also the mean scores obtained for male and female students reveals tha, female students are more engaged in cognitive type of activities than male students.

From Table 5, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of male and female students for the variable emotional engagement is 7.80, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that male and female higher secondary school students significantly differ in the extent of emotional engagement. Also the mean scores obtained for male and female students reveals that female students are better in emotional engagement in the school than their counterparts.

Table 5 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of male and female students for the variable behavioral engagement is 8.14, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that male and female higher secondary school students significantly differ in the extent of behavioral engagement. Also the negative sign of the critical ratio reveals that female students are better in engaging behavioral activities than their counterparts.

ii) Based on the Locale of school

The investigator tested the significance of difference between mean scores of the Variable Academic Engagement based on the Locale of the school using two tailed test of significance of difference between means for large independent samples. The results are given in Table 6.

Table 6

Data and results of the test of significance of difference between the mean scores of the Academic Engagement based on Locale of school

Variable compared	Group compared	Mean score	Standard deviation	Critical ratio
Academic Engagement	Rural N=451	47.32	7.76	0.61
	Urban N=281	46.97	7.28	
Cognitive Engagement	Rural	47.38	7.61	1.15
	Urban	46.63	7.37	
Emotional Engagement	Rural	51.36	5.63	-1.40
	Urban	51.94	5.03	
Behavioral Engagement	Rural	48.65	7.54	-1.20
	Urban	49.32	6.93	

Table 6 reveals that the critical ratio obtained for the test of significance of difference between the mean scores rural and urban Higher Secondary school students for the variable Academic Engagement is 0.61, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that rural and urban Higher Secondary School student not significantly differ in the extent of their Academic Engagement.

From Table 6, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of rural and urban students for the variable cognitive engagement is 1.15, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that

rural and urban students not significantly differ in the extent of their cognitive engagement.

Table 6 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of rural and urban students for the variable emotional Engagement is 1.40, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that rural and urban students does not differ significantly in the extent of their Emotional Engagement.

From Table 6, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of rural and urban students for the variable Behavioral Engagement is 1.20, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that rural and urban students not significantly differ in the extent of Behavioral Engagement.

iii) Based on Type of Management of school

To compare the mean score of the variable Academic Engagement (total and component wise) between the sub sample based on type of management of the school, one way ANOVA is used. The details of the result are given in Table 7

Table 7

Summary of one way ANOVA of Academic Engagement by Type of Management of schools

Variable compared	Source of variance	Sum of squares	df	Mean squares	'F' Value
Academic Engagement	Between group	5091.54	2	2545.77	
	within group	215690.29	729	295.81	8.60**
	Total	220781.84	731		
Cognitive Engagement	Between group	1293.35	2	645.67	
	within group	40350.48	729	55.35	11.68**
	Total	41643.84	731		
Emotional Engagement	Between group	209.49	2	104.74	
	within group	21245.55	729	29.14	3.59*
	Total	21455.04	731		
Behavioral Engagement	Between group	513.77	2	256.88	
	within group	38666.27	729	53.04	4.84**
	Total	39180.04	731		

Note:*Indicates significance at 0.05 level.

Table 7 also shows that the obtained 'F' value for the variable Academic Engagement is 8.60 Which is greater than 'F' value (4.63) for (2,729) degrees of freedom at 0.01 level of significance. This suggests that the variable academic engagement is differ significantly for the type of management of schools.

As the effect of the variable Academic Engagement (total) is found significant, the investigator conducted a follow up study by means of 't' test

for large independent samples where the group difference are. The details of the test are given in table 8.

Table 8

Data and result of the test of significance of difference in Academic Engagement among the subsample based on type of management of schools

Variable compared	Group compared	N	Mean	SD	Critical ratio
Academic Engagement	Government	304	145.82	17.20	-3.14**
	Aided	381	149.98	17.25	
	Government	304	145.82	17.20	1.75
	Unaided	47	141.12	16.73	
	Aided	381	149.98	17.25	
	Unaided	47	141.12	16.73	

Note:**Indicates significance at 0.01 level.

Table 8 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Government and Aided Higher Secondary school students for the variable Academic Engagement is 3.14, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that significant difference exists in the Government and Aided Higher Secondary School students in their Academic Engagement. The negative sign shows that Aided school students are more engaged in Academic activities than Government school students.

From Table8, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of Government and

Unaided Higher Secondary School students for the variable Academic Engagement is 1.75, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that significant difference does not exist between the Government and Unaided Higher Secondary School Students in their academic engagement.

Table 8 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Aided and Unaided Higher Secondary School students for the variable Academic engagement is 3.33, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that significant difference exists in the extent of academic engagement between Aided and Unaided Higher Secondary School students. The positive sign of critical ratio shows that aided students are having more academic engagement than unaided school students.

From Table 8, it can also be found that the obtained 'F' value for the variable cognitive engagement is 11.68. Which is greater than 'F' value (4.63) for (2,729) degrees of freedom at 0.01 level of significance. This suggests that the variable cognitive engagement differs significantly for the type of management of schools.

As the effect of the variable Cognitive Engagement is found significant, the investigator conducted a follow up study by means of 't' test

for large independent samples to locate where the group difference. The details of the test are given in table 9.

Table 9

Data and result of the test of significance of mean difference in Cognitive Engagement among the subsample based on type of management of schools

Variable compared	Group compared	N	Mean	SD	Critical ratio
Cognitive Engagement	Government	304	46.09	7.86	-4.01**
	Aided	381	48.40	7.15	
	Government	304	46.09	7.86	1.39
	Unaided	47	44.40	6.88	
	Aided	381	48.40	7.15	3.63**
	Unaided	47	44.40	6.88	

Note:**Indicates significance at 0.01 level.

Table 9 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Government and Aided Higher Secondary school students for the variable Cognitive Engagement is 4.01, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that significant difference exists in the extent of Cognitive engagement, between Government and Unaided Higher Secondary School students. It is also revealed that Aided school students are more engaged in Cognitive Activities than Government school students.

From Table 9, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of Government and Unaided students for the variable Cognitive Engagement is 1.39, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that Government and Unaided students not significantly differ in the extent of their cognitive engagement.

Table 9 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Aided and Unaided students for the variable Cognitive engagement is 3.63, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that significant difference exists between the Aided School students are having more cognitive engagement than unaided school students.

Table 9 also shows that the obtained 'F' value for the Emotional Engagement is 3.59 Which is greater than obtained 'F' value (3.00) for (2,729) degrees of freedom at 0.05 level of significance. This suggests that the Emotional Engagement differ significantly for the type of management of schools.

As the effect of the variable Emotional Engagement is found significant, the investigator conducted a follow up study by means of 't' test for large independent samples to locate where the group difference are. The details of the test are given in table 10.

Table 10

Data and result of the test of significance of mean difference in Emotional Engagement among the subsample based on type of management of schools

Variable compared	Group compared	N	Mean	SD	Critical ratio
Emotional Engagement	Government	304	51.46	5.08	1.11
	Aided	381	51.91	5.43	
	Government	304	51.46	5.08	2.07*
	Unaided	47	49.72	6.90	
	Aided	381	51.91	5.43	
	Unaided	47	49.72	6.90	

Note:**Indicates significance at 0.05 level.

Table 10 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Government and Aided Higher Secondary school students for the variable Emotional Engagement is 1.11, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicate that Government and Aided school students does not differ significantly in the extent of their emotional engagement.

From Table 10, it can be seen that, the critical ratio obtained for the test of significance of difference between the mean scores of Government and Unaided students for the variable Emotional Engagement is 2.07, which is greater than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates significant difference exists between the Government and Unaided students in their emotional engagement. The 't' value shows that

Government School students are having more emotional engagement than unaided school students.

Table 10 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Aided and Unaided students for the variable Emotional engagement is 2.52, which is greater than 1.96 the tabled value of 't' required for significance at 0.05 level. This indicates that significance difference exists between the Aided School students in their Emotional engagement . Aided school students are having more emotional engagement than unaided school students.

Table 10 also shows that the obtained 'F' value for the Behavioral Engagement is 4.84, which is greater than obtained 'F' value (4.63) for (2,729) degrees of freedom at 0.01 level of significance. This suggests Behavioral Engagement differ based on the Type of Management of Schools.

As the effect of the variable Behavioral Engagement is found significant, the investigator conducted a follow up study by means of 't' test for large independent samples to locate where the group difference are. The details of the test are given in table 11.

Table 11

Data and result of the test of significance of mean difference in Behavioral Engagement among the subsample based on type of management of school

Variable compared	Group compared	N	Mean	SD	Critical ratio
Behavioral Engagement	Government	304	48.26	7.21	-2.47*
	Aided	381	49.66	7.44	
	Government	304	48.26	7.21	1.13
	Unaided	47	47	6.32	
	Aided	381	49.66	7.44	
	Unaided	47	47.00	6.32	

Note:**Indicates significance at 0.05 level.

Table 11 reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Government and Aided Higher Secondary school students for the variable Cognitive Engagement is 2.47, which is greater than 1.96 the tabled value of 't' required for significance at 0.05 level. This indicates that significant difference exists between Government and aided school students in their Behavioral Engagement. Aided school students are having more behavioral engagement than Government school students.

From Table 11, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of Government and Unaided students for the variable Behavioral Engagement is 1.33, which is

less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that Government and Unaided students does not differ in the extent of their Behavioral Engagement.

Table 11 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Aided and Unaided students for the variable Behavioral Engagement is 2.34, which is greater than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that significance difference exists in the Aided and Unaided students are having more behavioral engagement. Aided school students in their behavioural engagement than unaided school students.

iv) Based on Subject of Specialization of students

To compare the mean scores of the Variable Academic Engagement (total) and component wise between the sub sample based on subject of specialization, one way ANOVA is used. The details of the results are given in table 12.

Table 12

Summary of one way ANOVA of Academic Engagement by subject of Specialization of Student

Variable compared	Source of variance	Sum of Squares	df	Mean Score	'F' Value
Academic Engagement	Between group	1672.55	2	836.27	2.78
	Within group	219109.29	729	300.56	
	Total	220781.84	731		
Cognitive Engagement	Between group	201.50	2	100.75	1.77
	Within group	41442.34	729	56.84	
	Total	41643.84	731		
Emotional Engagement	Between group	98.32	2	104.74	3.59*
	Within group	21356.72	729	29.14	
	Total	21455.04	731		
Behavioral Engagement	Between group	525.09	2	256.88	4.84**
	Within group	38654.95	729	53.04	
	Total	39180.04	731		

Note:**Indicates significance at 0.01 level.

* Indicates significance at 0.05 level.

Table 12 shows that the obtained 'F' value for the Variable Academic Engagement is 2.78 Which is greater than obtained 'F' value (300) for (2,729) degrees of freedom at 0.05 level of significance. This suggests that the Variable Academic Engagement is not significantly differ for the sample based on the subject of specialization. That means, significant difference does not exists in the extent of academic engagement among Higher

Secondary School students studying in Science, Humanities and Commerce streams.

As the effect of the variable Emotional Engagement is found significant, the investigator conducted a follow up study by means of 't' test for large independent samples to locate where the group difference are. The details 3

Data and Result of the test of significance of mean difference in Emotional Engagement among the subsample based on type of management of school

Variable compared	Group compared	N	Mean	SD	Critical Ratio
Emotional Engagement	Science	255	51.70	5.26	-0.65
	Humanities	216	52.01	4.89	
	Science	255	51.70	5.26	1.17
	Commerce	261	51.12	5.93	
	Humanities	216	52.01	4.89	1.75
	Commerce	261	51.12	5.93	

Table 13, reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Science and Humanities students for the variable emotional engagement is 0.65, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that Science and Humanities students not significantly differ in their emotional engagement.

Table 13 also shows that the obtained that critical ratio obtained for the test of significance of difference between the mean scores of Science and Commerce Higher Secondary School students for the variable Emotional Engagement is 1.17 Which is less than 1.96 the tabled value of 't' required for significance at 0.05 level. This indicates that Science and Commerce students not significantly differ in their Emotional Engagement.

From Table 13, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of Humanities and Commerce Higher Secondary School students for the variable Emotional Engagement is 1.75, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that Humanities and Commerce Higher Secondary School students does not differ significantly in the extent of their Emotional engagement.

Table 13 shows that the obtained 'F' value for the variable Behavioral Engagement is 4.84 which is greater than 'F' value for 4.63 for (2,729) degrees of freedom at 0.01 level of significance. This suggests that the variable Behavioral Engagement is differ significantly for the subject of specialization. It reveals that significant difference exists in the variable Behavioral Engagement among Science, Humanities and Commerce Higher Secondary School students.

As the effect of the variable behavioral engagement is found significant, the investigator conducted a follow up study by means of 't' test for large independent samples to locale where the group difference are. The details of the test are given in table 14.

Table 14

Data and Result of the test of significance of mean difference in Behavioral Engagement among the subsample based on subject of specialization

Variable compared	Group compared	N	Mean	SD	Critical Ratio
Behavioral Engagement	Science	255	48.70	6.97	-2.22*
	Humanities	216	50.15	7.07	
	Science	255	48.70	6.97	0.97
	Commerce	261	48.07	7.72	
	Humanities	216	50.15	7.07	
	Commerce	261	48.01	7.72	

*Indicates significant at 0.05 level

Table 14, reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Science and Humanities students for the variable Behavioral engagement is 2.22, which is greater than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that significant difference exists between Science and Humanities students in their Behavioral engagement students studying in Humanity stream are having more behavioral engagement than Science students.

From Table 14, it can be seen that critical ratio obtained for the test of significance of difference between the mean scores of Science and Commerce students for the variable Behavioral Engagement is 0.97, which is less than 1.96, the tabled value of 't' required for significance at 0.05 level. This indicates that significant difference does not exist in the science and commerce students in their behavioral engagement.

Table 14 also reveals that the critical ratio obtained for the test of significance of difference between the mean scores of Humanities and Commerce Higher Secondary School students for the variable Behavioral Engagement is 3.03, which is greater than 2.58, the tabled value of 't' required for significance at 0.01 level. This indicates that significant difference exists in the mean score of behavioural engagement between Humanities and Commerce students. Humanity students are having more behavioural engagement than commerce students.

Discussion

Comparison of the mean scores of Academic Engagement (total and component wise) among the sub sample based on gender of students revealed that male and female students significantly differ in Academic Engagement along with its dimension viz., cognitive engagement, Emotional engagement and Behavioral Engagement.

Female students are having more engagement in cognitive activities, emotional activities and behavioral activities and in whole academic activities.

We can see a significant difference in the extent of Academic engagement between the students of rural and urban area. Urban students are having more academic engagement than the rural higher secondary school students.

Significant difference does not exist in the cognitive activities, Emotional Activities and Behavioural activities in the Higher Secondary School students in the areas of schools. Rural students are having more engagement in cognitive, emotional and behavioral engagement than the urban school students.

Also we can see, significant difference in the extent of Academic engagement of Higher Secondary School students among Government, Aided and Unaided schools. Among the three, aided students are having more Academic engagement than the Government and Unaided school students. And also we can see that, Government, aided and unaided students exist significant difference in their cognitive engagement, emotional engagement and also the behavioral engagement in their classroom activities.

In the case of subject of specialization, we can see that significant difference does not exist in Academic Engagement and Cognitive

Engagement. And also we can see that, significant difference exists in Science, Humanities and Commerce students in their emotional and behavioral engagement.

Summary of Findings

The major findings of the study are summarized as follows:

- The extent of Academic Engagement among Higher Secondary School students in the total sample is moderate.
- Female students are having more Academic Engagement than their counterparts.
- Urban students are more Academic Engagement than the Rural Students.
- Aided school students have more academic engagement than the Government and unaided students. The least academic engagement is found in unaided school students.
- Humanities Higher Secondary School students have more Academic Engagement than the Science and Commerce students. The least Academic Engagement is found in Commerce Higher Secondary School Students.
- There exists significant difference the mean score of Academic Engagement between male and female higher secondary school students (CR=9.84, P< 0.01).

- There exists significant difference in the mean score of cognitive engagement between male and female higher secondary school students. (CR=8.77, $P < 0.01$).
- There exists significant difference in the mean score of emotional engagement between male and female higher secondary school students. (CR=7.80, $P < 0.01$).
- There exists significant difference in the mean score of behavioral engagement between male and female higher secondary school students. (CR=8.14, $P < 0.01$).
- There exists no significant difference in the mean score of Academic engagement between rural and urban higher secondary school student. (CR=0.61, $P > 0.01$).
- There exists significant difference in the mean score of cognitive engagement between rural and urban higher secondary school students. (CR=1.15, $P > 0.01$).
- There exists no significant difference in the mean score of emotional engagement between rural and urban higher secondary school students. (CR=1.40, $P > 0.01$).
- There exists significant difference in the mean score of behavioural engagement between male and female higher secondary school students. (CR=1.20, $P > 0.01$).

- The effect of type of management of school on academic engagement is significant ($F=8.60$, $P < 0.01$ for 2,729 degrees of freedom)
- The effect of type of management of school on cognitive engagement is significant ($F=11.68$, $P < 0.01$ for 2,729 degrees of freedom)
- Significant difference exists in the cognitive engagement between Government and Aided ($t=4.01$, $P < 0.01$).
- Significant difference exists in the cognitive engagement between Government and Unaided ($t=1.39$, $P > 0.01$).
- Significant difference exists in the cognitive engagement between Aided and Unaided ($t=3.63$, $P < 0.01$).
- The effect of type of management of school on emotional engagement is significant ($F=3.59$, $P < 0.01$ for 2,729 degrees of freedom)
- Significant difference does not exist in the emotional engagement between Government and aided ($t=1.11$, $P > 0.01$).
- Significant difference exists in the emotional engagement between Government and Unaided ($t=2.07$, $P < 0.01$).
- Significant difference exists in the emotional engagement between Aided and Unaided ($t=2.53$, $P < 0.01$).
- The effect of type of management of school on behavioural engagement is significant ($F=4.84$, $P < 0.01$ for degrees of freedom)
- Significant difference exists in the behavioural engagement between Government and Aided ($t=2.47$, $P < 0.01$).

- Significant difference does not exist in the behavioural engagement between Aided and Unaided ($t=1.13$, $P > 0.01$).
- Significant difference exists in the behavioural engagement between Aided and Unaided ($t=2.34$, $P < 0.01$).
- The effect of subject of specialization on the Academic engagement is not significant ($F=2.78$, $P < 0.01$ for degrees of freedom)
- The effect of subject of specialization on the Cognitive engagement is not significant ($F=1.77$, $P > 0.01$ for degrees of freedom)
- The effect of subject of specialization on the emotional engagement is significant ($F=3.59$, $P < 0.01$ for degrees of freedom)
 - Significant difference does not exist in the emotional engagement between Science and Humanities students ($t=0.65$, $P > 0.01$).
 - Significant difference does not exist in the emotional engagement between Science and Commerce students ($t=1.17$, $P > 0.01$).
 - Significant difference does not exist in the emotional engagement between Humanities and Commerce students ($t=1.75$, $P > 0.01$).
- The effect of subject of specialization on the behavioral engagement is significant ($F=4.84$, $P < 0.01$ for degrees of freedom)

- Significant difference exists in the behavioral engagement between Science and Humanities students ($t=2.22$, $P < 0.01$).
- Significant difference does not exist in the behavioral engagement between Science and Commerce students ($t=0.97$, $P > 0.01$).
- Significant difference exists in the behavioral engagement between Humanities and Commerce students ($t=3.03$, $P < 0.01$).

Tenability of Hypothesis

Based on findings, the tenability of the hypothesis for the study were reviewed.

The hypothesis states that there exists significant difference in the mean scores of Academic Engagement (total and component wise) among higher secondary school students between sub sample based on gender of students, locale of the school, type of management of the school and subject of specialization of the students. Finding of the study in this regard reveals that the given hypothesis is partially substantiated.

CHAPTER V

SUMMARY CONCLUSION AND SUGGESTIONS

- *Study in Retrospect*
- *Variables*
- *Objectives*
- *Hypothesis*
- *Methodology of the study*
- *Conclusion*
- *Educational Implications*
- *Suggestion for further Research*

SUMMARY CONCLUSION AND SUGGESTION

This chapter provides a retrospective view of the study, major findings of the study, educational implications and suggestions for further research.

Study in Retrospect

The present investigation was entitled as "ACADEMIC ENGAGEMENT AMONG HIGHER SECONDARY STUDENTS IN KERALA".

Variables

The major variable that is measured and analysed in the study is Academic Engagement. Gender of students, Locale of Schools, Type of Management of Schools and subject of specialization of students are treated as classificatory variables.

Objectives of the Study

The objectives of the study are:

- To find out the extent of Academic Engagement (total and component-wise) among Higher Secondary students in the total sample and the relevant sub sample based on,
 - Gender of student

- Locale of school
 - Type of management of school
 - Subject of specialisation of student
-
- To compare the Academic Engagement (total and component wise) among Higher secondary school students based on gender of the student.
 - To compare the Academic engagement (total and component-wise) among Higher Secondary School Students based on local of the school
 - To compare the Academic Engagement (total and component wise) among Higher Secondary School students based on type of management of the school.
 - To compare the Academic Engagement (total and component wise) among Higher Secondary Students based on subject of specialization of students.

Hypothesis of the Study

The following hypothesis is set for the present study was

- There exists significant difference in the mean scores of Academic Engagement (total and component-wise) among higher secondary students between the subsamples based on;
 - Gender of student
 - Locale of school
 - Type of management of school
 - Subject of specialisation of student

Methodology of the Study

It deals with the description of the method sample used for the study, tool and statistical techniques used.

Method

In the present study survey method was used.

Sample

The present study was carried out on a representative sample of 732 pupils from 11 Higher Secondary Schools in Kerala

Statistical Techniques Used

Apart from the preliminary analysis, the following statistical techniques were used for analysing the data.

1. Test of significance of difference between means for large independent samples.
2. One way ANOVA

Tool used

Academic engagement scale (2016) was used for measuring the variable Academic Engagement.

Conclusion

Major findings of the study helped the investigator to conclude as follows:

The mean score obtained for the variable Academic Engagement reveals that the cognitive, emotional and behavioural of the higher secondary school students are satisfactory, irrespective of the gender of the students, Locale of the School, type of management and subject of specialization.

The result reveals that significant difference exists between male and female higher secondary school students in the variable. Academic Engagement total and the three component, cognitive, emotional and behavioural engagement in gender level.

The result reveals that, based on the Locality of the school, significant difference does not exist between urban and rural higher secondary school students in the Variables Academic Engagement in total and three component, cognitive engagement, Emotional Engagement and also the behavioural engagement.

The result based on type of management of schools reveals that significant difference exists in Academic Engagement in total and the three components, cognitive engagement, emotional engagement and also the

behavioural Engagement among government, aided and unaided school students.

In the case of subject specializations, the ANOVA result reveals that, the significant difference does not exist in the Academic Engagement in total and the component cognitive engagement. But in the component, emotional and behavioral engagement significant difference exists in science, humanities and commerce higher secondary school students.

Educational Implication

The comparison of the mean score of Academic Engagement based on gender reveals that male and female students are significantly different in the school activities. Male and female students are significantly different in cognitive, emotional and behavioral engagement. Female students have more academic engagement in total and component wise than the male students. It reveals that the school authorities should provide more facilities and case to the male categories to solve their problem and demands in academic related matters and in class room learning.

The comparison based on the type of management of school revealed that significant difference exists in the mean scores of Academic Engagement in total and component wise. The result revealed that aided schools student are having more engagement than the Government and unaided school students. Hence the concerned authorities including both teachers and

administrations should take sufficient steps in teaching learning process in order to involve all the students in all the activities especially in cognitive emotional and behavioral mode.

While considering the subject of specialization, each subject of specialization should have adequate curriculum for making the students active participants. Curriculum should include verities of activities and process and hence each and every student get the opportunity to engage in cognitive, emotional and behavioral type of activities.

Academic Engagement can be promoted in the following ways:

Enhance Students Self Belief

This means that what students believe about themselves as learners is very important. They must believe they can learn, including that they can overcome and learn from failure. Giving students some control over learning process helps to develop this confidence and commitment to learning.

Enable students to work autonomously, enjoy learning relationship with others and feel they are competent to achieve their own objective.

When institutions provide opportunities for students to learn autonomously and with others, and to develop their sense of competence, students are more likely to be motivated, to engage and succeed.

Recognize that teaching and teachers are central to engagement

Research places teachers of the heart of Engagement. If the teacher is perceived to be approachable, well prepared, and sensitive to students needs, students are committed to work harder, get more out of the session and are more willing to express their opinion.

Create learning that is active, collaborative, and fosters learning relationships

Finding acknowledge that active learning in groups, peer relationships, and social skills are important in engaging learners.

Create educational experiences for students that are challenging and enriching and that extent their academic abilities

When students are reflecting, questioning, evaluating and making connections between ideas, they are engaged. Teachers need to create rich educational experiences that will challenge students ideas.

Invest in a variety of support services

Sometimes it seems as though students don't take advantage of support service like learning and advising centres, they are perceived as part of the institution or culture and students engage when that culture values and support their effort to learn.

Adapt to changing student expectation

An institution should never be satisfied with how it is promoting student Engagement.

Enable students to become active citizens.

What is needed is a democratic, critical conception of Engagement that goes beyond strategies, techniques, behaviors. A conception in which Engagement is participatory, dialogic and leads not only to academic achievement but to success as an active citizen.

Enable students to develop their social and cultural capital.

This kind of capital derives from a sense of belonging, from active relationships with others and from knowing how they work around the institution.

Suggestion for Further Research

The findings of the study are limited in its scope with respect to certain selected schools from Malappuram district and Kozhikode district. In order to overcome the limitation encountered in the present study and to extent the research findings of this study, it may be helpful to forward some suggestions for further research.

- Study on the factors promoting to Academic Engagement among Higher Secondary School students.
- Problem faced by higher secondary school students in Kerala.
- Interaction effect of Parental involvement and learning style on Academic Engagement among higher secondary school students.
- Comparison of instructional process in higher secondary schools based on type of management.
- Study on school climate and Academic Engagement among higher secondary schools students.

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APPENDICES

PERSONAL DATA

Dr. Mumthas N.S
Associate Professor

Vilasini E.K
M.Ed Student

Instructions

Some statements regarding your school life are given below. For each statement, 3 responses 'correct', 'don't know', 'wrong' are given. Read each statement and mark (✓) in column of your response.

Name of School :

Locality of School : Rural/Urban

Class of study :

Subject of study : Science/Humanities/Commerce

Sex : Male/Female

Age :

School Management: Government/Aided/Unaided

Locality of house : Rural/Urban

Residing with : With family/relatives/hostel

Sl. No.	Statements	Yes	No Opinion	No
1	I am very careful in classroom learning.			
2	I enjoy learning by learning new things.			
3	I discuss the difficult areas of study with my classroom friends.			
4	I don't avoid any chance to take part in competitive examination.			
5	I clear my doubts in the subject area on time .			
6.	I do not spent my time for learning difficult area			
7	I do not say any opinion related to the classroom learning discussion			
8	I ask question to self for ensuring once again what I have learnt			
9	I actively engaged with proper attention in classroom learning activities			
10	I learn the same content repeatedly in different ways to ensure retention of the learnt matter.			
11	I don't use the school library my study			
12	I don't spent my time trying to find out my own faults in learning			
13	I don't try to learning in addition to what the teachers teach.			
14	I do not avoid any examination.			
15	I don't have the habit of solving previous question paper			
16	I use my time obtained for learning with much consciousness.			
17	I take efforts to submit assignment, project etc. on time			
18	I evaluate the feedback from my teachers timely.			
19	Instead of being successful in exams, I consider only attending examinations			
20	I engage in learning activities logically with my classmates			
21	I am doing all learning activities with satisfaction			
22	Holdings create boredom in me			

Sl. No.	Statements	Yes	No Opinion	No
23	I do not feel interest in any activities in the school			
24	I like to help backward learners in my class.			
25	I don't like to help children facing learning difficulties			
26	I am safe in my school.			
27	Even small difficulties hold me back from school activities			
28	I do not like to learn			
29	I believe that schooling provides the foundation for a safe future life			
30	I enjoy learning by learning new things from school			
31	I fell sorrow for not getting due consideration to my opinions in the class			
32	I do not believe that the knowledge I get from school is enough for my life.			
33	I feel interest in learning new things			
34	I feel happy in each and every moment in my school			
35	Friendly relationship of my teachers help to increase my confidence			
36	I think schooling has its own value			
37	Unreal peer support/friendship destroy my confidence			
38	Lack of cooperation from parents lead to not being able to pay proper attention in my studies			
39	I feel school life boring.			
40	Encouragement from others motivate me to study			
41	I do my home work regularly.			
42	I don't pay any attention in keeping my books and study materials properly/neat and clean			
43	I ensure my participation in extra-curricular activities			
44	I spent each of my day without depending on others			
45	I do not behave in the same manner with all my teachers			

Sl. No.	Statements	Yes	No Opinion	No
46	I do not spent my valuable time doing nothing/sitting idle			
47	I interact with all my teachers without any hesitation.			
48	I am lonely at school.			
49	Even minor scolding of teachers cause me to retire from learning activities			
50	I do not participate in extra curricular activities			
51	I am a failure in attending class regularly on time			
52	I participate in extracurricular activities by taking initiatives			
53	I have the habit of not attending classes			
54	I am careful of obeying school rules and regulations			
55	I sit in the classroom with proper attention			
56	I am in the habit of studying only for the sake of examination			
57	I am actively involved in learning activities in the class even in the leisure			
58	I do class activities on correct time			
59	I am in the habit of expressing my opinion freely in the class			
60	I am a student who attends class daily			

**DETAILS OF THE SCHOOL SELECTED FOR
DATA COLLECTION**

1. H.S.S. NANMINDA
2. G.H.S.S. KOKKALLUR
3. G.H.S.S. KARAPARAMBA
4. B.E.M G.H.S.S.
5. AL. FAROOK H.S.S
6. PROVIDENCE H.S.S
7. G.M.H.S.S. KOZHIKODE
8. G.M.H.S.S. CAMPUS
9. S.P.B. H.S.S.
10. S.N.T. CHELANNUR
11. N.N.M.H.S.S. CHELEMBRA