ENVIRONMENT AND HEALTH OF SCHOOL GOING ADOLESCENTS IN KOLLAM DISTRICT, KERALA

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ENVIRONMENT AND HEALTH OF SCHOOL GOING ADOLESCENTS IN KOLLAM DISTRICT, KERALA

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September 2022

CERTIFICATE

This is to certify that the thesis, *Environment and Health of School Going Adolescents in Kollam District, Kerala* submitted by *Mr. Harikrishnan U* for the award of Doctor of Philosophy in Social Work is carried out under my guidance and incorporates the student's bonafide research and that has not been submitted for award of any research in this or any other University or Institute of learning.

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Declaration

I, Harikrishnan U, hereby declare that the subject matter of this thesis is the record of

work done by me, that the contents of this thesis did not form basis of the award of any

previous degree to me or to the best of my knowledge, to anybody else; and that the thesis

has not been submitted by me for any degree in any other University/Institute.

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"You are only entitled to the action, never to its fruits" – **Srimad Bhagavad Gita**"Knowledge can only be got in one way, the way of experience; there is no other way to know." – **Swami Vivekananda**

"Education is the most powerful weapon which you can change the world" - Avul Pakir

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Bio	Bio-Data of Candidate			
Pa	Particulars of Candidate			

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LIST OF ABBREVIATIONS

AIDS Acquired Immune Deficiency Syndrome

ASDS Australian Self-Reported Delinquency Scale

ASSIST Alcohol, Smoking and Substance Involvement Screening Test

BAARS Barkley Adult ADHD Rating Scale

BDI Beck Depression Inventory

BMI Body Mass Index

CBSE Central Board of Secondary Education

CED Chronic Energy Deficiency

CES Classroom Environment Scale

CES-D Center for Epidemiologic Studies Depression Scale

CSE Compulsory Secondary Education

DASS Depression Anxiety Stress Scales

EIU Excessive Internet Use

FES Family Environment Scale

FGDs Focus Group Discussions

FLIs Free list interviews

GB General Benefits

GHQ General Health Questionnaire

GSHS Global School-based Student Health Survey

GYTS Global Youth Tobacco Survey

HEI Home Environment Inventory

HIV Human Immunodeficiency Virus

HS High School

HSG House Support Group

HSS Higher Secondary School

IAHQ Indian Adolescent Health Questionnaire

ICDS Integrated Child Development Services

ICSE Indian Certificate of Secondary Education

ICT Information and Communication Technology

IECA Index of Empathy of Children and Adolescents

KII Key Informant Interview

KV Kendriya Vidyalaya

MSPSS Multi-dimensional Scale for Perceived Social Support

NASW National Association of Social Workers

NDS Neighbourhood Danger Scale

NVS Neighbourhood Violence Scale

OBC Other Backward Class

PAQ Parental Attachment Questionnaire

PGII Peer Group Influence Inventory

PSS Perceived Social Support

PSSM Psychological Sense of School Membership Questionnaire

SAHA Social and Health Assessment

SAS Scale of Academic Stress

SB Stress-Buffering
SC Scheduled Caste

SD Standard Deviation

SDQ Strength and Difficulties Questionnaire

SES Socio-Economic Status

SPAQ Students' Perception and Attitude Questionnaire

SPSS Statistical Package for the Social Sciences

SSLC Secondary School Leaving Certificate

ST Scheduled Tribe

STDs Sexually Transmitted Diseases
STIs Sexually-Transmitted Infections

TSQ Teenage Screening Questionnaire-Trivandrum

UG Under Graduate

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Children's Fund

USA United States of America

VDCs Village Development Committees

VHSS Vocational Higher Secondary School

WHO World Health Organization

CHAPTER - I

INTRODUCTION

The present study attempts to understand the Environment and Health among school-going adolescents in Kollam district, Kerala. It explores the environment, social support and health of school-going adolescents from the perception of parents and teachers.

1.1 Adolescence

Adolescence is an important stage of human growth and it is a period of biological development and psychosocial changes. Individual and environmental factors influence the characteristics of adolescence (WHO, 2017b). Adolescence is a period between the age of 10 to 19 years and of critical transitions in the lifespan of an individual (WHO, 2017a). The word adolescence is derived from the Latin word 'adolescere' which means 'to grow, to mature'. In India, the National Youth Policy defines the adolescent age as 13 to 19 years whereas Integrated Child Development Services (ICDS) describes it as 11 to 18 years. Meanwhile, reproductive and child health programme demarcates the ages from 10 to 19 years as the adolescent age (Kalyanwala, Sharma, & Sarna, 2013). However it may be, adolescence is a period of stress and strain. Peer influence, pressure to fulfil family expectations, dealing with the stimulations from the external world and creating a niche and identity for oneself in this fast-paced, dynamic and demanding society can throw up challenges that an adolescent may not be equipped to handle (Harikrishnan, Sobhana, & Arif, 2016).

According to world statistics, there are 1.2 billion adolescents between the age of 10 to 19 years and they account for 16 per cent of the entire human population. Asia has the biggest adolescent population in the world and nearly 350 million adolescents are from South Asia (UNICEF, 2019). India is the home of 243 million adolescents (UNICEF, 2011). Uttar Pradesh has the highest adolescent population in India, around 4,89,10,261 and Kerala has around 54,33,322 adolescents (Census, 2011).

The world data indicates that one in every five adolescents is out of school. One third every 200 million adolescents are not going to school and the adolescents aged between 15 to 17 years, are four times not likely to attend classes than other age groups (UNESCO, 2018).

1.2 Environment

The environment is a broader term which includes different aspects such as physical, social, home, and school. The school-going adolescent's environment is focused on home/family, school and support from the society.

Family is one of the basic social institutions that help to preserve bloodlines, provide love and security. Children learn socialisation process from family and family influences the child's psychosocial development (Upali, 2015). The family/home environment influences an individual's marital relationships, child/adolescent development, and socio-economic-political-religious status. Children learn positive emotions, behaviours, socialization and social relationships from family. Family provides education which, in turn, leads to future employment/livelihood (Sharma & Sangwan, 2016).

Children spend most of their time in school. Therefore, the school has a major role in the development of every child. The school environment is a set of internal features, roles, and influences the behaviour of students, teaching and non-teaching staff. The environmental factors help the students' academic performance and extracurricular activities (Chukwuemeka, 2013). Education helps the children to absorb knowledge, understand current situations, learn skills, attitude, solve problems, knowledge and practice (Sobri, Hanum, Zulnaidi, Ahmaddt, & Alfitria, 2019).

Social support is one of the most important factors in the environment. Positive social support helps in adolescent development. Social Support is a linkage and close connection between individuals, families and communities (Lin, Dean, & Ensel, 1986). School-going adolescents need support from family, peers and significant others. Positive social relationships lead to goal direction, motivation, effective coping mechanisms and academic achievement (Ahmed, Minnaert, van der Werf, & Kuyper, 2010). School-going adolescents overcome worry, stress and fear through positive social support as well (Camara, Bacigalupe, & Padilla, 2017).

1.3 Health

Health is one of the most important factors in every individual's life especially during adolescence as they undergo tremendous biological and psychological changes. The health of adolescents need much attention as they are prone to several risks. The major health-risk behaviours of adolescents are physical health, physical activity, nutrition, hygiene, medical care and medical history, HIV/AIDS, tobacco,

alcohol and drugs, violence, domestic violence and unintentional injury and mental health. Around the world, more than 1.1 million adolescents died in 2016 and major causes of death were road accidents, suicide and interpersonal violence (WHO, 2018).

Physical activity is one of the core aspects of adolescent health. Physical fitness, bone health and metabolism are improved through regular exercise and healthy physical practices. Lack of physical activities leads to diabetes, obesity and high blood pressure (de Lima & Silva, 2018; Oyeyemi et al., 2016).

Alcohol, tobacco, and drug use lead to negative outcomes in adolescents such as dropping out of school, psychological distress, suicide, physical health and unsafe sexual behaviours (Pfinder, Liebig & Feldmann, 2014).

HIV/AIDS has arisen as the most harrowing change in public health. Among the youth and adolescents, there is a rapid increase in HIV/AIDS due to unprotected sex and lack of education on STDs (Gupta, Anjum, Bhardwaj, Srivastav, & Zaidi, 2013).

Risk factors for injury such as road accidents, carrying weapons, bullying, suicidal behaviour, and violent acts such as fighting, verbal abuse may lead to physical and psychological issues among the adolescents (Swain, Mohanan, Sanah, Sharma, & Ghosh, 2014).

Mental health problems are common among adolescents. The prevalence of adolescent mental health problems among Indians is very high (Nair, Ganjiwale, Kharod, Varma, & Nimbalkar, 2017).

1.4 School Social Work

The support and guidance from the school social worker or school counsellor also help in the overall development of adolescents. School social workers seek to ensure equitable educational opportunities; ensure that students are mentally, physically, and emotionally present in the classroom; and promote respect and dignity for all students. School social work is a complex and specialized field of practice that is affected by changes in education policy, research, and practice models that continue to evolve (NASW, 2012). School social work seeks to promote studies, health and environment and overall development of the students in school.

1.5 Overview of Literature

The most important role of school social worker in schools is to promote healthy practices and prevent health-related issues among the students. Studies found that there is high prevalence among the school children for health-risk behaviours like mental health, physical activity, dietary behaviour, violence and injuries, substance abuse, HIV/AIDS, school and home-related issues, traumatic events, academic problems etc. The role of school social work is of utmost importance in schools because of these major issues.

A high prevalence of overall health-risk behaviour among adolescents is found in most of the studies (Das, Chattopadhyay, Chakraborty, Dasgupta, & Akbar, 2015; Pravin N Yerpude, 2013; Zhang, Li, & Liu, 2010). The prevalence of obesity (Midha, Nath, Kumari, Rao, & Pandey, 2012), nutritional status (Johnson, 2015; Sil, Samir; Sankar, SR; Saha, S; Roy, 2011), mental health (Bhosale, Singru, & Khismatrao, 2015; Dogra, Svirydzenka, Dugard, Singh, & Vostanis, 2013; Harikrishnan, Arif, & Sobhana, 2017; Kharod, Nikhil; Kumar, 2015; Lam, 2014; M., C., R., S., & M., 2018; Mohanraj, Rani; Subbaiah, 2010; Swain et al., 2014), physical activity (Dave, Hemal; Nimbalkar, SM; Vasa, Rohitkumar, Vasa; Phatak, 2017; Morton, Atkin, Corder, Suhrcke, & van Sluijs, 2016; Satija et al., 2018), tobacco and alcohol use (Sogarwal, Bachani, Kumar, & Gupta, 2014), less knowledge regarding the HIV/AIDS (Ejike, 2015; Harms, Jack, Ssebunnya, & Kizza, 2010), association with multiple health issues (Ataie-Jafari et al., 2015; Kekkonen et al., 2015).

Studies which focused on school environment found that academic pressure (Jayanthi, Thirunavukarasu, & Rajkumar, 2015; Sagar & Singh, 2017; Shawl & Mehraj, 2017), teacher-student relationship, peer relations (Fr & Obiunu, 2015; Wang & Holcombe, 2010) and family environment also influenced adolescent growth and development (Alam, 2017; Burges Sbicigo & Dalbosco Dell, 2012; Sacks, Moore, Shaw, & Cooper, 2014; Sathyabama, Jeryda, & Eljo, 2014; Sharma & Sangwan, 2016).

School social workers focus on school, community, child-parent interaction and work to help the children's overall development. School social work has a unique approach to view student within the context of the classroom, the family, the community and his or her culture. Some studies focused on the role, scope, practice and challenges of school social work (Anand, 2010; Brand, 2008; Costin, 1969;

Dash & Mohan, 2015; Franklin, Gerlach, & Chanmugam, 2008; Lakshmi, 2014; Noel et al., 2011; Openshaw, 2008; Webber, 2018) and perception of teachers and parents on school social work (Olga, 2017). As professionals working closely with children and their families, social workers play a valuable role in ensuring children's well-being (Mann, 2015). Social work practice in schools is based on individual, group, school and parents level (Caroff, 1977; Pritchard & Williams, 2001; Sweifach & LaPorte, 2013).

There are theories related to school social work practice like ecological theory, strength-based approach, bio-psycho-social-spiritual model, task-centred, system theory, and survivor centred approach. A recent study was focused on the influence of social work theory in school social work (Isaksson & Sjostrom, 2017).

There is a dearth of Indian studies focused on Environment & Health of School going adolescents, teachers and parents. Day by day, issues of adolescents are changing in the world, so this study helps to identify more in terms of individual, family and school level development of adolescents.

1.6 Theoretical Perspective

Theories are the back bone of every phenomenon and the following theories are related to the environment and health of adolescence.

Urie Bronfenbrenner's ecological theory emphasises on individual influence and affects in environment and environment classified into individual, micro, meso, exo and macro system. Each system influences adolescents' relationships, linkage, ideologies and culture. The environment influences adolescent development and it affects the society (Bronfenbrenner, 1977).

George Engel mentioned about 'biopsychosocial model' and it represents the human experience in which an individual's thoughts, emotions, behaviours, social and economic factors, environment, impact on physical health (Engel, 1978). Spiritual element also incorporated in the health care model in later and the term used as 'biopsychosocial-spiritual model'. The true paradigm shift would be remarkable transformations in health care settings (Saad, de Medeiros, & Mosini, 2017).

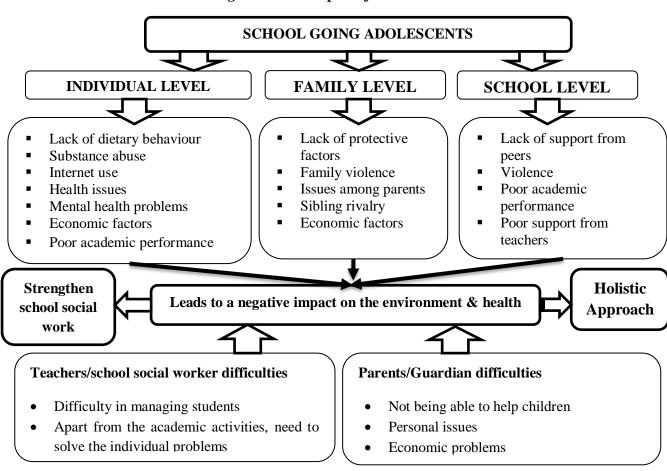
Bowlby's Attachment theory focuses on human beings' propensity to establish strong and long-lasting affective ties with other people. The theory emphasises on consistency, nurturance, protectiveness, and responsiveness in early interactions with caregivers contribute to the development of plans or mental representations about the relationships of oneself with others, and that these plans serve as models for later relationships (Bowlby, 1978).

Problem behaviour theory mentioned that the environment and personality play roles in adolescence risk. The theory explained the protective and risk factors, and adolescents' health risk behaviours. The problem behaviours such as addiction, genetic risk factors, deviant behaviours, school dropout, delinquency, poor nutrition and hygiene, violence, premature sexual relationships and low self-esteem. The problem behaviour is only self and peer acceptance, and life of an individual at risk, and dangerous for his/her health (Karaman, 2013).

The task-centred approach indicates that the solution of the individual problems will be in a short term period. The strength based approach is to strengthen, hope, and improve the personal capacity, resources, social linkage and depersonalizing the individual problems (Isaksson & Sjostrom, 2017). These theories aid school social worker to give proper solutions to school-going adolescents, parents and their teachers.

1.7 Conceptual Framework

Figure 1.1 Conceptual framework



1.8 Statement of the problem

Adolescents face multiple risk factors at individual, family and school level. There is a complex inter-relationship among biological, psychological and social factors during adolescence, as well as the influence of these developmental changes on adolescent behaviour and health. The focus of many recommendations was on understanding how these aspects of development influence and interact with one other. There is a need for a bio-psychosocial perspective on adolescence, grounded in an understanding that substantive influences on young people emanate from the complex interplay of biological, psychological, social and structural factors.

In this study, home environment focuses on the support of parents for studying and also on the use of social networking sites. The relationship with teachers and peers; and attending school regularly are components under the school environment. Lack of supportive environment from school and home has a huge impact among school-going adolescents whereby the role of school social worker is necessary to reduce the vulnerability of school-going adolescents.

Since school-going adolescents are subject to multiple health risk behaviours and environmental problems and problems are interconnected with each other, there is a need for a holistic approach for the growth and development of school-going adolescents. In India, school social work is a slowly emerging trend and its feasibility is yet to be tested.

Kerala's achievements in social development and quality of life are, no doubt, inspiring and encouraging. The state has achieved a human development index comparable to the developed countries of the World. The society attaches so much importance to education that the school is the nucleus of the social microcosm in Kerala. Better education kindles the aspirations of the people and the main concern is on how to improve the quality of education. Majority of the schools in Kerala have contractual based school social workers and their impact on the academic performance and well-being of adolescents is uncertain. With this background, the current study is an attempt to understand the Environment and Health among school-going adolescents in Kollam district, Kerala.

1.9 Objectives

- 1. To identify the socio-demographic details of school-going adolescents.
- 2. To assess the environment, social support and health of school-going adolescents.
- 3. To understand the parents' and teachers' perception of environment, social support and health of school-going adolescents.
- 4. To determine the scope of social work practice in schools.

1.10 Hypothesis

- 1. There is a significant difference in the environment, social support and health of school-going adolescents across gender.
- 2. There is a difference between in the environment, social support and health of school-going adolescents between public and private schools.
- 3. There is a significant difference in the environment, social support and health of school-going adolescents between rural and urban areas.

1.11 Chapter Scheme

There are seven chapters under the chapter scheme. The chapter one is the introduction part of the current study. Second chapter includes review of literature related to environment and health of school-going adolescents. The methodology is comprised in the chapter three. The quantitative findings of environment and health of school-going adolescents were specified in chapter four. Fifth chapter comprised on the qualitative findings of environment and health of school-going adolescents from the parents' and teachers' perception. The scope of social work practice in schools is included in the chapter six and the conclusion part is added in the chapter seven.

This chapter highlighted the current study concept, theory, conceptualisation, statement of the problem, objectives and hypothesis. The next chapter deals with the wide range of review of literature and its conclusion.

CHAPTER II

REVIEW OF LITERATURE

A review of literature is an extensive deliberation on a certain topic and at times within a particular period of a specific area. The review of literature focuses on the summary of secondary data, interpretation of existing materials and fortifies the rational progress of the current topic. Literature was collected through different online search engines like Google Scholar, ScienceDirect, PubMed and unpublished thesis for the past 15 years. This chapter highlights different scientific research studies allied with the planned study. The chapter is broadly divided into five segments. The first section is on studies related to socio-demographic details of adolescents. The second section highlights studies related to home, school environment and social support of adolescents in India and abroad. The third section reviews studies related to the health of adolescents in India and abroad. Section four consists of studies related to social work practice in schools. The fifth and last section is emphasis on the conclusion of the overall literatures in this chapter.

2.1 Studies on Socio-Demographic Details of Adolescents

This segment focuses on the literature related to socio-demographic details of adolescents, parents and teachers. The studies focused on their age, sex, education, marital status, teaching experience, parents' occupation, family type, school settings, rural-urban settings and socio-economic status.

A cross-sectional study on demographic and socio-economic factors associated with multiple health risk behaviours among adolescents in Serbia. The sample consisted of 683 high school adolescents from 15 to 19 years and two stage sampling method such as probability proportional sampling and simple random sampling were used in the study. The study results depict that more respondents were female (51.6%), sixty percentage from urban settings, 12.2% belonging to poorest households. Male adolescents had multiple risk behaviour such as alcohol use, bullying others, sexual activity and early sexual intercourse than female (**Boricic**, **Simic**, & **Eric**, 2015).

A school-based cross-sectional study explored the socio-demographic and economic factors associated with nutritional status of adolescent girls in Northwest Ethiopia. The participants were selected through the simple random method and 362 adolescent girls from 10 to 19 years old were selected for data analysis. The results showed that mean age was 14.8 and standard deviation (SD) was 1.34 years, 62.7%

were in class XI & XII, 77.6% were from the rural area, 98.1% were Amhara by ethnicity and 93.6% were orthodox by religion. The whole frequency of underdevelopment and slimness among adolescent girls were 16.3% and 29%, separately (Arage, Assefa, & Worku, 2019).

Burke, Nic Gabhainn, & Kelly, (2018) investigated a study on sociodemographic, health and lifestyle factors influencing age of sexual initiation among adolescents. There were 879 school-aged children from 15 to 17 years old in Ireland and findings indicated stronger predictor of age of sexual initiation among girls than boys. The high-risk behaviours such as substance use and unhealthy food consumption had a significant relation with age sexual initiation.

Association between sex with socio-demographic and health situation of teenage students by **Mota et al. (2019)**. A cross-sectional study led with 239 adolescents in a public school of Salvador, Brazil. The majority were males (53.97%), 59.83% were less than 14 years old, 53.14% had no religion, 64.85% were in sixth and seventh standard and most of them belonging to a rural area. There was an association between females and higher education level and a higher rate of mental, social and behavioural issues.

A cross-sectional study scrutinised on under nutrition and associated factors among rural adolescents in west Bengal. A stratified two stage random cluster sampling was used for selection of 560 adolescents. The majority of respondents in the study were girls, 79.11% had faith in Hinduism, 42% of fathers and 50% of mothers were illiterate, 32% of fathers were labourers and 66.79% of mothers did not work outside home. Among the respondents, 54% were stunted and 49% were thin and were significant with low social class. The father's occupation, mother's education, economic status and sanitation indicated a significant and negative association with under diet (Amitava Pal, Pari, Sinha, & Dhara, 2017).

Sucharitha et al. (2014) investigated risk factors for hypertension among school attending adolescents in Kancheepuram District. A descriptive cross-sectional study among 1540 school-going adolescents and majority of them were males, most were in the age of 14 years, the majority believed in Hinduism and most belonging to a nuclear family. The prevalence of hypertension among male was 1.9% and 1.72% among female adolescents.

A cross-sectional study by **Shukla**, **Ahmad**, **Singh**, **Shukla**, **& Shukla** (2019) investigated factors associated with depression among school-going adolescent girls in northern India. There were 2187 respondents and 47.1% of adolescents were between 14 to 16 years, 45% of them studied in class 11th & 12th, 76.2% belonged to Hindu religion, most of their mothers were illiterate and housewives and 66.2% belonged to lower socioeconomic status. The study found that 39.7% were depressed and depression was more prevalent in rural areas, mid-adolescent age group and among those studied in private schools.

A study investigated the prevalence and socio-demographic correlates of depressive symptoms in early adolescents in china. There were 2059 seventh grade Chinese students and the result showed that the majority of them were males, 12 years old and had an average academic performance. Among the students, 34.7% had depressive symptoms and females were more likely to have depression and poor academic performance predicted depressive symptoms (Chi, Huang, Wang, & Zhang, 2020).

A cross-sectional study by **Masud et al.** (2019) examined the determinants of academic performance with an emphasis on the role of parental styles in adolescents in Peshawar, Pakistan. The study conducted among 376 school-going adolescents from class VIII to X and the findings indicated that 54.6% were males, 52.2% studied in class VIII, 63.6% were from public schools and 57.2% had a poor academic performance.

The association between asthma, environmental and socio-demographic factors in adolescents in Rio de Janeiro, Brazil was explored by **Kuschnir & Alves da Cunha (2007)**. The study was cross-sectional in nature and 3033 of adolescents in the age between 13 to 14 years were taken for data analysis. The socio-demographic details depict that 50.1 % were males, 56.4 % were at age 14 years and 69.6% were from public schools. The prevalence rate of asthma was 13.1% and environmental and socio-demographic factors were associated with asthma in adolescents in the study.

Peters, Bae, Barrington-Trimis, Jarvis, & Leventhal (2018) in their study prevalence and socio-demographic correlates of adolescent use and polyuse of combustible, vaporized, and edible cannabis products in Los Angeles, California. The cross-sectional study covered 10 high schools and 3177 tenth grade students, the

majority were female, mean age was 16.1 years and SD was 0.4 and 61.7% used cannabis and male adolescents use was higher than female.

A study investigated by **Singh, Junnarkar, & Sharma** (2015) on anxiety, stress, depression and psychosocial functioning of Indian adolescents. The two stage sampling method among 1812 adolescents from age 12 to 19 years. The tools used in the study were socio-demographic details, strength and difficulties questionnaire (SDQ) and Depression Anxiety Stress Scales (DASS) and the majority of the respondents were male, staying in the urban area, attended private schools, class XII and resided in nuclear families. The findings depict that the females had high prosocial behaviour; rural areas diverged from urban on prosocial behaviour and anxiety; government school-going adolescents varied from private school-going adolescents on prosocial behaviour, stress and anxiety.

A study examined Indian adolescents' perspectives of their home food environments. There were 1026 adolescents from age 14 to 16 years; speaking English; private secondary schools in Kolkata were selected through convenient sampling. The most of respondents were girls, age at 14 and 15 years and the majority of them believed in Hinduism. The study found that a majority of the adolescents stated that fruits and vegetables are always available in their homes and their mothers provide meals than fathers (**Neha Rathi, Riddell, & Worsley, 2018**).

Bokhorst, Sumter, & Westenberg (2010) studied the social support of children and adolescents aged 9 to 18 years. Overall, 655 respondents and sociodemographic details outcomes that 53.6% of respondents were females, mean age was 12.54, and middle-class catchment basin. The study was carried out in eight schools in the western part of the Netherlands.

A cross-sectional study on health-risk behaviour and protective factors among school-going adolescents in Tezpur investigated by **Harikrishnan**, **Sobhana**, & Ali (2016). A total of 1403 school-going adolescents in the age group between 13 to 17 years were taken for analysis. Socio-demographic details show that the mean age of school-going adolescents was 14.81, majority of them were males, class IX, Hinduism, semi-urban area, nuclear family and upper socio-economic background.

A cross-sectional descriptive study aimed at the prevalence of pain in children and adolescents. A cluster sampling method was used in the study. There were 1238 children and adolescents aged 8 to 18 years, and 828 parents were randomly selected from schools in Norway (Haraldstad, Sorum, Eide, Natvig, & Helseth, 2011).

Abera, Robbins, & Tesfaye (2015) studied the perception of parents about psychiatric illness in children and adolescents in Ethiopia. A community-based cross-sectional study was carried out among 532 parents in urban settings in Ethiopia. Children in the study were aged between 6 to 17 years and 54.1% were male. Socio-demographic details of parents found that 81.6 % were female, 53.8% were aged in between 25 to 34 years, 46.2% were believed in Muslim, 65.4% were married, 44.4% studied below grade VIII, and 41.2% were housewives.

High school teachers' perceptions of the motivational needs of their students investigated by **Hardre & Sullivan (2009)**. There were 96 teachers from 15 public high schools in the USA. Socio-demographic details of teachers found that age range from 25 to 60 years and 44.2 mean age, teaching experience mean was 14.7, 59% were female, 54% completed Bachelor degree.

A study investigated by **Rathi, Riddell, & Worsely** (2018) teachers' and parents' perception of the role of school food environments and policies in promoting healthy food consumption among Indian adolescents. A cross-sectional survey was carried out among parents and teachers from private secondary schools. Overall, 312 respondents (32 teachers and 280 parents) participated in the survey. Parents' socio-demographic characteristics revealed that 65% were females, 88.6% were educated up to university level whereas teachers' socio-demographic details show that all are females, and 89.7% were qualified bachelor degree and above.

Achoraa, Thupayagale-Tshweneagaea, Akpora, & Mashalla, (2018) in their study investigated the experiences and perceptions of adolescents and teachers regarding school-based sexuality education in rural primary schools. The respondents were 42 adolescents (24 females & 18 males) aged 12 to 16 years and 8 female teachers and 3 male teachers' age ranged between 28 to 52 years from four schools.

2.2 Studies on Home, School Environment and Social Support of Adolescents

This segment focused on three aspects related to adolescents. Firstly, literature related to the home environment such as parental care, support and involvement in the adolescents' daily activities. Secondly, School environment like academic achievement, attendance, teachers and peer pressure. Literature related to social support such as peer, family, significant others' support was included in the third aspect.

Rapheal & Varghese, (2015) in their study about the home environment of adolescents in their psychological well-being, anxiety and stress from five schools of Kerala. Overall, 152 school-going adolescents were selected for the study. Home environment inventory, psychological well-being scale, IPAT anxiety scale and students stress scale were administered among the respondents. The study found that significant linear relationship between home environment and psychological wellbeing, stress and anxiety.

A study on home environment and adjustment among adolescents of working and non-working mothers investigated by **Mahajan & Kauts** (2018). Descriptive survey and stratified random sampling method were used among equal gender distribution in 100 adolescents of working mothers and 100 of non-working mothers. Adjustment inventory and home environment inventory were administered among the respondents. Results found no gender difference among the adolescents of working and non-working mothers in the home environment and adjustment. There was a significant relationship in the home environment and adjustment among adolescents of working and non-working mothers.

Joshi & Acharya (2013) in their study home environment and achievement motivation of 500 urban adolescents. Deo-Mohan achievement motivation scale and socio-economic status scale were administered among adolescents. Results found that the home environment (protectiveness, conformity, and reward) had a significant positive correlation with achievement motivation. Social isolation, permissiveness and rejection had a negative relationship with the academic area and overall achievement motivation of adolescents.

A study investigated by **Kumar & Lal (2014)** on the pattern of relationship between the academic achievement and family environment in schools of Chandigarh, Mohali and Panchkula. Convenient random sampling method was used for the selection of 200 adolescents aged 15 to 18 years. Tools of data collection

were the aggregate percentage of marks and family environment Scale. Results found that female had better academic score than male adolescents whereas the male had a better score in the family environment. The study found that children with an enriched family environment are found to have better academic achievement than those belonging to low family environment group.

A cross-sectional study examined the family environment as a function of aggression among 200 adolescents aged 13 to 18 years. Tools of data collection were family environment scale aggression scale. The study found significant mean differences among aggression level of adolescents of cohesive family environment and adolescents of a poor family environment. Results also found that high aggression level adolescents come from the poor family environment (**Jain, 2017**).

Sharma (2014) investigated a study on the predictors of academic stress among 360 adolescents in Chandigarh. Descriptive survey design and equal gender distribution of adolescents studied in class XI were taken for study. Scale of Academic Stress (SAS), Family Environment Scale and Peer Group Influence Inventory (PGII) were administered among respondents. Results found that no gender difference in academic stress whereas gender difference in the family environment. Male adolescents had more peer influence on aggression, substance use and sexual behaviour. There was a significant correlation between academic stress and family environment.

A review article by **Jaiswal & Choudhuri** (2017) examined the relationship among parenting practices such as parenting style, parents' expectations, parental home and school involvement activities and students' academic performance. Literature was collected through online databases and the review focused on major themes. The review revealed that the authoritative parenting style is positively associated with academic performance across all school level. Parents' expectations and involvement had a strong impact on the academic performance of children. Parental involvement in school events, effective communication, and help in homework helps a better academic achievement.

Jaiswal & Choudhuri (2017) studied the homework management of 1611 eight and eleventh-grade students from 107 classes. Homework questionnaire based on gender, ethnicity, free lunch, self-reported grade, parent education, help from family on homework, time spent on television, student grade average, homework purpose scale and homework management scale. Results indicated that attitude and

homework interest are two factors that influenced the student in both classes. Homework management was positively associated with learning-oriented reasons, affective attitude, self-reported grade, family homework help, homework interest, teacher feedback, and adult-oriented reasons. Girls are more likely to manage their homework assignments than the opposite gender.

Homework completion based study investigated among 1895 eighth and eleventh-grade students from 111 classes in the south-eastern United States. Tools were constructed based on academic achievement, grade average and items were adopted from the National Education Longitudinal Study of 1988. Homework completion was positively associated with teacher feedback, grade, and learning-oriented reasons for doing homework, homework interest, and homework management. Girls reported significantly higher scores in homework completion than opposite gender (**Xu**, **2011**).

Academic stress and mental health of 190 eleventh and twelfth-grade high school students from three government-aided and three private schools in Kolkata, India investigated by **Deb**, **Strodl**, & **Sun** (2015). Multi-stage sampling method, and General Health Questionnaire (GHQ-28), as well as a structured questionnaire, were administered among respondents. Results found that most of the respondents had stress due to academic pressure and no significant difference in socio-demographic details. Girls were more prone to exam related anxiety than male. Academic pressure had a significant relationship with parental pressure and mental health difficulties.

Deb, Chatterjee, & Walsh, (2010) in their study compared anxiety with socio-demographic details, and also adolescents' perceptions of quality time with their parents among 460 adolescents aged 13 to 17 years in Kolkata, India. Multistage sampling method and semi-structured questionnaire, standardized psychological test, the state-trait anxiety inventory were administered among respondents. Results revealed that male respondents had more anxiety than the opposite gender. The study also found that they are not receiving quality time with fathers whereas mothers spent quality time with them than fathers. Most of the adolescents did not feel comfortable to share their issues with their parents.

A study examined the level of parental encouragement and difference based on locality among 200 adolescents. The study was Descriptive in nature and randomly selected eight secondary schools of Pulwama District. Parental encouragement scale was administered among 100 rural and 100 urban adolescents aged from 15 to 16

years. Results found that the majority of adolescents falls in the average level of parental encouragement. Parental influence on students was encouragement, daily routine, and discussion of students regularly, praise, warmth, limit setting, and intellectual stimulation. Rural and urban students had differed significantly in parental encouragement. Due to poor socio-economic status, the rural parents don't encourage their children toward education and less parental encouragement also turn into low self-confidence (Bashir & Bashir, 2016).

A study examined the online activities, the prevalence of Internet addiction in relation to demographic details, and risk factors related to family and school among 6468 school-going adolescents aged 10 to 18 years old in Guangzhou, China. Multistage stratified random sampling and structured questionnaire were administered among respondents. Results found that more than one-quarter of respondents had a prevalence of internet addiction and older adolescents are more prone to internet addiction. The high internet addiction was social networking, schoolwork, entertainment, internet gaming and online shopping. The study also found that internet addiction leads to poor academic performance. Adolescents living in rural area had a significant lower Internet addiction risk factor than the urban area. Parents' poor involvement resulted in significant risk factors associated with adolescents' internet usage (Xin et al., 2018).

Lau & Yuen (2016) in their study point out the importance of paternal and maternal parenting as predictors of adolescents' home internet use and usage from six secondary schools in Hong Kong. The sample size was 807 and Internet use and usage, parental education, parental Information and Communication Technology (ICT), and parenting style were administered among respondents. Results illustrate that significantly positive correlation between paternal and maternal educational level, and ICT. The study shows that paternal monitoring and paternal worry styles influenced male adolescents' learning-related Internet usage whereas female adolescents tended to be influenced more by maternal parenting styles. Adolescents point out that their parents communicate their beliefs, values, attitudes, and expectations on intentional and unintentional messages and behaviours. The study also mentioned that the mutual effort of the family helps a positive ICT use at home.

A study on the effects of socio-demographic, individual, family, peers, and school life factors on Internet addiction in 8941 Taiwanese adolescents investigated by **Yen, Ko, Yen, Chang, & Cheng (2009)**. Assessment tools such as Che Internet

Addiction Scale, Center for Epidemiological Studies' Depression Scale, Adolescent Family and Social Life Questionnaire, Rosenberg Self-Esteem Scale were administered among adolescents. Results found that low family monitoring was one of the factors for adolescent Internet addiction in gender and age. Depression had the dominant factor in adolescent internet addiction in gender and age. The study found that low connectedness to school; conflict in the family, habitual alcohol intake with friends, the rural background also had a high risk of internet addiction among adolescents in gender and age.

Casaloa & Escario (2019) investigated the prevalence of excessive internet use among 37586 students aged 14 to 18 years in Spain and their relationship with parents. Two-stage sample design and Excessive Internet Use (EIU) questionnaire were administered among respondents. Results found that 4.39% of adolescents were addicted to the internet. Most of the parents are not aware of the internet use of adolescents and parental care is a significant factor associated with the low risk in adolescent internet use. The study did not find any relationship between adolescents' age and excessive internet use.

Shochet, Smyth, & Homel (2007) studied the impact of parental attachment on the adolescent perception of the school environment and school connectedness. Overall, 171 adolescents aged 12 to 18 years from Brisbane state high school participated in the study. Tools for data collection were Psychological Sense of School Membership questionnaire (PSSM), Parental Attachment Questionnaire (PAQ), School Environment Variables, General Likeability of Teachers and House Support Group (HSG) Scale. Results revealed that adolescents' school connectedness depended mainly on attachment to home class, support services, classroom environment, involvement in school activities, and likeability of Teachers. Parent-adolescent relationships were significantly connected to the school environment. Multi-system approach (individual, family & school) helps to develop positive wellbeing among adolescents.

Hayes (2011) investigated the parental perceptions of various context variables as predictors of two dimensions of parental involvement (home and school) in two groups of urban African American parents. Overall, 132 parents, 67 low-income parents in the first group and 65 high-income parents in the second group were the respondents. The convenient sampling method used selection of place and randomly selected parents from various economic backgrounds. Tools were administered based

on parent's educational aspirations for their adolescents, perceived teacher support, home involvement and school involvement. Results found in the first group that lower socioeconomic status of parents, educational aspirations predicted home involvement while educational aspirations, parents' education, and perceived teacher support predicted school involvement. Higher socioeconomic status of parents, educational aspirations and perceived teacher support predicted home involvement in the second group of parents.

A study examined the pattern of relationship between the academic achievement and family environment by **Kumar & Lal (2014)**. Convenient random sampling method and 200 school-going adolescents including 100 male and 100 females from Chandigarh. Family environment scale and aggregate percentage of marks were the tools for data collection. Results found that males had more academic achievement mean score than females whereas males had more score in the family environment. The study also revealed that the adolescents who had low risk in the family environment are found higher in academic achievement in comparison to those who had high risk in the family environment.

A study investigated the academic achievement in relation to the home environment among 160 secondary school students randomly from Rohtak District of Haryana. Descriptive survey method and tools administered for data collection were Home Environment Inventory (HEI) and academic achievement score. Results found a positive relationship between home environment and academic achievement of secondary adolescents. The study also found no significant gender effect between home environment and academic achievements of adolescents (Kakkar, 2016).

Siziya, Muula, & Rudatsikira (2007) examined the prevalence and factors associated with truancy among 7341 adolescents in Swaziland, Africa. Two-stage probability sampling and GSHS questionnaire were used for data collection. Results revealed that overall prevalence rate of truancy was 21.6% and male adolescents had high truancy rate than female. Multivariate logistic regression analysis found that truancy is positively associated with male, bullied victim's behaviour, lower school grades and alcohol use.

Prakash et al. (2017) in their study school dropout and absenteeism with two cohorts of adolescent girls aged 13 to 14 years and their families from Bijapur and Bagalkot districts in Karnataka. They used a cross-sectional baseline survey and cluster randomized control trial design among 2275 adolescent girls in 2014. Overall

80 village clusters and eligible girls and their parents were interviewed in two cohort waves. Tools for data collection were face to face interview based on structured behavioural questionnaires for girls and their parents/carers. Results found that overall 8.7% of adolescent girls had dropped out of school. In cohort 1 and cohort 2 revealed that 9.6% and 8% of adolescent girls had dropped out from both districts. School dropout and absenteeism had a significant association with economic factors, social norms and practices and poor school environment.

Adolescents' perception of the school environment, engagement and academic achievement investigated by Wang & Holcombe (2010). Short-term longitudinal study and respondents were 1046 students from the urban area. The study used self-reported measures of different items and for academic achievement and family socioeconomic status, data were taken from school report cards and primary caregivers. Results found that adolescents' perceptions of the school environment in seventh grade contribute differentially to the three types (school participation, school identification, and use of self-regulation strategies) of school engagement in eighth grade. Adolescents' perceptions of the school environment influenced their academic achievement directly and indirectly through the three types of school engagement.

A thematic analysis examined the students' perception of good and bad teachers. The study was a part of larger quantities study from 124 secondary schools in Germany. There were 23 schools randomly selected and a random subsample of 86 adolescents from the rural and urban area. Qualitative analysis found that students prioritize teachers' interpersonal dimensions over their academic abilities in everyday classroom interactions when evaluating them as educators. Adolescent students perceive their relationship with a good teacher considered by appreciation, individual consideration, and sympathy whereas the relationship with a bad teacher is dominated by relational aggression, injustice and antipathy (Raufelder et al., 2016).

A case study examined secondary school teachers' perception of corporal punishment in India. There were 160 secondary school teachers from public and private schools located in both rural and urban areas. Questionnaire and three openended questions were included to understand the teachers' perception of corporal punishment. The findings indicate that the teachers still perceive corporal punishment as an effective method of controlling indiscipline in class. The study also

found that males are likely to get more punishment than female school children (Cheruvalath & Tripathi, 2015).

Lopez-Castedo, Alvarez Garcia, Alonso, & Roales (2018) examined on expressions of school violence among 4943 Compulsory Secondary Education (CSE) students in public and private schools in Galicia-North-Western Spain. Cluster stratified random sampling techniques and CUVE3-CSE questionnaire consisting of classroom disruption, student-to-student verbal violence, student-to-student direct physical violence and threats, student-to-student indirect physical violence, social exclusion, student-to-teacher verbal violence and teacher-to-student violence were administered among adolescents. Results found that the level of school violence was mostly low to moderate. Female adolescents were at the receiving end of classroom disruption, student-to-student verbal violence, and student-to-teacher verbal violence than their male counterparts. Male adolescents faced more teacher-to-student violence, and student-to-student direct physical violence and threats than female.

A study investigated the protective factors of school connectedness in relation to the risk-taking behaviours of 540 adolescents in Queensland, Australia. The respondents were taken from grade nine in five state-funded high schools. Tools for data collection were Australian Self-Reported Delinquency Scale (ASDS), Adolescent Injury Checklist and School as a Caring Community Profile-II. Results showed in both gender that riding as passengers of dangerous drivers and being involved in a group fight were the most common transport and violence-related risk-taking behaviours. The study also found that there was a significant relationship between school connectedness and reduced engagement in transport and violence risk-taking, as well as fewer associated injuries (Chapman, Buckley, Sheehan, Shochet & Romaniuk, 2011).

Chen & Astor (2008) in their study violence against teachers among 14000 students grade fourth to twelfth in Taiwanese schools. The study was a part of the large project of prevention and control of school violence in Taiwan. Two-stage stratified cluster sampling structured questionnaire was developed based on school violence studies and theories. Results found that more than 30.1% of students had done at least one aggressive act against their school teachers. The common aggressive acts against teachers were verbally teasing, mocking, hurting with

instruments, threatening and blackmailing. Male students are more aggressive act against teachers than females.

A study investigated the role of family and classroom environments on the development of particular individual characteristics, and the meditational role these individual characteristics may in turn play in the development of school aggression. Ex post facto study and multi-stage stratified random method were used for selection of 1494 Mexican adolescents aged 12 to 18 years from six secondary schools. Family Environment Scale (FES), Classroom Environment Scale (CES), Index of Empathy of Children and Adolescents (IECA), Attitude to Institutional Authority Scale, Social Reputation at School Scale and School Aggression Scale were administered among secondary school children. Results found that level of empathy, the social reputation, and the attitude to authority mediated the relationship between the environment perceived by boys at home and school, and their aggressive behaviour at school (Jimeneza & Estevez, 2017).

Sharma & Lata (2014) investigated the relationship of mental health and school environment of 200 adolescent students of grade nine from Hoshiarpur District of Punjab. They used survey method and randomly selected 100 boys and 100 girls from co-educational and separate schools. Standardised tools such as Mental Health Battery and School Environment Inventory were administered among the respondents. Results indicated that positive school environment was significant in mental health. There were significant gender differences found in the mental health of adolescents. Coeducational and separate schools had a significant difference in environmental factors.

Ries et al. (2008) conducted their study environmental factors influence the use of recreational facilities for physical activity among 48 urban African-American adolescents aged 14 to 18 years in Maryland. Qualitative in-depth interviews and direct observation was the method for data collection. Results found that physical, social, organisational and economic environments influenced the facility use. Adolescents are not getting transportation facilities, playing spaces and unsafe environment around them.

Prabhu & Shekhar (2017) in their study the resilience and Perceived Social Support (PSS) among 206 school-going adolescents in grade eight to 10th of four schools in Mangalore. Cross-sectional descriptive research design and convenient sampling were used for the selection of respondents. Tools administered among

respondents were the Brief Resilience Scale, Multidimensional Scale of Perceived Social Support -and Perceived Stress Scale. Results found that the respondents had mid stress and high PSS from family, friends and significant others. The study also found that adolescents had a moderate level of resilience. There were significant gender difference found in total score PSS and the females perceived better support from friends and significant others than male adolescents. There were no significant gender differences found in PSS from family. The study also found that males had high resilience than female adolescents.

A study investigated the parents and peers as protective factors exposed to neighbourhood risk of adolescents. The sample consisted of 206 families (adolescents aged 10 to 18 years and primary caregivers) that participated in the study from Midwestern American city. Tools for data collection was Neighbourhood Violence Scale (NVS), Neighbourhood Danger Scale (NDS), Adolescent antisocial behaviour Scale, Prosocial Behaviour Scale and Emotional Regulation Scale. Results found that neighbourhood violence and danger had a significant relationship with high antisocial behaviour. The study also found that positive peer and emotional support reduce neighbourhood violence and antisocial behaviour. Positive and effective parent-adolescent relationship reduces neighbourhood violence and danger (Crissa, Smithb, Morrisa, Liua & Hubbard, 2017).

The relationship between social support and life satisfaction among adolescents in Aligarh, India investigated by **Khan** (2015). There were 80 male adolescents selected through random sampling method and MSPSS and Satisfaction with Life Scale were administered among adolescents. Results found a positive significant relationship between social support and life satisfaction among adolescents. Positive social support in adolescents' life removes physical, emotional and behavioural distress.

A longitudinal study explored the relationship between social support and depression of 2453 adolescents aged 11 to 17 from Mainland, China. The students were randomly selected from 47 classes from seven secondary schools and Children's depression inventory (CDI) and Perceived school climate Scale were used for the collection of data. Results revealed that depressive symptoms influence a decrease in perceived support from peers. The study also found that interpersonal theories emphasising that depression promote support destruction (**Ren, Qin, Zhang, & Zhang, 2018**).

Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho (2011) in their study investigated the relationship between social support, stress, and depressive symptoms among 258 adolescents in Montreal, Canada. Longitudinal design and Center for Epidemiologic Studies Depression Scale (CES-D), Multidimensional Anxiety Scale for Children— Short Form, Adolescent Life Event Questionnaire—Revised and Social Support Scale for Children and Adolescents were administered among adolescents. An initial and follow-up assessment was conducted every 6 weeks for 6 months in the school premise. Results found on Multilevel modelling analyses on social support domains predicted variations in depressive or anxious symptoms over the follow-up period. The study also revealed that poor social support predicted a high level of depression symptoms.

A meta-analysis study investigated the association between social support and depression in children and adolescence. There were 341 articles included in the current study from different online searches such as PsycINFO, PsycARTICLES, ERIC, and ProQuest. The study used random effects model and from 341 studies support for the general benefits (GB) and stress-buffering (SB) models. Results found that the effects of social support enhanced better understand in stress-buffering. Several articles included in the study found that absence of gender difference, the importance of administration of tools with adequate psychometric support, careful consideration of methodology and conceptual issues (Rueger, Malecki, Pyun, Aycock, & Coyle, 2016).

Nautiyal, Velayudhan, & Gayatridevi (2017) investigated on perceived social support of adolescents from a rural and urban setting in Kerala. Purposive sampling method was used for selection of 50 from an urban and the other 50 (25 boys and 25 girls) a rural region, and MSPSS tool was administered among respondents. Results revealed that adolescents in a rural area had more positive support than adolescents in an urban area. Females got support from significant others than male adolescents.

2.3 Studies on Health of Adolescents

This segment focus on literature related to health aspects such as body mass index, nutrition, hygiene, violence, physical activity, HIV/AIDS awareness, medical history, unintentional injuries and mental health of adolescents.

A cross-sectional descriptive study investigated by **Das, Chattopadhyay, Chakraborty, Dasgupta, & Akbar** (2015) on health risk behaviour of 788 schoolgoing adolescents in a rural and an urban area of West Bengal. Randomly selected one urban and one rural school and administered GSHS among respondents. Results found that dietary problems are more among urban adolescents whereas rural adolescents had more risk in personal hygiene practice, physical activity, emotional and behavioural domain, and protective factor problems. Overall study shows that urban adolescents had high-risk behaviour than rural adolescents.

Cattelino et al. (2014) in their study the relationships between protective factors and involvement in risk of 908 Italian adolescents aged 14 to 16 years. Longitudinal self-reported questionnaire of health-related behaviour and lifestyle were administered among adolescents. The study found that religiosity is a protective factor and that age, friends' models for conventional behaviours, and a positive attitude about health can mitigate the influence of deviant friends on adolescent risk behaviour.

A review focused on the prevalence of health risk behaviours among adolescents aged 10 – 19 years and published between 1980 to 2005 by **Maharaj**, **Nunes**, & **Renwick**, (2009). Overall, ninety-five relevant articles reviewed and data divided into seven themes. Results found prevalence of substance use: cigarettes-24% and marijuana-17%; high-risk sexual behaviour: initiation of sexual activity -19%; teenage pregnancy: teens account for 15–20% of all pregnancies; Sexually-Transmitted Infections (STIs): prevalence of gonorrhoea in 18–21 year-olds was 26%; mental health: severe depression was 9% and attempted suicide-12%; violence and juvenile delinquency: carrying a weapon to school in the last 30 days-10%; eating disorders and obesity: overweight-11%. Many of the risk behaviours in adolescents were shown to be related to the adolescent's family of origin, home environment and parent-child relationships.

Harikrishnan, Sobhana, & Arif (2016) in their study investigated the healthrisk behaviour and protective factors among school-going adolescents in Tezpur. It was a cross-sectional study and purposive selected 1403 school-going adolescents aged 13 to 17 years during the period of August to December 2015. Self-reported Global School Based Health Survey questionnaire was administered among school-going adolescents. Results found that more than a quarter of respondents had high-risk in dietary behaviour. More than half of respondents had eaten junk food more than two or more days in a week. Majority of respondents were not doing regular physical exercise. Prevalence in substance revealed that 3.2 % in drugs; 10.1% in tobacco use and 11.3% in cigarette use and alcohol use.

A cross-sectional descriptive study was used to determine the health status of 200 adolescent boys and 200 adolescent girls in an urban area of Vellore District. Systematic random sampling method was used for selection of adolescents in the study. The IAHQ was used for understanding the general health status of adolescents and questionnaire consisted of 111 questions. Results found that 1.25 % had poor health status; more than half of them were underweight; little less than half of them slept for 8 to 9 hours; 31.5 % of them were physically active; more than half of them were not vegetarian and ate junk food every day; a majority of them maintained good hygiene practice; more than nine-tenths of them were able to go to a health centre during illness; more than half of them were aware of HIV/AIDS; less than one-fifth of them had seen an act of violence at home, school or society; more than one-tenth used substance and little less than one tenth of them had mental health issues (Sarah, Rajeswari, Sindhu, & Vaishnavi, 2018).

Singh, Maheshwari, Sharma, & Anand (2006) in their study prevalence of lifestyle associated risk factors for non-communicable diseases in 510 school children aged 12 to 18 years in an urban school in Delhi. GSHS questionnaire was administered among school children and standardized equipment and procedure used to measure height, weight and blood pressure. Results found that the majority of boys and girls preferred non-vegetarian and a third of school children ate burgers, pizzas, fried foods more than three times in a week. School children ate fewer fruits and vegetables in a week. Majority of the school children were not engaged in any kind of physical activities and females were not being engaged in any activities than male school children. Male school children were tired or consumed alcohol and used tobacco than female. The study depicts that 18.6% of boys and 16.5% of girls were overweight. Systolic Hypertension was found in 11.82% boys and 3.03% girls. The study also found that there was an association between Body Mass Index (BMI), systolic and diastolic blood pressures amongst children and other lifestyle factors.

Prevalence of overweight and obesity among 18955 children and adolescents across 51 schools in Chennai investigated by **Jagadesan et al. (2014)**. Cross-sectional study conducted by Obesity Reduction and Awareness of noncommunicable disease through Group Education (ORANGE) and International Obesity Task Force classification criteria were followed for overweight and obesity. Results found that there was a high prevalence of obesity in private as compared to government schools, in female than male, in adolescents than children.

Patnaik, Pattanaik, Sahu, & Rao (2015) compared the prevalence of overweight or obesity among 1800 school-going adolescents aged 10 to 16 years of government and private schools. A school-based cross-sectional study was conducted in 12 schools of Bhubaneswar. Height, weight, waist circumference, Hip circumference and Neck circumference were measured via Anthropometric measurements among the respondents. Results found that 27.8% of respondents were overweight and private school children weighed significantly higher than respondents from government schools.

A study investigated the health problems of rural school-going adolescents in Thiruvananthapuram district, Kerala. A cross-sectional study among 110 girls and 107 boys from class tenth and eleventh in a rural government higher secondary school and pretested semi structured questionnaire were administrated among respondents. Results revealed that 2.8% of them had obesity and male were more underweight than female. Hypertension was found among 4.2% and female was more vulnerable than male. The prevalence of premenstrual symptoms among girls was 83%. More than one-tenth of males smoked cigarettes and consumed alcohol (Beevi, Manju, & Bindhu, 2017).

Banerjee, Dias, Shinkre, & Patel (2011) in their study to determine the nutritional status among adolescents from class five to ten in rural Goa. The data were collected through three methods such as measured body mass index among 1015 students, diet analysis among 76 underweight students and self-reported questionnaire of hunger among 684 students. Results found that 63.3% of them had normal weight and male adolescents were underweight than female. More than half of the adolescents felt hungry during school time due to insufficient food intake and also found that hunger was more common in higher classes.

Amuta, Houmsou, & Robert (2009) investigated the nutritional status of school children aged 6 to 17 years in Nigeria. It was a cross-sectional study and

randomly selected 600 school children (282 boys and 318 girls) from five schools in study setting. The quantitative data was collected through anthropometry and measured the height, weight and body mass index of school children. Results found that no significant gender difference in the mean BMI. The study also found that school children in the slum had more prevalence in under nutrition. The male school children had more prevalence rate than female in under nutrition.

A study documented body image perception and nutritional status among 118 adolescents aged 11 to 19 in a rural government school in Karnataka. Body Image Questionnaire and anthropometric measurement on nutritional status were included in the data collection. Results found that 32 % were underweight, 5% were overweight and the rest of them had normal BMI. Majority of adolescents was dissatisfied with their body image. The study also found that there was no significant association between gender and nutritional status with body image dissatisfaction (Johnson et al., 2015).

Bharthi, Ghritlahre, Das, & Bose (2017) examined children and adolescent nutritional status of Kolam tribe in Andhra Pradesh. Cross-sectional method and 827children and adolescents (413 boys, 414 girls) aged 6 to 18 years were taken for the study. Anthropometric measurement was used for data collection and nutritional status was evaluated through three grades of chronic energy deficiency (CED). Results found that there were 15.01% boys and 18.35% girls are in CEDIII, 16.22% boys and 19.32% girls are in CEDII, 31.71% boys and 2.72% girls are in CEDI only 0.96% boys and 1.69% girls are in overweight category respectively.

A study investigated the nutritional status of 764 adolescents in a rural area of Wardha, Maharashtra. It was a cross-sectional study and two stage sampling method was adopted for the collection of data. BMI score was taken from the nutritional status with CDC 2000 reference. Results revealed that the majority of adolescents are thin and 2.2% were overweight and boys' mean BMI was higher than girls. There was a significant prevalence between thinness among girls, lower education and poor economic status (**Deshmukh et al., 2006**).

Association between physical activity, participation in physical education classes, and indicators of social isolation among 4207 adolescents aged 14 to 19 years. Epidemiological study and data were collected through the GSHS questionnaire. Results found that more than half of the adolescents were not active and not attending physical education classes. The study also showed that more than

one-tenth of participants had a feeling of loneliness. Binary logistic regression illustrates that those who attended physical education classes had low risk in social isolation. Female adolescents had low risk in social isolation because of participation in physical education classes (Santosa, Hardman, Barrosa, Santos da Franca, & Barros, 2015).

Comparing level of physical activity and behaviour in 72845 school children from 34 countries across WHO Regions investigated by **Guthold**, **Cowan**, **Autenrieth**, **Kann**, & **Riley** (2010). Data was collected based on the GSHS questionnaire and study conducted from 2003 to 2007. Overall results revealed that physical activity was less among students. The lowest prevalence was in the Philippines and Zambia (both 8.8%) and the highest in India (37.5%). More than one-third of the students spent 3 or more hours per day on sedentary activities in more than half the countries.

A longitudinal study examined the parental influences on adolescent physical activity. Multi-stage, stratified, school-based, cluster sampling design of 80 high schools and data collected from first and second waves in the USA. Physical activity, Family cohesion and parenting, and self-esteem and depression questionnaire were used in data collection and the final analytic sample was 13246 adolescents. Results revealed that physical activity in both genders had a positive association with family cohesion, parent-child communication and parental engagement. There was no significant association found between parental monitoring and physical activity among adolescents. The study also found that female had higher levels of parent-child communication and lower family cohesion than males. Females had low self-esteem and high depressive symptoms than males (Ornelas, Perreira, & Ayala, 2007).

A qualitative study investigated by **Satija et al.** (2018) on physical activity among adolescents in India. Overall, 174 students were selected from class eight to twelve aged 12 to 16 years from one private and one government school in New Delhi. Focus Group Discussions (FGDs) were conducted for understanding physical activities among adolescents. A total of 16 FDGs with 10 adolescents in each group and two FGDs were separately conducted in each gender, classes and school. Results found on barriers of physical activity such as body image-related negative consequences; both genders faced more social censure; less opportunity. Health benefits and sports role models were found as enablers in physical activity. The

study also found that gender-sensitive policies encourage physical activity among adolescents.

A cross-sectional study investigated physical activity among adolescents in Anand, Gujarat. Self-reported Physical Activity Questionnaire (PAQ-A) and self-reported anthropometric questions were administered among 3337 adolescents. Results found that 5.4% were obese, 21.2% were overweight and males had high risk of obesity and overweight. Females are more involved in physical activities and males are more interested to be involved in physical education classes (Dave, Nimbalkar, Vasa, & Phatak, 2017).

Ataie-Jafari et al. (2015) in their study examined an association of vitamin D status with mental health and violent behaviours of 1095 Iranian adolescents. It was a nationwide study from 2009 to 2010 and information was collected based on self-reported GSHS questionnaire. Results found that forty percentages of adolescents were vitamin D deficient and significant associations between vitamin D deficiency and self-reported psychiatric distress. The study also concluded that vitamin D deficiency is related to the incident of psychiatric distress in adolescents.

A study examined the association between junk food intake and mental health among 13 486 Iranian children and adolescents aged 6 to 18 years. Cluster sampling method and GSHS questionnaire were adopted for data collection. Results found a significant association between violent behaviours and intake of junk food. Logistic regression analysis showed that daily consumption of junk food increased psychiatric distress like violent behaviours, physical fighting in children and adolescents (Zahedi et al., 2014).

A meta-analysis study investigated the prevalence of overweight and obesity among children and adolescents of the Indian subcontinent. Secondary data was collected through online databases over the period 1961 to 2013. Snowball method was used for checking of references from retrieved articles and finally, 43 full test articles accounted for 73 data sets. Results found a 2% to 36% prevalence of overweight and obesity among children and adolescents. Overweight and obesity were more prevalent among urban children and adolescents. The study found that 10 to 18 years old children had more prevalence of overweight and obesity whereas boys had more prevalence of overweight and obesity than girls (**Hoque et al., 2014**).

A study examined the role of individual and familial factors in adolescents' diet control in Romania. It was a cross-sectional study and 1977 adolescents in

secondary schools participated in the study. The self-reported questionnaires administered among adolescents such as diet controlling behaviour, general self-efficacy scale, future consequences scale, self-regulation scale, brief stress and coping inventory, authoritative parenting index and measures of perceived social support. Results found that 19.3% of males had poor diet control whereas in girls only 13.2%. Logistic regression analysis found that all protective factors are against poor diet control of adolescents. Regression model found that female adolescents had a high level of protective factors than the opposite gender (**Piko & Brassai, 2009**).

Kotecha et al. (2013) investigated the dietary pattern of school-going adolescents in Urban Baroda, India. Mixed method study and structured questionnaire on dietary patterns were administered among 1440 students from class seven to twelve aged 10 to 19 years. For the qualitative element, FGDs was conducted among adolescents and five FGDs with teachers. Results found that more than eight-tenths of respondents had eaten dal, rice, chapati and vegetables regularly. More than half of the respondents had their breakfast and consumed soft drinks and chocolates.

A cross-sectional study investigated the prevalence of undernutrition and associate factors of rural adolescents in West Bengal. Overall 839 respondents (408 boys and 431 girls) aged 10 to 17 years were selected through stratified two stage random sampling method. Anthropometric measures were measured to determine the prevalence of undernutrition in the study. Results found that there was a significant association between weight and height according to age. Boys had a higher mean BMI than girls. The study also found that respondents belonging to the lower social class were significantly more likely to be stunted; nuclear families were more likely to be stunted; large families were more likely to be stunted and thin (Pal, Pari, Sinha, & Dhara, 2017).

A cross-sectional study to determine the growth and nutritional status of Tripuri tribal adolescent boys from West Tripura District. Overall, 623 adolescent boys aged 8 to 15 years were selected through random sampling method in public schools in a rural and urban area. Tools for data collection were socio-demographic details including modified Kuppuswamy's scale for understanding the economic status, Measurement of height and weight, and BMI. Results found that urban adolescent boys had 7.7% stunting, 17.8% thinness and 6% overweight whereas in

rural adolescent boys had 27.9% stunting, 38.4% thinness and 0.39% overweight (Sarkar, Saha, Roy, & Sil, 2012).

Sadinejad et al. (2014) investigated the hygienic behaviours of 13486 children and adolescents in Iran. Random cluster stratified multistage sampling and GSHS questionnaire were administered among the respondents. Results showed that twenty-six percentages of respondents brushed their teeth more than once in a day. Female respondents brushed their teeth more than the opposite gender. Urban students brushed their teeth twice than rural students. Urban schools had more appropriate hygiene facilities than rural schools.

Ratnaprabha, Kumar, & Kumar (2018) in their study investigated the personal hygiene practices among 213 government high school children in the rural area of Davangere, Karnataka. It was a cross-sectional study and semi-structured self-administered questionnaire was administered to the study participants. Results revealed that 72.77% reported cleaning the house every day, 73.70% follow segregation of domestic waste and 46.47% disposed waste in a big dustbin in the area and 45.54% disposed in a common pit in their area and others just threw outside the house. Girls had better hygiene practices than boys and higher maternal education had better hygiene practices.

A study examined the menstrual hygiene practices among adolescent girls in rural Puducherry. It was a cross-sectional community-based study and semi-structured questionnaire was administered among 528 adolescents aged 10 to 19 years. Results found that the mean age of menarche among school-going adolescent was 12.71 years and more than half of them had attained menarche between 12-14 years of age. Majority of them complained of abnormal pain during menstruation and low backache. The study also revealed that the majority of houses does not have separate sanitary latrine facilities (**Hema Priya et al., 2017**).

Javalkar & Akshaya (2017) investigated menstrual hygiene practices among adolescent girls of rural Mangalore. Cross-sectional design and census method of sampling techniques were used to select 116 girl students aged 11 to 18 years from one private and one government school. The semi-structured questionnaire consisted of age at menarche, hygiene practices, social, religious; attended school's restrictions and common issues during menstruation. Results showed that majority of them saw menstruation as a normal process; knowledge about menstruation before menarche, mother was the prime source of information; knowledge about menstrual hygiene

and had no knowledge about organ causing bleeding during menstruation. The study also revealed that most of them did not change cloth in school due to lack of privacy. Majority of them had no ritual practice at menarche and they had restrictions during menstruation.

A study determined the health status and morbidity pattern among school-going adolescents in an urban area in Andhra Pradesh. Height, weight, nutritional status, general examination and clinical signs were conducted among 210 adolescents aged 10 to 19 years. Results revealed that boys were stunted than girls whereas in age group early adolescents were stunted as compared to late adolescents. The study also found that more than half of the adolescents were underweight. Morbidity condition of adolescents found that dental issues were common and girls were more anaemic than boys. Skin disorders, history of worm infection and ENT problems also found among adolescents (Yerpude, Jogdand, & Jogdand, 2013).

Teh, Sumbele, Meduke, Ojong, & Kimbi (2018) in their study examined the prevalence, intensity and risk factors for malaria parasitaemia, anaemia and malnutrition among children in the Mount Cameroon area. A cross-sectional community-based survey among 828 children aged 6 months to 14 years. Anthropometric measurements were used for data collection. Results found that 41.7% had malaria parasite and 56.2% had anaemia. 34.8% of children were malnutritioned. Logistic regression model shows significant risk factors of anaemia with age, gender, level of education and marital status of the guardian.

A study examined the estimates of the global and regional incidence of tuberculosis among young people aged 10–24 years. The study used the WHO database of tuberculosis in 2012. Results show that 17% of tuberculosis cases were detected among the young population. The study also found that the WHO South-East Asian Region and the WHO African Region detected the greatest number of tuberculosis cases (Snow, Sismanidis, Denholm, Sawyer, & Graham, 2018).

Cowger, Wortham, & Burton (2019) investigated the prevalence of tuberculosis among children and adolescents in the USA. The study used data analysis for children and adolescents with tuberculosis disease reported to the National Tuberculosis Surveillance System during 2007–17. Results found that 6072 tuberculosis cases occurred among children and adolescents from 2010 to 2017. 85% occurred in the 50 US states and the rest in US-affiliated islands. The study also

revealed that cases occurred among 76% US-born children and 42% US-born adolescents.

A study examined the prevalence of tuberculosis (TB) in adolescents in western Kenya. A cohort study was conducted among 5004 adolescents aged 12 to 18 years. Data collected through screening clinical criteria and history, Mantoux test, two sputum examinations and chest radiography were also conducted. Results revealed that 39.2% were suspected TB, 32.1% had positive Mantoux and 2.9% with household TB contact. Case notification rate among 12–18-year-old adolescents for all TB was 101/100 000 (Nduba et al., 2015).

Arora, Das, Pooni, Rustagi, & Singh (2015) in their study examined the prevalence and risk factors for childhood asthma. It was a cross-sectional study conducted over a period of one and a half years and 2500 children aged 5 to 15 years from three urban schools in Ludhiana were taken for the study. Questionnaire and pulmonary function tests were conducted for data collection. Results revealed that 7.5% of schoolchildren had asthma. Most common symptoms stated by the cases were wheezing and seasonal allergy. Asthma had no connection with sex, socioeconomic status, and pet at home. The significant risk factors associated with asthma were family history of asthma and allergy, family history of smoking.

Peltzer & Pengpid (2016) investigated risk and protective factors affecting sexual risk behaviour among 6792 school-going adolescents aged 13-16 years old from Fiji, Kiribati, Samoa, and Vanuatu. They used a cross-sectional design and two stage cluster sampling method to represent all school-going adolescents from class six to tenth. Self-reported GSHS questionnaire was administered among school-going adolescents during classroom periods. Results revealed that less than one fifth had ever had sex and 38% had early sexual debut during their lifetime, less than half of them did not use a condom during last coitus, and more than seven-tenths engaged in sexually risky behaviour using the composite measure. Multivariate logistic regression analysis found that late adolescents' age was associated with male sex, multiple sexual partners, no condom use and sexual risk behaviours. The study also found that substance use, mental distress, loneliness was highly associated with sexual risk behaviour. In protective factors, parental or guardian supervision was positively associated with sexual risk behaviour measures.

Muthuraja & Dhanes (2015) in their study examined the knowledge regarding HIV and AIDS among the 1440 adolescent students in Chennai. Cross-

sectional design and equal sex distribution were also included in the study. A self-reported questionnaire with 28 items was administered among adolescent students. Results found that most of them knew about HIV/AIDS, knew that sexual route is the mode of transmission; HIV/AIDS can be diagnosed by a blood test. The study also revealed that less than half of them knew about the symptoms of HIV/AIDS. Females had more knowledge regarding HIV/AIDS whereas late adolescents had more knowledge than early adolescents.

A community-based cross-sectional study investigated the knowledge and awareness regarding menstruation and HIV/AIDS among 282 school-going adolescent girls. Randomly selected government school and respondents from class eight to twelve and who have attained menarche were taken for study. The questionnaire consisting of menstrual awareness and knowledge regarding HIV/AIDS was administered among the respondents. Results revealed that little more than one-tenth of them thought of menstruation as a burden. Majority of them were perceived that personal hygiene is desirable during menses. Most of them knew the full form of AIDS and knew that AIDS can be transmitted by infected syringes. Majority of them said that they got information regarding HIV/AIDS and menstruation from their mothers (Jain, Anand, Dhyani, & Bansal, 2017).

A narrative review investigated tobacco use among school-going adolescents in India. The articles were searched through online databases and assessments were carried out by one or two independent reviewers. The review found that most of the articles lacked sufficient power to estimate the precise risks associated with the topic. The review also revealed that tobacco use is associated with several health issues (Sagarkar, Sagarkar, Arabbi, & Shivamallappa, 2013).

Jaisoorya et al. (2016) in their study the prevalence, patterns and correlates of tobacco use among 7560 adolescent school students in Kerala, India. Single-stage cross-sectional epidemiological study and cluster random sampling was used among 73 schools. Socio-demographic profile, Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), Kessler's Psychological Distress Scale, Suicidal Behaviour questionnaire, Child Abuse Screening Tool Children's Version (ICAST-C), Barkley Adult ADHD rating scale—IV (BAARS—IV) was administered among the adolescent school students. Results found that less than one-tenth of adolescents used tobacco and male adolescents used more tobacco than female adolescents. Tobacco users had poorer academic performance, more severe

psychological distress, suicidal attempts, higher scores of ratings of attention deficit hyperactivity disorder and history of sexual abuse.

Currie & Bray (2019) investigated the health inequalities, risky behaviours and protective factors in adolescents. Secondary analysis of the data collected by the Wiltshire Pupil Health and Well-being Survey conducted by Wiltshire Council, UK. There were 64 schools and colleges and 6912 adolescents who participated in the study. The health risk behaviours questionnaire including smoking tobacco, using cannabis, self-harming and drinking alcohol were administered among adolescents. Results found that the prevalence of smoking, tobacco, using cannabis and self-harming were high among vulnerable young adolescents.

A cross-sectional study examined the prevalence of tobacco use among government high school and higher secondary school students in Bhopal. Multistage sampling method was used for a section of government schools. The study found that more than one-fifth of students were prone to tobacco use and male students were more vulnerable than female students in terms of tobacco use (Neelkanth, Dohare, & Bhatia, 2017).

A systematic review investigated the prevalence of tobacco use among schoolgoing adolescents in India. Literature was collected through various online databases and studies published from 2000 to 2018. The original research articles which reported the prevalence of tobacco usage among school-going adolescents aged 13 to 16 years were included in the study. Overall, 189 articles were collected through online databases and only 20 articles with 50390 population met the criteria of the study and were included in the final analysis. Results found that the prevalence of tobacco smoking among school-going adolescents was 5.9% to 49%. The study also found that peer pressure was one of the common risk factors for tobacco usage among school-going adolescents. Other risk factors for tobacco usage among school-going adolescents were parents' smoking habits, stress, curiosity and family conflict (Raja & Devi, 2018).

Tsering, Pal, & Dasgupta (2010) in their study tried to determine the knowledge regarding the harm of use and tried to obtain information about attitudes among 416 high school students in two high schools of West Bengal. Cross-sectional design and multistage sampling method were used for the selection of samples. Self-administered questionnaires based on substance use were used for data collection. Results revealed that more than one-tenth of students used or abused any one of the

substances in their lifetime. More than two-thirds of them need to quit substance and reason for continuing substance use was because of relieving tension and easy availability. Urban students know about the harmfulness of substance use than rural. Urban students were more influenced by peers in terms of substance use than rural students.

Narain, Sardana, Gupta, & Sehgal (2011) investigated the prevalence of tobacco use among school children in Noida, India. It was a cross-sectional study and cluster sampling method was used for selection of 4786 students from class eleven to twelve in different schools of Noida city. Socio-demographic details and health questionnaire on tobacco use was prepared based on the Global Youth Tobacco Survey (GYTS) questionnaire for data collection. Results revealed that little more than one-tenth of students used tobacco and current users were 4.1%. Boys used tobacco more than girls. Government school boys used tobacco more than private school boys whereas tobacco use among private school girls were more prevalent than government school girls. Both genders in private schools were more prone to smoking than government school students.

A study examined the association between bullying victimisation and physical fighting among 7388 Filipino adolescents. Cross-sectional study and two-stage cluster sampling design were used for selection of adolescents. The study used a GSHS questionnaire for analysing the physical fighting and bullying victimization. Results found that half of the adolescents engaged in physical fighting and a third of adolescents were victims of bullying. Bullying victimisation was positively associated with physical fighting for both genders whereas no gender difference found in physical fighting. Older adolescents had less fighting behaviour than younger adolescents (Rudatsikira, Mataya, Siziya, & Muula, 2008).

Mathur, Mehra, Diwan, & Pathak (2018) investigated the prevalence of childhood injuries in an urban and rural locality in Ujjain district in central India. A total of 1049 children from villages and urban slums were taken for data analysis. Results found that less than one-fifth of children got all injuries and boys are more injured than girls. Urban children found to be more injured than rural children. The most common injuries are physical injuries, burns, poisonings, near drowning and suffocations. Children's injuries happened in public places and home. The study also found that various unintentional childhood injuries and factors associated with an increased risk of unintentional injuries.

Nair, Ganjiwale, Kharod, Varma, & Nimbalkar, (2017) studied the prevalence of mental health problems in schoolchildren aged 13–17 years and compared differences between urban and rural schools in Anand District, Gujarat. A Cross-sectional study was conducted among 693 students from five schools. Sociodemographic data, Teenage Screening Questionnaire-Trivandrum (TSQ) and SDQ were administered among the school children. Result found that more than one-tenth of respondents had mental health problems whereas boys had higher mental health problems than girls. Peer problem was the most common mental health problem. Girls had emotional problems than boys and boys had more conduct disorders, peer problems and hyperactivity than girls. Rural children had more prevalence in mental health problems than urban. Rural school children had prosocial behaviour than urban. Hyperactivity was more common in rural boys, whereas peer problems are common in urban girls.

Faizi, Azmi, Ahmad, & Shah (2016) examined psychological problems among 1456 school-going adolescents aged 13 to 15 years in Aligarh. Cross section study design and SDQ English version were administered among school-going adolescents. Results found that little less than one-tenth of school-going adolescents had psychological morbidity. Male school-going adolescents had more psychological problems than female. The study also found psychological problems among school-going adolescents such as 5.42% of emotional, 5.56% of conduct, 3.78% of hyperactivity, 4.40% of peer, and 4.26% of prosocial problems.

Keyho, Gujar, & Ali (2019) in their study the mental health status of schoolgoing adolescents aged 13 to 19 years from private and government schools in Kohima district, Nagaland. It was a cross-sectional study design and they randomly selected the schools. Overall, 702 students were taken through a total enumeration method. Socio-demographic details and SDQ were administered among adolescents. Results found that overall, the adolescents had 17.2% abnormal score, 17.1% abnormal scores for emotional problems, 15.2% abnormal scores for conduct problems, 16.1% abnormal scores for hyperactivity and 5.6% abnormal scores for peer problems.

A study investigated the mental health status among 1403 school-going adolescents aged 13 to 17 years from 10 schools in Tezpur, Assam. Cross-sectional design and schools were selected through convenient sampling method. Socio-demographic details and self-reported SDQ were administered among school-going

adolescents. Results found that 10.2% fell under abnormal range in the domain of emotional problems, 15.1% had scores indicating an abnormal range in conduct disorder, 5.7% had an abnormal range in hyperactivity, 5.2% participants reported severe problems with the peers and overall mental health problems among schoolgoing adolescents in this study is 31.6% (borderline to the abnormal range). Female adolescents had higher emotional problems than male whereas male had higher conduct problem, hyperactivity and peer problems than the female respondents. Female had high prosocial behaviour than male. The study also revealed that emotional problem and hyperactivity had a significant positive relationship with age. Multiple regression analysis found that total score on SDQ had a significant predictor with academic performance and socioeconomic status (Harikrishnan, Ali, & Sobhana, 2017).

A systematic review investigated the relationships between various commonly used indicators of SES and mental health outcomes for children and adolescents aged 4 to 18 years. Literature was collected from an online database and initially 152 articles listed out between 1990 and 2011. Overall 55 studies were selected for final analysis. Results found that children and adolescents from low socio economic had high mental health problems. There was an association between decreased economic status with high mental health problems. The review also found that different types of socio economic evaluation might influence the studies which are included in the final analysis (Reiss, 2013).

Kharod & Kumar (2015) in their study examined the mental health status of 605 school-going adolescents in a rural area in Gujarat. Cross-sectional study design and four schools were selected randomly. Teenage Screening Questionnaire (TSQ) and SDQ were administered among the school-going adolescents. Results found that 33% had mental health problems. The study also revealed that the highest level of abnormal score was seen in peer problem score. Girls were more at risk in the overall SDQ score.

Rai et al. (2019) investigated the prevalence of mental health issues, violence, bullying, and unintentional injuries among adolescents. Observational descriptive study design and purposively selected the schools from an urban and a rural area of Patiala. GSHS questionnaire was administered among 100 students from rural and 100 from an urban area. Results found that 11% had felt lonely, 13.5% had

difficulty in sleeping and 2.5% even considered of attempting suicide. There was no significant urban-rural difference found in the study.

A study examined the prevalence of stress, anxiety and its correlates among adolescents. Descriptive design and 1000 adolescents aged 15 to 19 years were selected through multistage random sampling from Kannur, Kerala. A standardised questionnaire was administered among adolescents. Results found that 16 % had stress and 17% had anxiety. The study also revealed that girls had more stress and anxiety than boys. There was a significant association between stress, anxiety with parent, peer, school and academic-related factors (Nair & Elizabeth, 2016).

A study investigated the prevalence of depression and anxiety among higher school-going adolescents. It was a cross-sectional study and 201 school-going adolescents were selected from two select pre-Graduation Institutes in the city of Mangaluru. Socio-demographic details, socioeconomic status used by Modified Kuppuswamy Scale, Beck Depression Inventory (BDI-II) and Screen for Child Anxiety Related Disorders were administered among the school-going adolescents. Results found that 40.8% of them had depression and females had more depressive symptoms than males. 54.7% had anxiety and association between anxiety and depression was significant (Jayashree, Mithra, Nair, Unnikrishnan, & Pai, 2018).

A qualitative study investigated the behavioural problems of school-aged children in rural Nepal. The respondents were children aged 8 to 15 years, parents, community members and school teachers from Jutpani and Meghauli Village Development Committees (VDCs) of Chitwan district. Free list interviews (FLIs) and KIIs were used for data collection. Overall 72 FLIs and 30 KIIs were conducted, which includes 12 boys, 12 girls, 24 mothers, 24 fathers, 8 school teachers, 7 community people, 4 social workers, 4 Female Community Health Volunteers (FCHVs), 3 members of the community-based organization/ non-governmental organization, 2 members of youth clubs, and 2 participants in women's groups. Results revealed that problems are interrelated and independent in the study. The major problems identified were addictive behaviour, not paying attention to studies, getting angry over small issues, fighting back, disobedience, and stealing. The child behaviour problems affect the individual growth, family harmony and social cohesion (Adhikari et al., 2015).

Samanta, Mukherjee, Ghosh, & Dasgupta (2012) in their study rural-urban comparison of protective factors, mental health issues and violence among 199 (104)

urban & 95 rural) adolescents aged 13 to 15 years in West Bengal. A cross-sectional study based on the Global School-based Student Health Survey (GSHS) questionnaire was administered among adolescents studied between classes VIII to XI. Results found that urban adolescents missed more classes than rural students. Urban adolescents' parents were more involved in their children's studies like checking homework, understanding problems and knew their activities in free time. Poor mental health found in urban adolescents than rural adolescents.

Stickley et al. (2013) examined the relationship between peer victimisation at school and a range of different psychological and somatic health problems among Russian adolescents. It was cross-sectional in nature and 2892 adolescents aged 12 to 17 years were taken for the study. The Social and Health Assessment (SAHA) questionnaire were administered among the adolescents. Results found that more than one-fifth of students had experienced frequent victimisation. Experiencing victimisation and reporting worse health had a strong relationship. Highest victimisation scored adolescents had anxiety symptoms, suffer from posttraumatic stress and more likely to experience depressive symptoms.

Long et al. (2017) investigated the mental health of Indian adolescents in three urban secondary schools. IAHQ was administered in 1500 secondary students in three private urban Indian schools. SDQ module assessed the mental health of secondary students. Significant independent variables associated with SDQ scores were gender, level of overall health, negative peer pressure, insults from peers, the kindness of peers, feeling safe at home, at school, or with friends, and grades. IAHQ and SDQ are to identify factors that contribute to poor mental health among students.

A qualitative study explored the perspective of adolescent Iranians on issues of family and their health. Descriptive qualitative method and purposive sampling, and method used to analysis the content of narrative data to develop the themes. There were 41 Adolescents aged 11 to 19 years in Tehran, Iran. Open-ended, semi-structured interview and major aspects asked respondents about their feelings and their health. The audiotaped interview was taken in one to three sessions and each session lasted between 30 to 70 minutes. The results found three risk factors such as widening generation gap, effective parenting and family financial situation. The study also suggested that parents and adolescents need more knowledge about adolescent health and development (Parvizy & Ahmadi, 2009).

2.4 Studies on Social Work Practices in Schools

This segment will discuss the scope of social work practice in schools, teachers' and parents' perception of social work practices and so on.

Dash & Mohan (2015) investigated three aspects such as views of teachers, challenges faced by social organisations and the scope of social work in schools. Fourteen schools were selected through convenient sampling. FGDs were done among 37 school teachers and four social organisations were also included in the study. Results revealed the teachers' view on child development such as family support, good environment, physical development and sports and education. Personality development trainings, co-curricular activities with proper training, developing creativity and imagination of children and providing them experiential learning facilities need to be promoted in teaching methods. According to teachers, care and support from parents for their child is mandatory. Teachers point out that counselling services are necessary in schools only for children who has problems. Social organisation's challenges are lack of initiative from teachers' side, school teachers expect help only in administrative work from them and sometimes social organisations fail to explain quantitatively the expected outcome of their services.

A pilot study investigated the role of school social workers from the perspective of school administrator interns in rural North Carolina. It was cross-sectional design and conveniently selected the school administrator interns. Online survey questionnaire made it convenient for students interning at different schools to participate in the study. Overall, 27 filled all the questions and were taken for data analysis. Results found that respondents had a favourable view on school social workers and they believed social workers in schools as competent, essential, resourceful, available and personable (Higy, Haberkorn, Pope, & Gilmore, 2012).

Madhusudanan (2015) investigated the school teacher's perception of social work practice in school. Sequential research design and purposive sampling method were adopted in the case study. Among the respondents one was head mistress and the other was B.T. Assistant from government schools in a rural area in Cuddalore Taluk. Semi-structured interview schedule and an in-depth interview guide were used for data collection. Results found that respondents had a lack of awareness on social work education, school social work, special educators, learning disability and social workers or other professionals.

A study examined the teachers' perceptions of school counsellors in Lebanon. Randomly selected the schools and 100 elementary, intermediate, secondary, and high school teachers from 13 different private schools participated in the study. Semi-structured interviews were conducted among the respondents. Results found that the teachers had different perceptions, negative and positive experiences with counselling services (Khansa, 2015).

A study investigated the perception of teachers and students for guidance and counselling services in Southwest Ethiopia Secondary Schools. Descriptive survey design and multi-stage sampling method were used for the study. There were 394 students and 108 teachers selected through systematic sampling method. Likert scale closed-ended self-administered questionnaire was used for data collection. Results found that the students' and teachers' mean perception scores to needs of guidance and counselling for students learning was positive. Their opinion on guidance and counselling services helps on student's future career, personal problems. There were no significant differences found between students' and teachers' means perception scores guidance and counselling services (Arfasa, 2018).

Gallant & Zhao (2011) in their study examined high school students' perceptions of school counselling services. There were 701 students from class nine to twelve from an urban school district located in the south-eastern part of the United States. A standardised questionnaire was administered among the students. Results revealed that the majority of students stated awareness of school counselling services at their school.

A study investigated the perceptions among high-school students about school counsellors' roles and career selection. Case study design and stratified sampling were used for the selection of three schools in Adana. Overall 60 students were taken for study with an equal distribution of males and females. Self-reported questionnaire and the interview guide were also used for data collection. Results found that the majority of the students agreed that school counsellors are friendly and approachable to the majority of them. Students gain an in-depth understanding of different learners' viewpoints from the counsellors. Counsellors often respond promptly to the students' needs and requests regarding career selection (Hanimoglu, 2018).

Agi (2014) investigated the relationship between perception and attitudes of students towards school counselling. There were 640 students chosen through

stratified random sampling method from eight secondary schools in Cross River State. Students' Perception and Attitude Questionnaire (SPAQ) was adopted for data collection. Results revealed a significant relationship between perception and attitudes with regard to school counselling. Both genders had a positive relationship between perception and attitudes of Counselling whereas no difference found inbetween gender. The study also found a significant difference between senior and junior students and no difference between rural and urban.

A study examined the nature and scope of school social work practice among eight schools in Delhi. The study carried out a mixed-method approach and gathered information from teachers, children and school social workers. A structured interview schedule was administered among 40 males and 40 female teachers and FGDs were held among 40 male and 40 female children, 8 school social workers were taken for an in-depth interview process. Results found that the school social workers addressed various problems related to the children and their environment. There were less school social workers seen handling deeper issues related to children. Private school social workers were conducting more sessions and co-curriculum activities than the school social workers in government schools. Children in both government and private schools spoke in FGDs about the necessity of social work practice in schools. Three-quarters of children talked to school social workers about their issues (Meenu, 2010).

A study explored the role of the school social worker from a mental health perspective. The study demonstrates the need for school-based mental health services, the goal of school social worker and general responsibilities. Poor mental health awareness was one of the limitations of school-based mental health practice. Study revealed lack of mental health services for adolescents and the need to raise public awareness about the issues related to adolescents (**Lakshmi, 2014**).

2.5 Conclusion

In this chapter, studies were reviewed based on socio-demographic details of adolescents, environment and social support of adolescents, health & mental health-related issues of adolescents and the scope of social work practice in schools.

Majority of the studies included in socio-demographic segments found that different age groups of adolescents, child and adolescents mixed-age groups, community-based studies, focused on one setting such as either rural or urban and different socio-economic background. There is a dearth of studies concentrated on a

particular age group of school-going adolescents, comparison between government and private schools, rural-urban differences.

In the environment and social support segment, the studies were more focused on family-related problems, academic achievements of adolescents. There is a lack of studies focused protective factors of school-going adolescents such as parents support, teachers support and social support.

There is a lack of studies in different domains of health of school-going adolescents in Indian settings. Majority of studies in global and Indian settings are focused on nutrition, substance use self-reported emotional and behavioural problems and menstrual hygiene of adolescents. There is a dearth of studies focused on medical care and history, self-reported, parents and teachers' version of SDQ, violence behaviour, hygiene and physical activity of school-going adolescents.

There is a dearth of studies focused on the scope of social work practice in schools. There were few studies elaborated on the role, scope, teachers and students perception on social work practice in schools.

In this chapter, majority of studies found lacking:

- Emphasis on school-going adolescents.
- Specific age group of school-going adolescents.
- Rural-urban and government-private school comparison.
- Standardised tools for measuring socio economic status.
- Clear cut methodologies.
- Mixed method approach.
- Qualitative studies.
- Use of IAHQ.
- Use of three versions of SDQ.
- Self, parents' and teachers' perception on social work practice in schools.
- Indian studies.

The current Chapter presents an extensive review of literature and identifies the gaps in literature and hence attempts to fill up all the gaps of the reviewed studies. The next Chapter deals with methodology used in the study to fulfil the aforementioned gaps and the objectives of the study.

CHAPTER III

METHODOLOGY

Research methodology is the route through which the investigation must be conducted for the study. It is the connection between the researcher's study objectives and findings. The former chapters presented a critical review of literature and the major research gaps therein. The present chapter discussed the settings and methodology of the present study which has been organized into two major sections. The first section presented the profile of the study areas including the core and peripheral communities. The second section deals with the methodological aspects of the present study encompassing research design, sampling, tools of data collection, data processing and analysis of the present study.

3.1 Study Settings

The study setting is a depiction of study background including the locality and investigational operation and the present study location is at Kollam District, Kerala.

After independence, Kerala became a unique state in the southern part of India, it has 14 districts and Thiruvananthapuram is the capital city. Kollam district earlier known as Quilon came into existence on 1st July 1949 and is situated in the southern part of Kerala. It is situated on the South-West coast of India between North latitudes 9°10' and 8°45' and East longitudes 76°25' and 77°15'. This district is bordered by the Pathanamthitta & Alappuzha districts on the north, Thiruvananthapuram district & the Tamil Nadu state in the south, the Western Ghats on the east, and the Arabian Sea on the west. The district headquarters and capital is at Kollam city (Census, 2011a).

Kollam has a rich socio-cultural history from ancient times. The old name of Kollam was "Desinganadu" and the new name is derived from the Sanskrit word "Kollam" which means pepper. The queen of Travancore invited the Portuguese to conduct trade at Kollam in 1503. The historical Kundara proclamation in 1809 was headed by Veluthambi Dalawa (king) took place at Kollam. The social reformers like Sree Narayana Guru and Ayyankali focused their social activities at Kollam.

The geographical area of Kollam district is 2491 sq. km, 81,438 hectares of land is forest area and has 37.3 km are coastal line. There were 5 Taluks, 1 Corporation, 3 Municipalities and 70 Grama Panchayat in Kollam district. The district has a population of 2,635,375 of 2,483 square kilometres and 1113 females for every 1000 males recorded in 2011 census.

Kollam is one of the topmost educational hubs in Kerala and there are a lot of educational institutes such as medical colleges, engineering colleges, liberal arts colleges, schools and coaching centres. The present study focuses on the school-going adolescents in Kollam district. Table 3.1 below shows the demographic data of High Schools (HS), Higher Secondary Schools (HSS) & Vocational Higher Secondary Schools (VHSS) and students in Kollam district. The total number of schools with class VIII to Class XII is 520 and a total student is 250556 in the Kollam district.

Table 3.1 Demographic details of HS, HSS & VHSS and Students in Kollam, District.

Schools in Kollam District							
	VHSS	HSS		HS			
Govt	20	55		119			
Aided	32	49		95			
Unaided	0	25		43			
Total	52	129		257			
CBSE	ICSE	KV	Jawaha	ar Navodaya			
67	13	1	1				
Students in Kollam District							
	State	CBSE	ICSE	JN			
Class VIII	36710	3699	1618	80			
Class IX	36589	3225	1351	40			
Class X	34158	3014	1139	82			
Class XI to XII	125166	2566	1024	95			
Total	232623	12504	5132	297			

Source: (Census, 2011b)

3.2 Research Design

The study design is cross-sectional and descriptive in nature which means that the condition and related factors are measured at a particular period of time and in a defined population. Data is obtained from both primary and secondary sources. The research followed a mixed method (quantitative and qualitative) in the collection of primary data. Quantitative method was used for measuring the socio-demographic profile, self-reported questionnaire for studying environment & health, parents & class teachers' version for mental health and school social work related questionnaire. The study also comprised the qualitative aspect like face to face interview with parents and class teachers of school-going adolescents in Kollam district. Secondary data consists of various scientific articles, websites, books or chapters and unpublished thesis.

3.2.1 Sampling

Multistage cluster sampling method was used for the selection of sample in Kollam district. School-going adolescents were divided into two stratas- strata I (Class VIII to X) and strata II (Class XI to XII). The classes were randomly selected and 10 school-going adolescents were taken from each class (cluster size). The class teachers and the parents of selected school-going adolescents were also included in the study (Figure 3.2, 3.3 & 3.4). The study covered urban, rural, tribal and coastal settings of Kollam District, Kerala.

Figure 3.2 Graphic Presentation of Sampling for School-going Adolescents and their Parents (Quantitative Method)

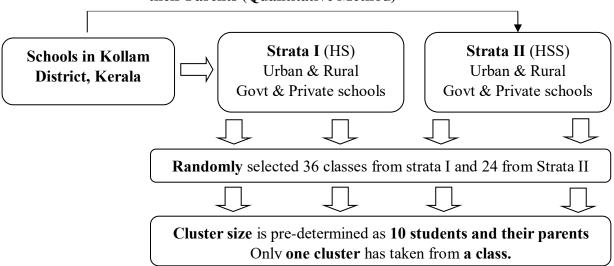


Figure 3.3 Graphic Presentation of Sampling for Class Teachers (Quantitative Method)

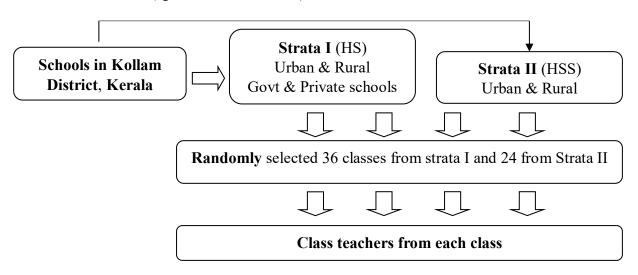


Figure 3.4 Graphic Presentation of Sampling for Teachers and Parents (Qualitative Method)

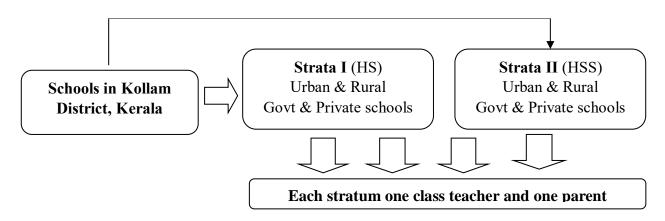
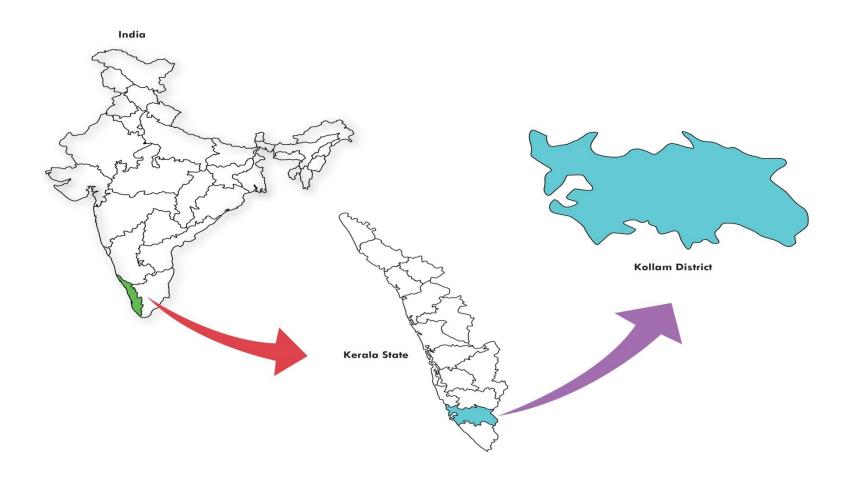


Table 3.5 List of Selected Schools and Overall Strength in Kollam District, Kerala

Settings &		Strength		
school type	Calcal Name	HC	HCC	T-4-1
	School Name	HS	HSS	Total
	Kendriya Vidhyalaya, Kollam	208	113	321
	Govt HSS, Paravoor	204	00	204
Urban – Govt	Govt HSS, Karunagappally	1410	00	1410
	Govt HSS, Punalur	00	732	732
	HSS for Boys, Punalur	00	480	480
	B C Mahatma Central School, Kollam	79	33	112
Urban - Private	S N Central School, Karunagappally	206	81	287
	Toc H Public School, Punalur	216	39	255
	Govt Fisheries school, Kuzhithura	104	00	104
	Govt HSS, Ottakal	167	00	167
Rural - Govt	Govt HSS, Kulathupuzha	166	00	166
210202	Govt HSS, Kulasekharapuram	00	606	606
	KRGPM HSS, Odanavattam	00	462	462
	Vivekananda V & HSS, Poredom	00	460	460
	Pushpagiri Central School, Edomon	163	00	163
	Siddhartha Central School, Puthoor	139	00	139
Rural Private	Sree Buddha School, Karunagappally	519	180	699
Tarar 1 11vate	Al Ameen Public School, Pathanapuram	00	35	35
	St John's School, Anchal	00	165	165
Total		3581	3386	6967

Figure 3.6 Map of Study Setting



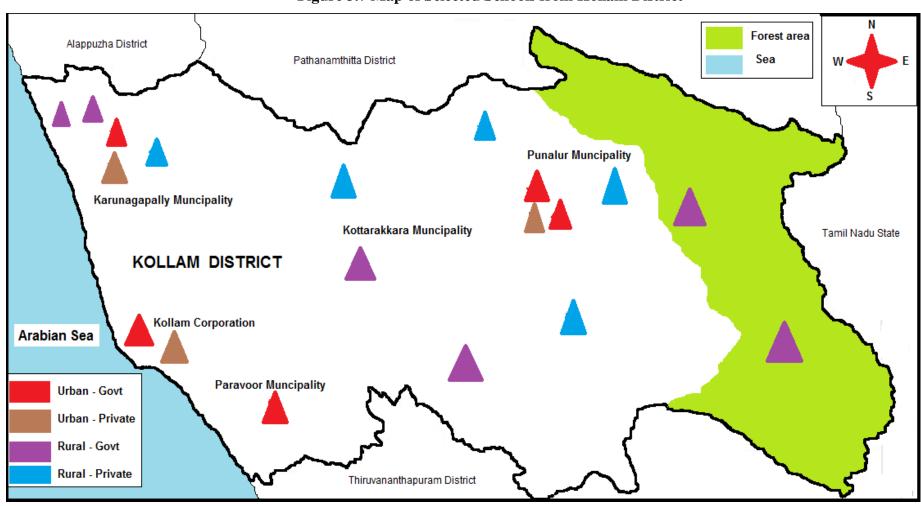


Figure 3.7 Map of Selected Schools from Kollam District

Sample Size

Quantitative – sample size of school-going adolescents, parents and their teachers

The sample size was calculated using the following formula which has been used in most cross-sectional descriptive studies (Hajian-Tilaki, 2011; Jayasinghe, 2010).

$$n = \frac{Z^2 \times p(1-p)}{d^2}$$

n = Number of subjects

p = Expected prevalence of mental health status.

Z = Standard normal deviation for a two tailed

d = Absolute precision required on either side of the proportion

Prevalence of mental health status among 13-17 old school-going adolescents was found 7.8% in a recent north eastern study (Harikrishnan et. al, 2017).

$$Z = 1.96$$
, $d = 5\%$, $p = 7.8\%$

$$n = \frac{1.96^2 \times 0.78 \text{ (1-0.78)}}{0.05^2}$$

Sample size = 131

As multistage cluster sampling method is followed, Total sample size = design effect x n Design effect = 1+ (b-1) (roh). Whereas, b= response per cluster, roh = intra-class correlation coefficient, since these values are not available from the previous studies, a design effect of 2 is set for this study.

Sample size =
$$131 \times 2 = 262$$

As the allowance for non-response, 10% (n=13).

Total sample size = $262 + 13 \times 2 50$.

Quantitative – Sample Size of School-going Adolescents, Parents and Class Teachers

Table 3.8 Selected Schools and Cluster Size in Kollam District

Settings & School type	School Name	VIII	IX	X	XI	XII	Total
School type	Kendriya Vidhyalaya	10	10	10	10	10	50
	Govt HSS, Paravoor	10	10	10	00	00	30
Urban &	Govt HSS, Karunagappally	10	10	10	00	00	30
Govt	Govt HSS, Punalur	00	00	00	10	10	20
	HSS for Boys, Punalur	00	00	00	10	10	20
Urban	B C Mahatma Central School	10	10	10	10	10	50
&	S N Central School	10	10	10	10	10	50
Private	Toc H Public School	10	10	10	10	10	50
	Govt Fisheries school	10	10	10	00	00	30
	Govt HSS, Ottakal	10	10	10	00	00	30
Rural	Govt HSS, Kulathupuzha	10	10	10	00	00	30
& Govt	Govt HSS, Kulasekharapuram	00	00	00	10	10	20
Govi	KRGPM HSS	00	00	00	10	10	20
	Vivekananda V & HSS	00	00	00	10	10	20
	Pushpagiri Central School	10	10	10	00	00	30
Rural &	Siddhartha Central School	10	10	10	00	00	30
	Sree Buddha School	10	10	10	10	10	50
Private	Al Ameen Public School	00	00	00	10	10	20
	St John's School	00	00	00	10	10	20
	Total	120	120	120	120	120	600

The present study sample size was **600 school-going adolescents and their parents** (table 3.8). The class teachers were chosen from each cluster (class) and there were **60 class teachers** selected for the present study.

Qualitative – Sample Size of Parents and Teachers

Table 3.9 List of Parents and Teachers from each Stratum in Kollam District.

Settings &		Strata I		Strata II			
School type	School Name	Parents	Teachers	Parents	Teachers	Total	
T71	Kendriya Vidyalaya, Kollam	1	1	1	1	4	
Urban &	Govt HSS, Paravoor Govt HSS, Karunagappally	1	1	0	0	2	
Govt	Govt HSS, Punalur	0	0	1	1	2	
	HSS of Boys, Punalur	0	0	1	1	2	
Urban	BC Mahatma Central School	1	1	1	1	4	
&	S N Central School	1	1	1	1	4	
Private	Toc H Public School Punalur	1	1	1	1	4	
	Govt Fisheries School	1	1	0	0	2	
	Govt HSS, Ottakal	1	1	0	0	2	
Rural &	Govt HSS, Kulathupuzha	1	1	0	0	2	
Govt	Govt HSS, Kulasekharapuram	0	0	1	1	2	
	KPGPM HSS Odanavattam	0	0	1	1	2	
	Vivekananda Voc & HSS	0	0	1	1	2	
	Pushpagiri Central School	1	1	0	0	2	
Rural	Siddhartha Central School	1	1	0	0	2	
&	Sree Buddha Central School	1	1	1	1	4	
Private	Al Ameen Public School	0	0	1	1	2	
	St John's School Anchal	0	0	1	1	2	
Total		12	12	12	12	48	

One teacher and one parent were selected from each stratum. The table 3.9 indicated the number of parents and teachers from strata I and strata II in Kollam district. Altogether, 24 parents and 24 teachers were selected for face to face interview.

3.2.2 Inclusion and Exclusion Criteria

Inclusion Criteria

- School-going adolescents of both genders, and their teachers and parents/caregivers.
- School going adolescents' aged 13 to 17 years old, from Class VIII to XII.
- Staying with their parents/caregivers.
- Those who were given consent by the parents for the study.
- Participants who have been residing in Kollam district for more than one year before the data collection.

Exclusion Criteria

• School-going adolescents who are intellectually/physically impaired.

3.2.3 Tools for Data Collection

The data collection tools are the instruments used to collect data for the present study, such as socio-demographic details, Indian adolescent questionnaire, and multidimensional perceived social support, SDQ teachers and parental version, a questionnaire related to school social work and face to face interview schedule for parents and teachers.

3.2.3.1 Socio-Demographic Details of School-going Adolescents, Parents and their Teachers

The socio-demographic details of school going adolescents comprises age, gender, sex, class, school type, settings, family type and socio-economic status (SES). The present study fixed the age range between 13 to 17 years, both genders, class between class VIII to XII, government & private schools, urban & rural settings, both nuclear & joint family (*Appendix VI*).

The parent's socio-demographic performa includes age, gender, education, occupation, marital status and socio-economic Status (SES) (Appendix VII). The SES is measured for the economic and social status of an individual and their family members in different community. The SES was taken from modified Kuppuswamy scale updated for 2018 and it was administered among the parents of school-going adolescents. The updated SES scale of 2018 were from 2012 Kuppuswamy scale and the change calculation of financial gain range by using consumer price index numbers for industrial workers [CPI (W)] by Labour Bureau, Govt of India. The domains in the scale are the occupation of the head of the family, education of the head of the family, total monthly

income of the family. All domain score were calculated and it will provide a total score. The total score will divide into five categories such as upper, upper-middle, lower-middle, upper-lower and lower. The score ranges of each category are upper – score 26 to 29, upper-middle – score 16 to 25, lower-middle – score 11 to 15, upper-lower – score 5 to 10 and lower less than 5 (Saleem, 2018).

The modified Kuppuswamy scale updated for 2018 was incorporated in other Indian studies (Grewal, Sodhi, & Sobti, 2017; Konwar, Vyas, Hossain, Gore, & Choudhury, 2019).

The socio-demographic details of class teachers comprise of age, gender, marital status and teaching experience in the present study (*Appendix VIII*).

3.2.3.2 Indian Adolescent Health Questionnaire (IAHQ)

The IAHQ is a tool for assessing the health of adolescents in Indian settings. It allows approximately 30 minutes for respondents to answer 111 questions within the following 12 modules: demographic information; physical health; physical activity; nutrition; hygiene; medical care and medical history; HIV/AIDS; tobacco, alcohol and drugs; violence, domestic violence and unintentional injury; emotional and behavioural problems; family and home environment and school environment (Long et al., 2013).

The physical health module contains height, weight, sleep of adolescents; physical activity module covered daily exercise, importance of fitness and spending time for watching TV/playing online games; nutrition module comprise eating behaviours such as vegetable, fruits, oiled food and fast food; hygiene module emphasis on brushing teeth, washing hands before going food, washing hands after using toilet; medical care or history module highlights on availability of clinical services, tooth ache, any diseases and taken any vaccinations; HIV/AIDs module comprise aware about HIV/AIDs, got awareness from school or home; substance use module (tobacco, alcohol and drugs) attention on use of substance, past month use, awareness; Violence module (violence, domestic violence and unintentional injury) emphasis on serious injuries, road safety measures, fighting or insult; emotional and behavioural problems module assessed through 25 items Strength and difficulties questionnaire (SDQ) domains such as emotional problems, conduct problems, hyperactivity, peer problems and prosocial behaviour; family or home environment module contain availability computer/TV/mobile/internet, protective factors; school environment module highlights on mark, attendance, insult and kindness from peers.

The IAHQ did face, content and construct validity and Cronbach alpha demonstrated that substance abuse and mental health modules had strong internal reliability and consistency, whereas modules on physical activity, nutrition, hygiene, safety, exposure to violence and relationship with parents all had moderately strong internal reliability. The substance abuse and mental health modules had strong internal reliability and consistency ($\alpha > 0.65$), whereas modules on physical activity, nutrition, hygiene, safety, exposure to violence and relationship with parents all had moderately strong internal reliability ($\alpha > 0.40$). The present study used only self-report format of IAHQ (*Appendix VI*).

This questionnaire was a tool for data collection in another Indian study (Long et al., 2017).

3.2.3.3 Strength and Difficulties Questionnaire (SDQ)

The SDQ is a 25 item, brief behavioural screening questionnaires for children and adolescents between 4 to 17 years of age. The questionnaire was developed by Goodman, (1997). The SDQ has English and several language versions and questionnaire for self-reported, parent and teacher version. There were 5 domains and 5 items for each domain. The domains are emotional problems, conduct problems, hyperactivity, peer relationship problems and prosocial behaviours. The scoring for each SDQ items is that 0 for not true, 1 for somewhat true and 2 for certainly true and there is a reverse score for items 7, 11, 14, 21 & 25. The three versions had original 3-band (normal, borderline & abnormal) categorized score in each domain and total score. The present study occupied the self-reported, parental and Teachers Malayalam version of SDQ and administered among students, class teachers and parents of school-going adolescents (*Appendix VI*, *VII* & *VIII*).

The tools were used in some of the Indian studies (Harikrishnan, Arif, & Sobhana, 2017; Nair, Ganjiwale, Kharod, Varma, & Nimbalkar, 2017).

3.2.3.4 Multi-dimensional Scale for Perceived Social Support (MSPSS)

Multidimensional scale for perceived social support (MSPSS) is a seven-point likert tool for understanding social support for individuals in society (G.D Zimet, Dahlem, Zimet, & Farley, 1988). The subscales in this scale are significant others, family and friends. The 12 items scale with 4 items each subscale and the options for respondents in each item are 'very strongly disagree', 'strongly disagree', 'mildly disagree', 'neutral', mildly agree', 'strongly agree' and 'very strongly agree'. The scoring manual mentioned about the calculation of subscale and overall score. Add

the all items under the subscale and divided by four, and for total score add all 12 items and divided by 12. The score ranged from 1 to 2.9 could be low social support, 3 to 5 score could be moderate support, and 5.1 to 7 score could be considered high support. The studies revealed that the scale had a good validity, reliability and stable factorial structure (Dambi et al., 2018; Gregory D. Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The MSPSS is a free English version scale for using different age groups (*Appendix VI*).

The questionnaire was also administered in Indian settings (Khan, 2015; Nautiyal, Velayudhan, & Gayatridevi, 2017; Prabhu & Shekhar, 2017).

3.2.3.5 Questionnaire on School Social Work Practice

Semi-structured questions were prepared by researchers for understanding the school social work practice in school-going adolescents, parents and their class teachers. The major questions covered among the school going adolescents were 'feel comfortable to express your personal problems to your teachers', 'any idea about counselling', 'taken any help from a school counsellor/school social worker, 'taken any private counselling services'. The questions asked to the parents were 'heard about school social worker or counsellor', 'do you think that school social worker or counsellor needed in schools', 'do you attended any parent training program or training program for the welfare of children', and 'your child taken any counselling help'. The questions such as 'permanent school social worker/counsellor in your school', 'sufficient idea about counselling', 'counselling will be an extra burden to you', 'attended any training programs for the student welfare', and 'able to handle issues of students' were asked among class teachers (Appendix VI, VII & VIII).

3.2.3.6 Key Informant Interview (KII)

The interview guide focused on broader topics such as home and school environment, community and support group, health aspects such as physical health, nutrition, physical activity, hygiene practice, medical condition, substance use, emotional and behaviour problems of school-going adolescents and scope of social work practice in schools. The KII was conducted among teachers and parents in the above-mentioned topic in the interview guide (*Appendix IX*).

3.2.4 Procedure for Translation Tools

The research got permission and details of IAHQ through e-mail (*Appendix III*) from Katelyn N. G. Long, the first author of the article titled "Development and validation of the Indian Adolescent Health Questionnaire published in Journal of Tropical Pediatrics (Long et al., 2013).

Over 111 items of IAHQ and from those only 86 items (excluded 25 SDQ items) were taken for translation. In MSPSS, all the 12 items were translated from English to Malayalam. A Bi-lingual panel was formed for translation of tools to Malayalam from English. The following members of the panel enlisted as forward translators and back- translators:

- Mr. Ajith Krishnan, HSST (Higher Secondary School Teacher) Malayalam, Thadicadu HSS & VHSS, Thadicadu, Kollam District, Kerala (teaching experience 20 years) – forward translator
- 2. Mrs. Sobha S, HSST Malayalam, KRGPM HSS, Odanavattam, Kollam District, Kerala (teaching experience 16 years) forward translator
- 3. Ms. Ammu S. Jayan, Assistant Professor in English (ad hoc), Mar Thoma College of Science and Technology, Ayur, Kollam District, Kerala forward and backward translator
- 4. Mrs. Bindhu Nair, HSST English, THSS & VHSS Thadicadu, Kollam District, Kerala (teaching experience 20 years) backward translator
- 5. Mr. Ganesh M. G, HSST English, KRUMHSS, Odanavattam (teaching experience 22 years) scrutiniser

After the forward and backward translation was done by the panel on IAHQ and MSPSS scale, a pilot study was conducted for testing the appropriateness of data collection using the questionnaire in two schools (one government and one private school) in Kollam District. The pilot study was conducted among 60 school-going adolescents (30 from government-aided & 30 from Private-CBSE school). Results found that school-going adolescents were not able to understand some of the content in the translated Malayalam version in the questionnaire. The panellists helped made changes accordingly, and final Malayalam version questionnaire was ready for the main study.

3.2.5 Ethical Considerations

For the Pilot Study, written permission was obtained from the school authority (Appendix II). The main study data collection was started during the month of June 2019 for which written permission was obtained from the Regional Officer, Central Board of Secondary Education (CBSE), Thiruvananthapuram, Kerala, District Education Officer, Kollam and District Educational Officer, Punalur (Appendix I) for collection of data in different government and private schools in Kollam District, Kerala.

Written permission was acquired from the principals of 19 schools (government and private) in the Kollam District, Kerala using the authorization from the District Educational Officer/Regional Officer. Information sheet and consent form (Appendix IV & V) were given to all the students from the selected classes. Only those school-going adolescents who obtained permission signature from their parents were included in the study. The name of school-going adolescents with code number was mentioned in the consent form.

The Socio-demographic details, Questions related to social work practice in school, IAHQ and MSPSS questionnaire (English & Malayalam version) was administered among 600 school-going adolescents. The same code number in the consent form was included in the questionnaire for complete anonymity was ensured to encourage the school-going adolescents to express their true opinions. The self-administered questionnaire was distributed to the selected school-going adolescents and given them to answer over a period of 45 minutes to 1 hour following an introductory section in the school premise.

Tools such as socio-demographic details included socio-economic status, parent SDQ version (English & Malayalam version) and Questions related to school social work practice in school were administered among parents of 600 school-going adolescents.

The researcher took written consent form (*Appendix V*) from class teachers of selected classes and administered questionnaires such as socio-demographic details, teacher SDQ version (English & Malayalam version) and Questions related to school social work practice in school.

Secondly, qualitative data collection was started based on the sampling procedure. The information sheet and written consent form (*Appendix IV & V*) taken from the 24 parents and 24 teachers of school-going adolescents.

The data collection was ended on the last week of October 2020 with the audio recorded KII conducted in the school premise or home.

3.2.6 Data Processing and Analysis

Quantitative data entry was done through IBM SPSS 20 version. Coding was done according to the scoring manual of each scale. Data cleansing was done after data entry and coding.

Firstly, frequency distribution was made on socio-demographic details and each domain in the environment, social support and health aspects. The standardised statistical procedure was following for BMI calculation (Chandra, Anne, Venkatesh, Teja, & Katkam, 2019). For inferential statistics, the researcher categorised and computed each question under each domain in three categories. The three categories were 1) never and rarely, 2) sometimes and 3) Most of the times and always. Appropriate response for each question was 0, 1, 2 or 2, 1, 0 score. The total questions under each domain were computed and indicate the score in three categories such a low risk, moderate risk and high risk. The statistical procedure was followed from a study on health risk behaviours of mid-adolescent school students in a rural and an urban area of West Bengal, India (Das, Chattopadhyay, Chakraborty, Dasgupta, & Akbar, 2015).

Secondly, the data analysis focused on comparing the domains of environment, social support and health with socio-demographic details. Mann-Whitney U test was done for comparison between gender and domains of environment, social support and health. The chi-square test and Z test was for comparison between the rural-urban areas and government-private schools with environment, social support and health aspects.

Thirdly, Spearman correlation was done between the domains of environment and health.

Fourthly, Binary logistic regression analysis was done for predictors of environment and health domains.

For qualitative data, the audio recorded interview data was transcript into the English language in MS office. ATLAS ti software was used for coded the qualitative data and coded data was analysed with through frequency distribution. The analysis interpreted on themes and subthemes of environment and health. The semantic linkages between various subthemes also highlight under qualitative data.

3.2.7 Operational Definitions

School-going Adolescents: School-going adolescents are those who have permanent residence in Kollam and who are attending high schools and higher secondary schools in Kollam District, Kerala.

High School: Students studying from class eighth to tenth in the school level at Kollam District, Kerala.

Higher Secondary School: Students studying from class eleven to twelfth in the school level at Kollam District, Kerala.

Government School: The state/central government schools which are directly run by the government and aided schools at Kollam District, Kerala.

Private School: The schools which run by private parties or societies and following CBSE syllabus at Kollam District, Kerala.

Urban Area: The schools which are located in the Corporation or Municipalities at Kollam District, Kerala.

Rural Area: The schools which are located in the Grama Panchayat at Kollam District, Kerala.

Health: The Health of school adolescents refer to physical health, physical activity, nutrition, hygiene, medical care and medical history, and risk factors like HIV/AIDS, tobacco, alcohol and drugs, violence, domestic violence and unintentional injury and mental health.

Environment: It refers to both family and school environments such as academic performance, and protective factors from the school and home.

Social Support: It refers to the support from friends, family and significant others to school-going adolescents.

3.2.8 Limitations of the Study

The current study administered only self-reported IAHQ and MSPSS questionnaire. The absence of a longitudinal design will not make a better in-depth understanding of the environment and health of school-going adolescents. Focus group discussion was nonappearance in the study as well as the absence of assessment on the strength and weakness of previous interventional programmes conducted in schools.

In this chapter, an attempt has been made to describe the physical, social and economic setting of the study area. It also presents the methodological aspects of the study and highlighted the operational definitions of concepts used and the limitations of the study. Keeping the aforesaid in mind, the next chapter presents the quantitative findings of environment and health of school-going adolescents in Kollam District, Kerala.

CHAPTER – IV

ENVIRONMENT AND HEALTH OF SCHOOL-GOING ADOLESCENTS

The previous Chapter focused on the study area and research design. This chapter focused on the results of the environment and health of school-going adolescents in Kollam District, Kerala. Environment indicates home, school and social support whereas health indicates domains such as physical health, physical activity, nutrition, hygiene, medical care and history, about HIV/AIDS, violence, unintentional injury, emotional and behavioural problems of adolescents. The descriptive and inferential statistics are discussed in the following sections. The first section presents the Socio-demographic profile of school-going adolescents while the second section presents the Socio-demographic profile of parents or caregivers. The Socio-demographic profile of class teachers is presented in the third section while the fourth discusses the Environment of school-going adolescents. The Health of school-going adolescents is deliberated in the fifth section while the next section compares the relationship between Health and Environment factors of school-going adolescents.

4.1 Socio-Demographic Profile of School-going Adolescents.

Socio-demographic profiles are essential for completion of any scientific study. The socio-demographic profile in the current study is age, gender, education, religion, reservation category and type of family. There were 600 school-going adolescents included in the socio-demographic profile. This socio-demographic profile occupied along with the self-reported IAHQ, MSPSS and questionnaire related to the scope of social work practices in schools.

4.1.2 Age

Age is one of the important factors in identifying the issues related to school-going adolescents. The mean and standard deviation (SD) and age categorization were included in this section.

Table 4.1 Mean age and SD of School-going Adolescents N=600

Ago	Mean	SD
Age	14.98	1.41
Source: computed		Figures in Mean ± SD

Table 4.1 depicts the mean age and standard deviation of school-going adolescents. The mean age was 14.98 among 13 to 17 year-old school-going adolescents and the standard deviation was 1.41.

Table 4.2 Age Categorisation of School-going Adolescents N=600

	Age	N (%)
	13 years	125 (20.8)
Age Categorisation	14 years	116 (19.3)
	15 years	123 (20.5)
	16 years	120 (20)
	17 years	116 (19.3)

Source: computed

Figures in parentheses are percentages

The age categorisation of school-going adolescents is illustrated in table 4.2. Among the age between 13 to 17 years, most of the school-going adolescents (20.8 %) were at the age of 13 years, 19.3% at 14 years, 20.5% at 15 years, 20% at 16 years and 19.3% at 17 years.

Age of adolescents was varying in different study settings and a majority of the studies was based on both children and adolescents (Abera, Robbins, & Tesfaye, 2015; Boricic, Simic, & Eric, 2015; Singh, Junnarkar, & Sharma, 2015). WHO defined the age group of adolescents between 11 to 19 years (WHO, 2017). The current study found that the mean age of school-going adolescents was below 15 years and age categorisation also show the majority of them are 15 and below. This indicates that the majority of the respondents are in the early adolescent period. Arage, Assefa, & Worku, (2019) reported 14.8 as the mean age of the nutritional status of adolescent girls in Northwest Ethiopia. Another foreign study also stated that the majority of the adolescents in a public school were less than 14 years old (Mota et al., 2019). An Indian study emphasised on health-risk behaviour of school-going adolescents aged 13 to 17 years in Tezpur, Assam. The study also found that the mean age and age categorisation was similar to the current study (Harikrishnan, Sobhana, & Ali, 2016).

4.1.3 Gender

Gender is another factor for the comparison between the variables of different studies. Majority of the health-related studies included gender comparison in their results. The current study also emphasises on the environment and health factors of school-going adolescents.

Table 4.3 Gender Distribution of School-going Adolescents N=600

Condor	Male (%)	Female (%)
Gender	283 (47.2)	317 (52.8)

Source: computed

Figures in parentheses are percentages

Table 4.3 illustrate the gender distribution of school-going adolescents. The study found that little more than half of the school-going adolescents were females (52.8%) and the rest of them were male (47.2%). This shows that the female adolescents were more interested to do voluntary participation and they got written parents' permission for this study. It also shows the social reality of Kerala that female was more interested in studies and attending regular schooling.

The gender difference was varying in diverse health related studies and in the majority of the studies, male adolescents are more than female (Chi, Huang, Wang, & Zhang, 2020; Kuschnir & Alves da Cunha, 2007; Masud et al., 2019). Some of the studies shared similar findings with the current study that female adolescents were more than half of the total sample size (Boricic et al., 2015; Rathi, Riddell, & Worsley, 2018).

4.1.4 Educational Status

Educational status of school-going adolescents is a key element in their forthcoming life and it aids the growth and development of an individual. It also shows the individual's academic achievement. It helps in recognizing the environment and health-related facts and behaviour.

Table: 4.4 – Educational Status of School-going Adolescents N=600

	Class			Str	eam
	Class	N (%)			N (%)
	Class VIII	120 (20)		General	360 (60)
Educational Status	Class IX	120 (20)		Science	150 (25)
	Class X	120 (20)		Commerce	50 (8.3)
	Class XI	120 (20)		Humanities	40 (6.7)
	Class XII	120 (20)	1		

Source: computed

Figures in parentheses are percentages

Educational status of school-going adolescents is depicted in table 4.4. The results revealed that equal distribution of school-going adolescents from class VIII to class XII because the cluster (class) sample size was equal in each class for this study. The study also found that 60% of school-going adolescents studied the general stream subjects, a quarter (25%) of them studied science as their core subject, 8.3% studied commerce and 6.7% studied humanities. The school-going adolescents from class VIII to X had only general subjects and the majority of the school-going adolescents studied in high school. The core subjects like science, commerce and humanities were the choices they had in higher secondary school (class XI and XII).

An equal class distribution was found in the current study because of the preset cluster or class size. Arage et al. (2019) reported that majority of the adolescent girls were from class XI and XII, and another study also revealed the same (Shukla, Ahmad, Singh, Shukla, & Shukla, 2019). Another study indicates that the majority of adolescents studied in class VIII (Masud et al., 2019).

4.1.5 Religion

Religion plays a vital role in every society and India is a country known for diverse religions. Religion is one of the factors which helps the growth and development of every individual in society. The study also found the different religious beliefs of school-going adolescents.

Table 4.5 Religious Background of School-going Adolescents N=600

Deligion	Hinduism (%)	Muslim (%)	Christian (%)
Religion	408 (68)	121 (20.2)	71 (11.8)

Source: computed

Figures in parentheses are percentages

The religious background of school-going adolescents is recorded in table 4.5. The results found that the majority of the school-going adolescents believed in Hinduism (68%), 20.2% belonged to Islam and the rest of them followed Christianity (11.8%).

The current study result is apparent in the Indian society where the majority of the population follows Hinduism. The last census demographic statistics of State of Kerala showed that the majority belonged to Hinduism (54.7%) and the rest 26.5% were Muslim, 18.38% followed Christianity and others were 0.30% (Census, 2011). Similar findings have been reported in other settings of India on the religious distribution of adolescents (Harikrishnan, Arif, & Sobhana, 2017; Satija et al., 2018; Shukla et al., 2019).

4.1.6 Reservation category

Reservation is an aid service system by government or public sector to the socio-economic-caste backward citizens. The aid services are education, employment and political provisions for each category. The current study also tries to comprehend the socio-economic, caste and political conditions of school-going adolescents.

Table 4.6 Reservation category of School-going Adolescents N=600

	Category	N (%)
	General	125 (20.8)
Reservation category	OBC	116 (19.3)
	SC	123 (20.5)
	ST	120 (20)

Source: computed

Figures in parentheses are percentages

Table 4.6 depicts the reservation category of school-going adolescents. The study revealed that the general category was 20.8%, Other Backward Class (OBC) were 19.3%, 20.5% were Scheduled Caste (SC) and the 20% of school-going adolescents belonged to Scheduled Tribe (ST). The study included almost equal distribution from each reservation category. According to the past Kerala Census, there were 30,39,573 SC individuals, 4,84,839 ST individuals and the rest of the population was General and OBC (Govt of Kerala, 2016). An abroad study reported that the majority of the adolescents belonged to a particular ethnic group (Arage et al., 2019).

4.1.7 Type of family

Family plays a vital role in the development of school-going adolescents. It is the primary support system of every school-going adolescent. The current study also included the two types of school-going adolescents belonging to the nuclear family and the joint family.

Table 4.7 Type of family of School-going Adolescents N=600

Type of family	Nuclear family (%)	Joint family (%)
Type of family	500 (83.3)	100 (16.8)

Source: computed

Figures in parentheses are percentages

Types of the family of school-going adolescents are shown in table 4.7. The results found that the majority of school-going adolescents belonged to nuclear family (83.3%) whereas the rest of them were from joint family (16.8%). This result demonstrates that school-going adolescents had fewer family members at home.

Urbanisation and industrialisation were the major reasons for the transformation from a joint to a nuclear family. The studies also reported the same as reported in the current study (Harikrishnan, Sobhana, & Arif, 2016; Kharod & Kumar, 2015).

4.2 Socio-Demographic Profile of Parents or Caregivers

This section indicates the socio-demographic profile of parents or caregivers of school-going adolescents. This profile integrates the age, gender, education, occupation, marital status and socio-economic status. Overall, 600 parents or caregivers of school-going adolescents have participated in the study. The socio-demographic details are taken for assessing parent's version SDQ and scope of social work practice in schools.

4.2.1 Demographic profile of Parents or Caregivers

The demographic profile includes age, gender, education, occupation and marital status of parents. Parents' or caregivers' demographic profile can help in understanding the situation of livelihood of school-going adolescents.

Table 4.8 Demographic profile of Parents or Caregivers N=600

Age						Mean				ard Deviation	
1190						42.86		5	5.89		
Gender						Male (%)		I	Femal	e (%)	
Gender						222 (37)		3	378 (6	3)	
	Illite	erate	SS	LC & bel	ow	Higher S	econ	dary	Gr	raduation &	
Education	(%	6)	(%)			(%)			above (%)		
	3 (0	0.5)	178 (29.7))	170 (28.3))	249 (41.5)		
	Dai	ily labo	ur	Farme	r	Home mal	ker	Busin	ness	Professional	
Occupation		(%)		(%)		(%)		(%)		(%)	
	8	7 (14.5))	29 (4.8)		271 (45.2	2)	92 (15.3)		121 (20.2)	
		Stayi	ng to	gether	S	eparated	Div	orced	Wie	dow/Widower	
Marital Statu	ıs		(%)	_		-		(%)		(%)	
		56	9 (94	4.8)		11 (1.8)	3 (0.5)			17 (2.8)	

Source: computed

Figures in Mean \pm SD and parentheses are percentages

Table 4.8 depicts the demographic details of parents or caregivers of school-going adolescents. The mean age of parents or caregivers is 42.85 and SD is 5.89. This indicates that the age range of parents or caregivers is between 32 to 77 years. Abera et al. (2015) reported that the majority of parents of children and adolescents were in between 25 to 34 years old. But the current study revealed diverse findings because the age group of school-going adolescents were 13 to 17 years.

Gender shows that majority of them, 63%, were female parents and male parents were 37%. Female parents are more active in taking care of their children

than male parents. The Indian and abroad studies reported that the majority of respondents were female parents of children and adolescents (Abera et al., 2015; Rathi, Riddell, & Worsely, 2018).

Educational status indicates that 41.5% of them finished their graduation and higher education, 29.7% studied up to SSLC & below, 28.3% completed higher secondary education and 0.5% was illiterate. Majority of the parents or caregivers were educated because the literacy rate of Kerala is very high among other states of India. Similar results were found in an Indian study (Rathi et al., 2018).

Occupation of parents or caregivers found that 45.2% of them were homemakers, 20.2% were working in a professional field, 15.3% were doing their own business, 4.8% were farmers and 14.5% of the parents or caregivers were daily labourers. This shows that majority of the female parents were not working and they were providing care and support to the school going-adolescents. Abera et al. (2015) reported that the majority of the parents of children and adolescents reported that they didn't have a job.

Marital status depicts that the majority of parents are staying together (94.8%) and rest of them were separated (1.8%), divorced (0.5%), and were widow/widowers (2.8%). Most of the parents are staying together with their children and other family members. This indicates that both parents' aid is getting to the school-going adolescents. An abroad study also found the majority of the parents of children and adolescents were married (Abera et al., 2015).

4.2.2 Socio-Economic Status of Family

Socio-economic status (SES) is an important factor in knowing the economic conditions of an individual or family in the society. The current study used modified Kuppuswamy scale to inquire the SES of the family of school-going adolescents. SES was indicated based on the total calculation of occupation & education of the head of the family and total monthly income of the family. SES was filled up by the parents or caregivers of school-going adolescents.

Table 4.9 Socio-Economic Status of Family N=600

	Class	N (%)
	Upper	66 (11)
SES of Family	Upper middle	230 (38.3)
SES of Failing	Lower middle	176 (29.3)
	Upper lower	126 (21)
	Lower	2 (0.3)

Source: computed Figures in parentheses are percentages

Socio-economic status of the family of school-going adolescents is illustrated in table 4.9. Results revealed that the majority of the families belonged to upper-middle-class (38.3%), 29.3% of the families were lower middle class, 21% were upper lower class, 0.3% were lower class and little more than one-tenth (11%) of the families belonged to the upper class. This indicates that majority of school-going adolescents' family economic status was stable. The socio-economic status varies from rural to urban settings. Therefore in terms of results, different socio-economic status of adolescents was reported (Harikrishnan, Sobhana, & Arif, 2016; Shukla et al., 2019).

4.3 Socio-Demographic Profile of Class Teachers

The socio-demographic profile includes age, gender, education, marital status and teaching experience of class teachers. The socio-demographic profile of class teachers helps to know the facts related to school-going adolescents and about the school. A total of 60 class teachers of school-going adolescents participated in the study. The socio-demographic details of class teachers were taken for measuring the teachers' version of SDQ and scope of social work practice in schools.

Table 4.10 Socio-Demographic Profile of Class Teachers N=60

Ago	Mean	SD
Age	42.30	1.75
		N (%)
Gender	Male	15 (25)
	Female	45 (75)
	UG with B.Ed.	8 (13.3)
Education	PG with B.Ed./M.Ed.	50 (83.4)
	M.Phil/Ph.D	2 (3.3)
Marital Status	Married	58 (96.7)
Marital Status	Unmarried	2 (3.3)
Tooching Exposiones	Mean	SD
Teaching Experience	13.33	6.46

Source: computed

Figures in Mean \pm SD and parentheses are percentages

Table 4.10 depicts the socio-demographic details of class teachers of school-going adolescents. The mean age of class teachers was 42.30 and SD was 1.75. This illustrates that the class teachers were at the age of 25 to 59 years. Hardre & Sullivan (2009) reported that the age range of high school teachers were 25 to 60 years and the mean age was 44.2.

More than two-thirds of the participants were female class teachers (75%) and the rest quarter of them were male class teachers (25%). Usually, female teachers are doing more teaching in the schools. Similar findings were also found in other studies (Hardre & Sullivan, 2009; N Rathi et al., 2018).

Education of class teachers shows that more than two thirds of them studied up to Post Graduation (PG) with B. Ed or M. Ed (83.4%), 13.3% did graduation with B. Ed and the rest of 3.3% had a high educational qualification such as M.Phil. or Ph. D in respective subjects. The school teachers from the high school and higher secondary departments are all well educated in both government and private schools in the study area. Rathi et al. (2018) reported that the secondary school teachers were educated up to university level.

More than nine-tenths of class teachers were married (96.7%) and the rest of 3.3% were unmarried.

The mean age on the teaching experience of class teachers was 13.33 and SD was 6.46. This emphasises that the experiences of class teachers in between 2 to 29 years. An abroad study reported that the mean age of teaching experience was similar to the current study (Hardre & Sullivan, 2009).

4.4 Environment of School-going Adolescents.

The environment of an individual promotes their growth and development. Especially the school-going adolescent's positive environment will ensure a better individual and social development in their future life stage. Overall, 600 school-going adolescents' self-report IAHQ and MSPSS were taken for analysis. The results of the environment of school-going adolescents concentrated on home & school environment and social support.

4.4.1 Home Environment

The home environment is the primary support system of every individual. The current study indicates the home environment data measured through IAHQ and the major areas covered such as facilities at home and protective factors.

Table 4.11 Home Environment of School-going Adolescents N=600

Facilities at Home							
Facilities Yes (%) No (%)							
Computer at home	272 (45.3)	328 (54.7)					
Home computer has internet access	196 (32.7)	404 (67.3)					
Own cellular or mobile	156 (26)	444 (74)					
Television at home	531 (88.5)	69 (11.5)					
Social networking sites on the internet	243 (40.5)	357 (59.5)					

Protective factors

Parents checked Parents

your homowork understood you

statement vour homework understood vour were doing with your free time problems Never 214 (35.7) 41 (6.8) 39 (6.5) Rarely 70 (11.7) 54 (9) 56 (9.3) 133 (22.2) 97 (16.2) 76 (12.7) Sometimes Most of the times 104 (17.3) 153 (25.5) 126 (21) Always 79 (13.5) 255 (42.5) 303 (50.5)

Source: computed

Past month

Figures in parentheses are percentages

Parents know what you

Table 4.11 shows the home environment of school-going adolescents. The results mainly focused on facilities at home and protective factors. Facilities at home found that 54.7% of them had no computer at home and the rest of them had computer at home (45.3%). Also, 67.3% of them had no internet access in home computer and 32.7% had internet access. Little less than nine-tenths of them had a television at home (88.5%) and 11.5% did not have television. Majority of them were not using social networking sites on the internet (59.5%) and 40.5% were using social networking sites.

Protective factors highlight the parents' care and support in the activities of school-going adolescents. The results found that 35.7% parents of school-going adolescents never checked their child's homework, 22.2% checked some times, 17.3% check most of the time, 13.5% of them checked always and 11.7% rarely checked their child's homework during the past month. This indicates that majority of the parents were not able to check their child's homework.

Less than half of the parents always (42.5%) understood their child's problems, 25.5% understood most of the times, 16.2% of them sometimes, 9% rarely and 6.8% of parents never understood the problems of their child. Most of the parents were able to understand their child's problems. This depicts that most of the parents were able to do effective communication with their children.

Half (50.5%) of the parents knew about what their child is doing with free time, 21% were aware most of the time, 12.7% of them knew some times, 9.3% knew rarely and 6.5% of them did not know what their child was doing in free time. Majority of the parents were closely watching their child's activities during the leisure time. This illustrates that most of the parents do care for their child.

The current study found that less than half of the school-going adolescents are using social networking sites and other gadgets at their home. An abroad study reported that more than one-quarter of adolescents were addicted to the internet and most of them were using it for social networking, entertainment, internet gaming, school work and online shopping (Xin et al., 2018).

There was some level of high risk in protective factors depicted in the current study. Samanta, Mukherjee, Ghosh, & Dasgupta (2012) reported that the parents of urban adolescents were more involved in their children's studies; understood their problems and so on. Some of the studies also mentioned that parents' support had a positive association in homework management (Jaiswal & Choudhuri, 2017; Xu, 2011).

4.4.2 School Environment

School is closely connected to the individual and family. It is a social institution for individual development. The school environment has a vital role in the development of school-going adolescents. The findings of current study focus on the importance of school, marks, attendance and protective factors of school-going adolescents.

Table 4.12 School Environment of School-going Adolescents N=600

	Importa	nce of Sch	ool								
Doing wall in sahool is impo	Yes (%)			456 (76)							
Donig wen in school is impor	Doing well in school is important to you					144 (24)					
		Yes (%)			352 (58.7)						
Doing well in school is import	rtant to your f	amily		No (%)	76 (12.7)					
				Unsure	2(%)	1	72 (28.7)				
]	Mark									
	Very high	High	Av	erage	Poo	r	Very				
Your average mark in	(%)	(%)	((%)	(%) (%)		poor (%)				
School	48 (8)	198 (33)	324	(54)	27 (4	.5)	3 (0.5)				
	Att	endance									
Past month, you missed	0 (%)	1 to 2	3	3 to 4		6	>7 (%)				
classes or school without		(%)	((%)	(%)					
permission	481 (80.2)	75 (12.5)	34	34 (5.7)		34 (5.7) 5 (.8)	5 (0.8)		
	Protec	tive factor	s		ı						
	Never	Rarely	Som	Sometimes Mo		st of	Always				
	(%)	(%)	((%) t		time	(%)				
					(%	6)					
Regularly do something	363	77	1	17	2	2	21				
negative because you feel	(60.5)	(12.8)		9.5)	(3.		(3.5)				
pressure from your peers	essure from your peers (00.3) (1			7.3)	(3.	. 1)	(3.3)				
Past month, students in	26	36	4	48		48		48		14	346
your school kind and	(4.3)	(6)	((8)	(2	4)	(57.7)				
helpful											

Source: computed

Figures in parentheses are percentages

Table 4.12 shows the school environment of school-going adolescents. According to that, 76% of school-going adolescents believed that doing well in school is important to them the rest of them were against that opinion (24%). More than half (58.7%) of the families' priority was their child doing well in the school, 28.7% were unsure about their families' priority and 12.7% of school-going adolescents marked that it is not important for their families for them to do well in school. This indicates that most of the school-going adolescents are interested in studies or other extra-curricular activities in school. Majority of them wanted to make a better future life through educational activities. The family members of

school-going adolescent's primary reason for sending their child to school is to do better in their studies and achieve a bright future in life.

Most of the school-going adolescents had an average performance marks wise (54%), 33% of them had high marks, 8% had very high marks, 4.5% had poor marks and 0.5% of them got very poor marks during the last exam. This shows that school-going adolescents are active in studies.

Majority of the school-going adolescents (80.2%) did not miss their classes, 12.5% of them missed their classes for one or two days, 5.7% missed their classes three to four days, 0.8% missed their classes for five to six days and the rest of them (0.8%) missed their classes or school without permission for more than a week in the past month. This depicts that school dropout was very less among the school-going adolescents in the current study setting.

Protective factors of school-going adolescents found that 60.5% of them never got any negative pressure from their peers, 19.5% of them got sometimes, 12.8% rarely got negative pressure, 3.7% most of the times and 3.5% of them always got negative pressure from their peers in the past month. This specifies that the majority of the students were getting support from their peers. More than half (57.7%) of school-going adolescents always received kindness and help from other students, 24% most of the time, 8% of them got sometimes, 6% got rarely and the rest of them never (4.3%) got kindness and help from the other students. Most of the students in the schools were helpful and behaved kindly others.

The current study found that less than one-fifth of school-going adolescents missed their classes. The classes missed without permission may lead to the school dropout. Prakash et al. (2017) reported that less than one-tenth of adolescent girls had dropped out of school due to economic factors, social norms and practices and unsafe school environment.

The study also found there was some level of lack of protective factors in the school environment of school-going adolescents. This indicates that the school-going adolescents were getting poor support from peers, teachers and school authority. Lopez-Castedo, Alvarez Garcia, Alonso, & Roales, (2018) reported that the prevalence of school violence was low to moderate level. Classroom disruption, verbal or physical abuse between students and verbal or physical threats from teachers are part of major school violence.

4.4.3 Social Support

Social support is another factor related to the environment. Positive support from family, friends and society indicates better future development among schoolgoing adolescents. The current study results emphasise on significant other, family and friends as sources of social support of school-going adolescents.

Table 4.13 Social Support of School-going Adolescents N=600

	Low (%)	Moderate (%)	High (%)
Significant other	79 (13.2)	214 (35.7)	307 (51.2)
Family	55 (9.2)	124 (20.7)	421 (70.2)
Friends	46 (7.7)	99 (16.5)	455 (75.8)
Overall	52 (8.7)	133 (22.2)	415 (69.2)

Source: computed

Figures in parentheses are percentages

Social support of school-going adolescents is illustrated in table 4.13. The results found that 51.2% of the school-going adolescents had a high level of social support, 35.7% moderate support and 13.2% of them had low social support from significant other. Also, 70.2% had high social support, 20.7% had moderate and 9.2% of them had a low level of social support from family. Friends' support revealed that 75.8% of school-going adolescents received high support from friends, 16.5% were getting moderate support and 7.7% were getting low social support from friends. Overall social support depicts that 69.2% of school-going adolescents are getting a high level of social support, 22.2% were moderate and the rest of them receiving low (8.7%) social support from significant other, family and friends. This indicates that the majority of school-going adolescents are getting social support.

Less than one-fifth of school-going adolescents were getting a lack of social support from significant others, peers, family and overall depicts in the current study. This may threaten the individual, family and social factors of school-going adolescents. Crissa, Smithb, Morrisa, Liua, & Hubbard (2017) reported that positive peer support may reduce violence and antisocial behaviour. Another study also found that the psychological distress of secondary school students arises due to the lack of peer support (Ren, Qin, Zhang, & Zhang, 2018).

4.5 Health of School-going Adolescents

Health is an important factor in every individual's growth and development in society. Health of school-going adolescents is important as it is a growing stage and it will affect their physical and mental health in future. Therefore, the current study analysis focuses on the health of 600 school-going adolescents through self-reported IAHQ scale. Along with self-reported SDQ scale, parents' and teachers' version are also added to determine the emotional and behavioural problems of school-going adolescents. The health of adolescents includes data about physical health, physical activity, nutrition, hygiene, medical care and medical history, HIV/AIDS, substance use, violence, abuse, unintentional injury, and emotional & behavioural problems.

4.5.1 Physical Health

Physical health mainly focused on body mass index and sleep hygiene of an individual. The current study determines the physical health of school-going adolescents.

Table 4.14 Physical Health of School-going Adolescents N=600

Body I	Mass Index (BMI)		N (%)				
	Unsure		322 (53.7)				
S	everely under			35 (5.8	3)		
1	Underweight			82 (13.	7)		
	Normal			143 (23	.8)		
	Overweight			15 (2.5	5)		
Mo	oderately obese			1 (0.2)		
S	everely obese		2 (0.3)				
M	orbidity obese		0 (00)				
	I am not trying	Lose we	eight Gain weight Stay the same				
Trying to do	(%)	(%))	(%)	(%)		
about your	102 (17)	188 (3	1.3)	112 (18.7)	198 (33)		
weight							
Sleep do you	Less than six hour	hours	8-9 hours	10 & more			
usually get each	(%)	%)	(%)	hours (%)			
night during the	82 (13.7)	416	(69.3)	82 (13.7)	20 (3.3)		
school week							

Source: computed

Figures in parentheses are percentages

Table 4.14 shows the physical health of school-going adolescents. The results of BMI at a scale of unsure, normal weight, underweight, severely underweight, overweight, severely obese, moderately obese were detected 53.7%, 23.8%, 13.7%, 5.8%, 2.5%, 0.3% and 0.2% respectively. This depicts that school-going adolescents were not conscious of their BMI. There was some level of risk factors found among school-going adolescents.

Also, 33% of school-going adolescents wanted to stay the same weight, 31.3% were trying to lose their weight, 18.7% were doing something to gain weight and the rest 17% were not trying to increase their weight.

Sleep hygiene found that more than half of the school-going adolescents slept between 6 to 7 hours, 13.7% were found to be asleep for 8 to 9 hours and less than 6 hours, and 3.3% of them slept for 10 and more hours at night during the school week.

The current study found that less than one-tenth of school-going adolescents are overweight and more than one-fifth of them are underweight. This indicates that school-going adolescents were not undertaking proper diet control measures. The studies reported that the majority of adolescents were thin and less than one-tenth of them are overweight or obese (Deshmukh et al., 2006; Johnson, 2015). Singh, Maheshwari, Sharma, & Anand (2006) in their study found that less than one-fifth of school children had a family history of overweight and association with BMI with diastolic blood pressures and other lifestyle issues.

Sarah, Rajeswari, Sindhu, & Vaishnavi (2018) reported that less than half of the adolescents slept for 8 to 9 hours in a day. Another study also found that more than one-tenth of adolescents were not able to sleep well (Rai et al., 2019). However, the current study result revealed that less than one fifth of school-going adolescents had disturbance or uncertain sleeping pattern. This specifies that school-going adolescents had some level of sleep disturbance.

4.5.2 Physical Activity

Physical activities strengthen and promote a healthy body for every individual. Especially, school going adolescents need physical exercise for their fitness. The physical activities focused in this study are everyday exercise, involvement in sports/games/dance, importance of physical fitness and watching or playing online games.

Table 4.15 Physical Activity of School-going Adolescents N=600

Last week, physically active for a total of at least 30 minutes	1 (%) 172 (28.7)	2 (%) 135 (22.5)	3 (%) 119 (19.8)	4 (%) 75 (12.5)	5 (%) 40 (6.7)	6 (%) 16 (2.7)	7 (%) 43 (7.2)		
per day. Involved in any sp	orts/game	es/dance in	school		Tes (%) 7 (69.5)		No (%) 183 (30.5)		
How important is you to feel like yo physically fit	u are	Very (%) 101 (16.8)	Import (%) 57 (9)	Somewha (%) 406 (67.7)		Not too (%) 36 (6)		
Outside of school, long do you so during a typical sitting & water television, playing the computer, or other sitting activity	day ching g on doing	< 1 hour per day (%) 188 (31.3)	1-2 (%) 263 (43.8)	3-4 (%) 87 (14.5)	5-6 (%) 43 (7.2)	7-8 (%) 9 (1.5)	> 8 (%) 10 (1.7)		

Source: computed

Figures in parentheses are percentages

Physical activities of school-going adolescents are depicted in table 4.15. Among the school-going adolescents who were physically active for a total of at least 30 minutes per day, the frequency of physical activities on day 1, 2, 3, 4, 5, 6, 7 was observed as 28.7%, 22.5%, 19.8%, 12.5%, 6.7%, 2.7% and 7.2% respectively.

Majority of the school-going adolescents (69.5%) participated in sports or games or dance activities in school whereas the rest of them (30.5%) did not join.

Most of the school-going adolescents (67.7%) stated that it was somewhat important for them that they are physically fit, 16.7% answered very important, 9.5% of them opted that it is important and 6% did not think it was important.

The hours spend during a typical day on sitting & watching television, playing on the computer, or doing other sitting activities outside of school found that 43.8% did 1 to 2 hours, 31.3% less than 1 hour, 14.5% 3 to 4 hours, 7.2% 5 to 6 hours,

1.7% more than 8 hours and 1.5% of the school-going adolescents sat or watched 7 to 8 hours.

Santosa, Hardman, Barrosa, Santos da Franca, & Barros (2015) reported that the majority of adolescents were not doing regular physical activity. Another study investigated across WHO Regions revealed that physical activity was less among students and the prevalence rate was very high in India (Guthold, Cowan, Autenrieth, Kann, & Riley, 2010). The current study also found that the majority of school-going adolescents were not doing regular physical activity.

4.5.3 Nutrition

Nutrition is one of the important factors in the case of school-going adolescents. Nutrition provides good physical and mental growth to school-going adolescents. Nutritional aspects focus on dietary preference, availability of food, oil use, fruits, vegetables, fish, meat, fast food and getting awareness of healthy eating from home and school.

Table 4.16 Nutrition of School-going adolescents N=600

Dietary Prefere	ence		V egetaria r 171 (28.			Non-Vegetarian (%) 429 (71.5)				
Past month, o	did you because	Never (%)	Rarely (%)	Somet			st of t ne (%		Always (%)	
there was no your home	food in	446 (74.3)	89 (14.8)		43 (7.2)		16 (2.7)		6 (1)	
Vegetables y cooked or fried	ou eat in oil	36 (6)	147 (24.5)	24 (40.	1		141 23.5)		35 (5.8)	
D 1	I did not eat	Less than one time	per da	y time		3 times		mes %)	5 or more	
Past week, per day did you eat fruit	83 (13.8)	(%) 181 (30.2)	(%) 212 (35.3)	(% 45 (7.5		(%) 40 (6.7)	1	9 .5)	30 (5)	
Eat meat or fish	104 (17.3)	(38.7)	(18.5)	68 (11.		49 (8.2)	1	.7)	20 (3.3)	
Eat fast food	264 (44)	188 (31.3)	73 (12.2)	31 (5.2		25 (4.2)		6 1)	13 (2.2)	
			No (%)		Yes (%)			Unsure (%)		
School taught eating			` ′		300 (50.2)			44 (24)		
Home taught eating	the benef	its of health	y 64 (10.7)	486 (81)			5	0 (8.3)	

Source: computed

Figures in parentheses are percentages

Table 4.16 depicts the nutritional status of school-going adolescents. Majority of school-going adolescents prefer non-vegetarian (71.5%) and the rest of them (28.5%) were purely vegetarian.

According to the current study, 74.3% of school-going adolescents stated that they never faced unavailability of food at home when they go hungry, 14.8% said rarely, 7.2% sometimes, 2.7% confronted unavailability most of the time and rest 1% of them always met unavailability.

Most of the school-going adolescents sometimes (40.2%) ate vegetables cooked or fried in oil, 24.5% rarely, 23.5% most of the times, 6% never and the rest 5.8% always ate cooked or fried vegetables.

Also, 35.3% of school-going adolescents ate fruits one time per day, 30.2% less than one time, 13.8% did not eat, 7.5% two times, 6.7% three times, 1.5% four times and the rest 5% had fruits five and more times per day in the past week.

Majority of school-going adolescents found that they had meat or fish less than one time (38.7%) per day, 18.5% had one time, 17.3% never ate fish or meat, 11.3% two times, 8.2% three times, 2.7% four times and 3.3% ate meat or fish five or more times in the past week.

The frequency of eating fast food among school-going adolescents found that most of them (44%) did not eat fast food, 31.3% had less than one time, 12.2% one time, 5.2% two times, 4.2% three times, 2.2% five and more times and 1% of them ate fast food four times per day in the past week.

Half of the school-going adolescents (50.2%) got classes about the benefits of healthy eating from school, 25.8% opted that they got no class and 24% of them were unsure about the class on the benefits of healthy eating.

Majority of school-going adolescents' (81%) parents taught them the benefits of healthy eating, 10.7% said no and 8.3% were unsure about the statement.

The current study found that the majority of them preferred non-vegetarian and fewer intakes of fruits and vegetables. One-quarter of school-going adolescents ate fast food every day. Sarah et al. (2018) reported the same findings of the current study that the majority of adolescents were non-vegetarian and ate junk food every day. An Indian set up study found that a third of school children preferred burgers, pizzas and fried foods more times in a week (A. K. Singh et al., 2006).

4.5.4 Hygiene

Hygiene practice is one of the inevitable factors for every individual in society. Good personal hygiene is important for a healthy life and social reasons. The current study focuses on hygiene practice such as cleaning or brushing the teeth, washing hands before eating, washing hands after using the toilet and use of soap while washing hands.

Table 4.17 Hygiene Practice of School-going Adolescents N=600

Past month, per day	I did not (%)	< 1 tir per da (%)	ay		time (%)		mes %)	3 times (%)	4 or more (%)
usually cleaned or brushed your teeth	5 (0.8)	7 (1.2))		118 19.7)	_	62 3.7)	203 (33.8)	5 (0.8)
		Never (%)			Sometimes (%)			t of the e (%)	Always (%)
Past month, washe	ed your	3	2	28 4		1 :		.28	400
Past month, washe	···· , ····· , ···· ,		6 25		(6.8)		,	78	(66.7) 463
hands after using the toilet Past month, you used soap		(1) 7	3	2) (4.7) 2 39		· · · · · · · · · · · · · · · · · · ·		13) .69	(77.2) 353
while washing your h	ands	(1.2)	(5.	.3)	(6.:	5)	(2	8.2)	(58.8)

Source: computed

Figures in parentheses are percentages

Table 4.17 illustrates the hygiene practices of school-going adolescents. Most the school-going adolescents (43.7%) brushed two times per day, 33.8% three times, 0.8% four and more times, 19.7% one time, 1.2% less than one time and 0.8% did not brush or clean their teeth in the past month.

Majority of school-going adolescents always (66.7%) washed their hands before eating food, 21.3% most of the time, 6.8% sometimes, 4.7% rarely and the rest 0.5% of them never washed their hands before eating food the past month.

Most of the school-going adolescents always (77.2%) washed their hands after using the toilet, 13% most of the times, 4.7% sometimes, 4.2% rarely and 1% of them never practised it in the past month.

More than half of school-going adolescents always (58.8%) used soap while washing their hands, 28.2% most of the time, 6.5% did sometimes, 5.3% rarely and 1.2% never used soap before washing their hands in the past month.

An abroad study reported that more than one quarter of children and adolescents brushed their teeth more than once in a day (Sadinejad et al., 2014). But the current study revealed that the majority of school-going adolescents was practising personal hygiene in the past month.

4.5.5 Medical Care and Medical History

Proper medical care and tracking medical history help an individual to prevent illnesses in future. Every individual desire a healthy body for their growth and development. The current study determines the medical care and medical history of school-going adolescents such as being able to go to the clinic when you are sick, any illness, toothache and whether they received any vaccination.

Table 4.18 Medical Care and Medical History of School-going Adolescents N=600

When you sick, are you to go to a clir		(9	ever (%) (3)	Rarely (%) 52 (8.7)		Sometimes (%) 76 (12.7)			Most of the time (%) 135 (22.5)		Always (%) 319 (53.2)
When you were not able to go to a clinic or hospital,	Alw go (%	0	Cost (%)	No Clinic too far to (%) take place (%)		r	Family treated me at home (%)	d	Traditiona healer (%)	ıl	Not like health care providers (%)
what was the reason	29 (49)		27 (4.5)	18 (3)	26 (4.3)		149 (24.8)		9 (1.5)		74 (12.3)
	Ev	ver be	een tol	d by a Do	octor th	ha	t you hav	ve 1	the illness		
Illness			N	(%)		Illness			iess		N (%)
Never			514	(85.7)			Tubercu	ılos	sis		16 (2.7)
Asthma			16	(2.7)			Malnutr	itic	on		31 (5.2)
Diabetes			3 ((0.5)		Malari					8 (1.3)
Anaemia			7 (1.2)			Obesity				5 (0.8)
Past year, did toothache cause you			e you to	Y	Yes (%			No (%)	U	nsure (%)	
miss class or school				3	37 (6.2)		5	563 (93.8)		00 (0)	
Ever received	Ever received a vaccination of any type					7 ((71.2)		59 (9.8)		114 (19)

Source: computed

Figures in parentheses are percentages

Table 4.18 depicts the medical care and medical history of school-going adolescents. According to that, 53.2% of school-going adolescents were able to go to a clinic when they were sick, 22% most of the time, 12.7% sometimes, 8.7% rarely and 3% were never able to go to any clinic.

Half of the school-going adolescents (49.5%) always go to clinic or hospitals, 24.8% of them got treatment from family members at home, 12.3% did not go to the clinic or hospitals because they did not like health care providers, 4.5% because of cost, 4.3% stated that clinic is too far, 3% had no one to take them to hospitals or clinics and the rest 1.5% believed in traditional healing.

The majority (85.7%) of school-going adolescents stated that the doctors did not diagnose them on major illness, 5.2% of them had malnutrition problems, 2.7%

had asthma, 2.7% tuberculosis, 1.2% anaemia, 1.3% malaria, 0.8% obesity and 0.5% diabetes.

More than nine-tenths (93.8%) of school-going adolescents did not miss their class because of toothache in the past year and the rest 6.2% had the problem.

Also, 71.2% of school-going adolescents received some kind of vaccination, 19% were unsure about the vaccination and 9.8% did not receive any kind of vaccination.

The current study revealed that there was some level of medical care problems and medical history among school-going adolescents. Teh, Sumbele, Meduke, Ojong, & Kimbi (2018) reported that the children aged 6 months to 14 years had malaria parasite, anaemia and malnutrition. Another abroad study also mentioned that more than a third of adolescents had tuberculosis (Nduba et al., 2015).

4.5.6 HIV/AIDS

HIV/AIDS-related awareness classes or programs are necessary for healthy human life. Therefore, the awareness programs need to start from the adolescent stage. The current study is to assess the awareness of school-going adolescents about HIV/AIDS. The study assessed whether they heard about it or were taught about it from school or home.

Table 4.19 HIV/AIDS awareness of School-going Adolescents N=600

		Yes (%)	No (%)
Ever heard of HIV infection or AIDS	481 (80.2)	119 (19.8)	
At your school, have you ever been taught AIDS	278 (46.3)	322 (53.7)	
Ever talked about HIV or AIDS with your p	arents	208 (34.7)	392 (65.3)
Can a person who looks healthy have an	Yes (%)	No (%)	Unsure (%)
HIV infection?	48 (8)	223 (37.2)	329 (54.8)

Source: computed

Figures in parentheses are percentages

HIV/AIDS awareness of school-going adolescents are shown in table 4.19. The majority (80.2%) of school-going adolescents have heard about HIV infection or AIDS and the rest of them have not (19.8%). More than half (53.7%) of them stated that their school never taught about HIV/AIDS and 46.7% mentioned that they got awareness class from school.

Most of the school-going adolescents (65.3%) never discussed HIV/AIDS with their parents and 34.7% have had that discussion. There were 54.8% of school-going

adolescents who were unsure whether a person who looks healthy have an HIV infection, 37.2% stated that no and 8% of them indicate that as 'yes'.

Peltzer & Pengpid (2016) reported that late adolescents' age was associated with high risk in sexual behaviour and it is associated with substance use, mental distress and loneliness. But based on the awareness a study revealed that the majority of school-going adolescent girls knew the full form of AIDS and AIDS can be transmitted through infected syringes. An Indian set up study found that the most of the adolescents were aware of the root cause of HIV/AIDS (Muthuraja & Dhanes, 2015), and similar findings were found in the current study.

4.5.7 Substance Use

Substance use is an unhealthy practice for every individual society. Therefore, early identification of that may aid to reduce the risk factors among the individuals. The current study identifies the different types of substance use such as tobacco, cigarette, alcohol and drugs among school-going adolescents.

Table 4.20 Tobacco/cigarette Use of School-going Adolescents N=600

	Ever smoked cigarettes or chewed guthka or				Tried (%)		nsionally (%)	Regularly (%)
pan masala		568 (94		24 (4		+	5 (1)	2 (0.3)
Past month, did you smoke cigarettes		I do not (%) 573 (95.5)	1 to 2 days (%) 14 (2.3)		Da	3 to 9 ys (%) 0 (1.7)	10 or mor (%) 1 (0.2)	Every day (%) 2 (0.3)
Your parents or guardians smoke	(either (%) (85.7)	(er/Mal (%) (13.8)	e		er/Female (%) (0.2)	Both (%) 2 (0.3)
Any of your smoking cigar pan masala				Yes (%) 82 (13.7)		No (%) 142 (73.2)	Unsure (%) 76 (12.7)	
You think sm health	oking i	s harmful	to you	r 502	2 (8.	3.7)	57 (9.5)	41 (6.8)
Past month, messages	seen	any anti-s	moking	g 43	1 (7	1.8)	96 (16)	73 (12.2)

Source: computed

Figures in parentheses are percentages

Table 4.20 illustrates the tobacco or cigarette use of school-going adolescents. The frequency of chewing tobacco or smoking cigarette among school-going adolescents found that 94.7% never used and 4% have tried it. Occasional and regular users were detected as 1% and 0.3% respectively.

More than nine-tenths (95.5%) of school-going adolescents didn't smoke cigarettes in the past month, 2.3% one to two days, 1.7% three to nine days, 0.2% ten and more times and rest 0.3% of them smoked every day.

In the case of majority (85.7%) of school-going adolescents, their parents or guardians never smoked, 13.8% of school-going adolescents' male parents or guardians did smoke, 0.2% said that their female parents or guardians smoked and 0.3% of them said that both parents and guardians smoked.

In addition to that, 73.2% of school-going adolescents' friends never tried tobacco or cigarettes, 13.7% of them stated that their friends have tried tobacco or cigarettes and 12.7% were unsure about this matter.

Most (83.7%) of them said that smoking is harmful to health, 9.5% opted 'no' and 6.8% were unsure about the statement.

More than seven-tenths (71.8%) of school-going adolescents chose 'yes' that they have seen anti-smoking messages in the past month, 16% of them have never seen any and 12.2% were 'unsure'.

The current study depicts that less than one-tenth of school-going adolescents chewed tobacco or were smoking cigarette. Similar findings were found in Indian studies (Jaisoorya et al., 2016; Raja & Devi, 2018). Currie & Bray (2019) reported that prevalence of tobacco use; smoking, cannabis and self-harming were high among adolescents. The risk factors of tobacco use among school-going adolescents were stress, family conflict, curiosity and parents' smoking habits (Raja & Devi, 2018).

Table 4.21 Alcohol and Drug Use of School-going Adolescents N=600

	Have you ever tried alcohol									53	(8.8)	547	(91.2)
Do you typica	Do you typically drink until you are intoxicated?									17	(2.8)	583	(97.2)
In the past six months, I have tried	1	have not (%)		ice 6)	A few time (%)	S	month (%) than a m		Mo than a mo (%	once onth	Once a week (%)	or	re than nce a veek %)
alcohol		565 94.2)		8 3)	10 (1.7)	(0.3)		(0.3)		2 (0.3)	(1 0.2)
Where did yo		I hav				At bar (%)		At someone else's home (%)		Street (%)		e other ce (%)	
have your fir drink?	st –	548 (91.3			27 4.5)		10 (1.7)		2 (0.3))	4 (0.7)	(1	9 1.5)
Your close friends ever to beer/wine/other liquor					Yes (%) 118 (19.7)			No (%) 326 (54.3)		156	re (%) (26)		
Close friends ever used illegal drugs						4	17 (2.8	<u> </u>		456 (· · · · · ·	1	(21.2)
	Past year, have you		I have not (%)		1	or 2 times (%)		3-9 times			(r more (%)	
used illegal d	rugs	?	591	(98.	5)		8 (1.3)			1 (0	.3)	0	(00)

Source: computed

Figures in parentheses are percentages

Table 4.21 depicts the alcohol and drug use of school-going adolescents. More than nine-tenth (91.2%) never tried alcohol and less than one-tenth (8.8%) tried. There were 97.2% who said 'no' on the statement 'typically drink until you are intoxicated' whereas 2.8% had intoxication.

More than nine-tenth (94.2%) have never tried alcohol in the past six months, 3% tried once, 1.7% a few times, 0.6% of them tried once or more than once in a month, 0.3% once in a week and 0.2% had alcohol intake more than once in a week.

There were 91.3% who never had a drink of alcohol, 4.5% of them had their first drink at home, 1.7% at the bar, 1.5% some other place, 0.7% had at the street and 0.3% had at someone else's home.

More than half (54.3%) of school-going adolescents' close friends never tried alcohol, 19.7% stated as 'yes' and 26% were unsure about the statement. The majority (76%) of school-going adolescents' close friends have never tried illegal drugs, 2.8% have tried and 21.2% were unsure.

There were 98.5% who never used any kind of illegal drugs in the past year, 1.3% tried one or two times and 0.3% of them tried three to nine times.

Tsering, Pal, & Dasgupta (2010) reported that more than one-tenth of students have used or abused substance in their lifetime and most of them are continuing substance use to relieve tension and because of easy availability. A review found that the prevalence rate of marijuana is high among adolescents (Maharaj, Nunes, & Renwick, 2009). An Indian set up study among school-going adolescents stated that less than one-tenth of them used drugs and little more than one-tenth used alcohol (Harikrishnan, Sobhana, & Ali, 2016). But the current study found less than one-tenth of school-going adolescents used alcohol or drugs in their lifetime.

4.5.8 Violence, Domestic Violence, Abuse and Unintentional Injury

Any kind of violence or unintentional injuries affect the personal and social life of every individual. School-going adolescents are one of the most vulnerable groups as far as this particular subject is concerned. Therefore, the current study is to determine the violence, domestic violence, abuse and unintentional injury of school-going adolescents.

Table 4.22 Violence, Domestic Violence, Abuse and Unintentional Injury of School-going Adolescents N=600

Past year, seriously		mes %)		1 to 2 (%)	3 to 4 (%)	5 to 6 (%)	7 or more (%)
injured	134	(22.3)	379 (63.2)		79 (13.2)	7 (1.2)	1 (0.2)
Past year, the most serious injury that		ras not (%)	I fell (%)			Fire/burnt (%)	Inhaled or swallowed (%)
happened to		173	330		15	8	7
you	(2	28.8)	(55)	(11.2)	(2.5)	(1.3)	(1.2)
Wear a h	nelmet	Neve	er	Rarely	Sometimes	Most of the	Always
while you ri	de on	(%))	(%)	(%)	time (%)	(%)
a motorbike		194 (32	2.3)	68 (11.3)	135 (22.5)	96 (16)	107 (17.8)
Wear a sea	t belt	117	'	99	150	97	137
when you ri	ide in	(19.5	5)	(16.5)	(25)	(16.2)	(22.8)
the car							
Past year,		433		71	57	30	9
experienced	insult	(72.2	2)	(11.8)	(9.5)	(5)	(1.5)
from others							
Feel safe at h	nome	22 (3.	.7)	19 (3.2)	25 (4.2)	54 (9)	480 (80)
Feel safe at s	school	22 (3.	.7)	15 (2.5)	27 (4.5)	85 (14.2)	451 (75.2)
Feel safe ha	Feel safe hanging 29			21	55	142	353
out with friends (4.8) (3.5)				(3.5)	(9.2)	(23.7)	(58.8)
				Yes (%)	No (%)		
Past year, we	ere you	injured	e accident	52 (8.7)	548 (91.3)		
You felt unsa	afe eith	er at sch	y to school	33 (5.5)	567 (94.5)		
You saw a vi	iolent a	ct at hor	ne/sch	ool/neighbo	ourhood	26 (4.3)	574 (95.7)

Source: computed

Figures in parentheses are percentages

Table 4.22 illustrates the violence, domestic violence, abuse and unintentional injury of school-going adolescents. The majority (63.2%) of school-going adolescents had been injured seriously one to two times in past years, 22.3% never got injured, 13.2% had been injured three to four times, 1.2% five to six times and 0.2% got injured seven and more times.

More than half (55%) of school-going adolescents were injured because they fell down, 28.8% were never injured, 11.2% had a vehicle accident, 2.5% were attacked or got injured due to fighting, 1.3% got injured due to fire and 1.2% had inhaled or swallowed in the past year.

There were 32.3% of school-going adolescents who never wore a helmet while riding on a motorbike, 22.5% sometimes, 17.8% always, 16% most of the time and 11.3% rarely wore a helmet.

A quarter (25%) of school-going adolescents sometimes wear a seat belt when they ride in a car, 22.8% always, 19.5% never, 16.5% rarely and 16.2% of them wear seat belt most of the time.

The majority (72.2%) of school-going adolescents never experienced insult from others, 11.8% rarely, 9.5% sometimes, 5% most of the times and 1.5% always got insulted.

Eight-tenth (80%) of school-going adolescents always felt safe at home, 9% most of the time, 4.2% some times, 3.2% rarely and 3.7% never felt safe at home.

Two-thirds (75.2%) of school-going adolescents always felt safe at school, 14.2% most of the time, 4.5% sometimes, 2.5% rarely and 3.7% of them stated never.

More than half (58.8%) of school-going adolescents always felt safe hanging out with friends, 23.7% most of the time, 9.2% sometimes, 3.5% rarely and 4.8% never felt safe.

There was some level of prevalence rate revealed of violence, abuse and unintentional injury of school-going adolescents. Mathur, Mehra, Diwan, & Pathak (2018) reported that less than one-fifth of children got all injuries and most common injuries are physical injuries, burns, poisonings, near drowning and suffocations. Another abroad study depicts that half of the adolescents engaged in a physical fight and a third of adolescents were victims of bullying (Rudatsikira, Mataya, Siziya, & Muula, 2008).

4.5.9 Emotional and Behavioural Problems

Emotional and behavioural problems generate inability to do daily activities in every individual. Therefore, positive mental health status enriches the wellbeing of individuals. The current study measures the emotional and behavioural problems of school-going adolescents from the perspective of self, parents' and teachers' level.

Table 4.23 Self-reported Emotional and Behavioural Problems of School-going Adolescents N=600

SDQ Domains	Normal (%)	Borderline (%)	Abnormal (%)
Emotional Problems	480 (80)	51 (8.5)	69 (11.5)
Conduct Problems	492 (82)	50 (8.3)	58 (9.7)
Hyperactivity	496 (82.7)	53 (8.8)	51 (8.5)
Peer problems	486 (81)	78 (13)	36 (6)
Overall	453 (75.5)	85 (14.2)	62 (10.3)
Prosocial behaviour	496 (82.7)	61 (10.2)	43 (7.2)

Source: computed

Figures in parentheses are percentages

Self-reported emotional and behavioural problems of school-going adolescents are depicted in table 4.23. Prevalence of emotional problems found that normal, borderline and abnormal emotional problems were observed at 80%, 8.5% and 11.5% respectively.

Normal, borderline and abnormal conduct problems were detected at 82%, 8.3% and 9.7% respectively.

Hyperactivity data revealed that normal, borderline and abnormal hyperactivity of school-going adolescents were at 82.7%, 8.8% and 8.5% respectively.

Peer problems prevalence rate of normal, borderline and abnormal were 81%, 13% and 6% respectively.

The overall frequency found that normal, borderline and abnormal were observed at 75.5%, 14.2% and 10.3% respectively.

Frequency of prosocial behaviour revealed that normal, borderline and abnormal were detected as 82.7%, 10.2% and 7.2% respectively.

In the current study more than one-tenth of school-going adolescents had overall emotional and behavioural problems. Nair, Ganjiwale, Kharod, Varma, & Nimbalkar (2017) reported similar findings of mental health problems in school children in Gujarat, India. Another Indian set up study reported that less than one-tenth of school-going adolescents had emotional problems, conduct problems, hyperactivity, peer problems and prosocial problems (Faizi, Azmi, Ahmad, & Shah,

2016). But the current study has little variation in each domain of SDQ. The studies related to emotional and behavioural problems of adolescents found different findings (Harikrishnan, Ali, & Sobhana, 2017; Keyho, Gujar, & Ali, 2019; Kharod & Kumar, 2015).

Table 4.24 Parents' Report of Emotional and Behavioural Problems of School going Adolescents N=600

SDQ Domains	Normal (%)	Borderline (%)	Abnormal (%)
Emotional Problems	464 (77.3)	45 (7.5)	91 (15.2)
Conduct Problems	476 (79.3)	45 (7.5)	79 (13.2)
Hyperactivity	491 (81.8)	49 (8.2)	60 (10)
Peer problems	443 (73.8)	63 (10.5)	94 (15.7)
Overall	451 (75.2)	74 (12.3)	75 (12.5)
Prosocial behaviour	499 (83.3)	55 (9.2)	46 (7.7)

Source: computed

Figures in parentheses are percentages

Parents' report of emotional and behavioural problems of school-going adolescents are illustrated in table 4.24. The results revealed that the frequency of emotional problems on a scale of normal, borderline and abnormal were observed at 77.2%, 7.5% and 15.2% respectively.

Conduct problems found that normal, borderline and abnormal levels were detected as 79.3%, 7.5% and 13.2% respectively.

Hyperactivity revealed that normal, borderline and abnormal levels were observed at 81.8%, 8.2% and 10% respectively.

Peer problems prevalence rate of normal, borderline and abnormal levels were detected at 73.8%, 10.5% and 15.7% respectively.

Overall problems rated as normal, borderline and abnormal were observed as 75.2%, 12.3% and 12.5% respectively.

Prosocial behaviour revealed that normal, borderline and abnormal levels were detected at 83.3%, 9.2% and 7.7% respectively.

This indicates that more than one-tenth of school-going adolescents had emotional and behavioural problems according to the parents' perspective. The parent's opinion on the emotional and behavioural problems of school-going adolescents was more reliable than the self-reported SDQ.

Table 4.25 Teachers' Report of Emotional and Behavioural Problems of School going Adolescents N=60

SDQ Domains	Normal (%)	Borderline (%)	Abnormal (%)
Emotional Problems	504 (84)	41 (6.8)	55 (9.2)
Conduct Problems	470 (78.3)	54 (9)	76 (12.7)
Hyperactivity	528 (88)	41 (6.8)	31 (5.2)
Peer problems	482 (80.3)	52 (8.7)	66 (11)
Overall	417 (69.5)	97 (16.2)	88 (14.3)
Prosocial behaviour	475 (79.2)	53 (8.8)	72 (12)

Source: computed

Figures in parentheses are percentages

Teachers' report of emotional and behavioural problems of school-going adolescents is depicted in table 4.25. The results revealed that the frequency of emotional problems rated as normal, borderline and abnormal was observed at 84%, 6.8% and 9.2% respectively.

Conduct problems found that normal, borderline and abnormal levels were detected as 78.3%, 9% and 12.7% respectively.

Hyperactivity revealed that normal, borderline and abnormal levels were observed as 88%, 6.8% and 5.2% respectively.

Peer problems prevalence rate of normal, borderline and abnormal were observed as 80.3%, 8.7% and 11% respectively.

Overall problems on a scale of normal, borderline and abnormal were observed as 69.5%, 12.3% and 14.3% respectively.

Prosocial behaviour revealed that normal, borderline and abnormal levels were detected as 79.2%, 8.8% and 12% respectively.

The teachers' report found that more than one-tenth of school-going adolescents had emotional and behavioural problems. The teachers' opinion had high prevalence rate than the self-reported and parent's version SDQ. This indicates that the emotional and behavioural problems of school-going adolescents are more authentic.

The three versions of SDQ indicate a clear understanding of the emotional and behavioural problems of school-going adolescents.

4.6 Patterns of relationship in Environment and Health factors of school-going adolescents

This section demonstrates comparison, correlation and binary logistic regression model of Environment and Health factors of school-going adolescents. Only self-reported findings were included in this section.

4.6.1 Comparison between genders

Mann-Whitney U test was used to understand the gender difference in environment and health domains of school-going adolescents in the current study.

Table 4.26 Relationship between Gender of respondents and Environment Domains N=600

Environment Domains	Gender	N	Mean Rank	$oldsymbol{U}$	P-value
Home Environment	Male	283	331.92	35,963	.000***
	Female	317	272.45		
School Environment	Male	283	321.18	39,004	.000***
	Female	317	282.04		
Social Support	Male	283	334.66	35,189	.000***
	Female	317	270.01		
Overall	Male	283	340.75	33,463	.000***
	Female	317	264.56		

Source: Computed

P<0.001***

Table 4.26 depicts the gender differences with the environment of school-going adolescents. The results revealed that male school-going adolescents had high risk in home environment (U=35,963; P=.000***), school environment (U=39,004; P=.000***), social support (U=35,189; P=.000***) and overall environment (U=33,463; P=.000***) domains than female school-going adolescents. This indicates a highly significant difference in terms of gender as far as the environment of school-going adolescents are concerned.

A study investigated on family environment revealed that there were significant gender differences among adolescents. Kumar & Lal (2014) reported that male family environment is better than female adolescents' family environment. But other studies found that female adolescents were more likely to do their homework assignments than male (Jaiswal & Choudhuri, 2017; Xu, 2011). This indicates that the protective factors of the home environment were safe for female adolescents than male. Similar findings found in the current study that female had low risk in the home environment. Parents of school-going adolescents were doing more care/support activities of their female children than male.

The current study also found that the male school-going adolescents were at high risk in the school environment. This indicates that male school-going adolescents were involved in school violence, aggressive behaviour in school and had poor support from school than female. Cheruvalath & Tripathi (2015) reported that male school children are likely to get more punishment from the school. Male adolescents were more involved in physical violence, threats, teacher-student or student-student violence (Chen & Astor, 2008; Jimeneza & Estevez, 2017; Lopez-Castedo et al., 2018).

Prabhu & Shekhar (2017) reported that female school-going adolescents received better support from friends and significant others than male. Another Indian set up study found that female adolescents had got support from significant others than male adolescents (Nautiyal, Velayudhan, & Gayatridevi, 2017). However, the current study found that females are getting more social support than male school-going adolescents overall and in each domain of MSPSS.

The overall findings in the environment of school-going adolescents depict that females had a safer environment than male school-going adolescents. This indicates that female school-going adolescents were getting more care/protection/support from home, school, significant others and friends.

Table 4.27 Relationship between Gender and Health Domains N=600

Health Domains	Gender	N	Mean Rank	$oldsymbol{U}$	P-value
Physical Activity	Male	283	290.80	41,109	.15
	Female	317	309.16		
Nutrition	Male	283	322.92	38,510	.000***
	Female	317	280.48		
Hygiene Practice	Male	283	314.67	40,845	.004**
	Female	317	287.85		
Substance Use	Male	283	309.66	42,263	.003**
	Female	317	292.32		
Violence	Male	283	315.82	40,520	.001***
	Female	317	286.82		
Emotional &	Male	283	304.87	43,618	.43
Behavioural problems	Female	317	296.60		
Overall	Male	283	320.58	39,173	.001***
	Female	317	282.57		

Source: Computed P<0.01**, P<0.001***

Male and female school-going adolescents were compared concerning the health domains in table 4.27. There was a highly significant difference found with male prone to high risk in nutrition (U=38,510; P=.000***), violence (U=40,520;

P=.000***) and overall health (U=39,173; P=.000***) domains than female school-going adolescents. Male had a significant difference revealed in hygiene practice (U=40,845; P=.004**) and substance use (U=42,263; P=.003**) domains than female school-going adolescents. However, there were no significant difference indicated in physical activity and emotional and behavioural problems domains. The mean rank of physical activity and emotional and behavioural problems domains indicates that male had high prevalence than female school-going adolescents.

The current study depicts that there was a highly significant difference with male prone to high risk in nutrition than female school-going adolescents. This may be due to lack of healthy food intake, heavy junk food intake or inadequate food intake patterns and so on. The studies found that the male was more underweight than female adolescents (Banerjee, Dias, Shinkre, & Patel, 2011; Beevi, Manju, & Bindhu, 2017).

Violence had a highly significant gender difference found in the current study. Male school-going adolescents were mostly involved in violence and unintentional injuries. The Indian study set up found similar findings related to the current study (Mathur et al., 2018). But an abroad study found that bullying victimisation was positively associated with physical fighting for both genders whereas no gender difference found in physical fighting (Rudatsikira et al., 2008).

Studies found that Boys had high risk in hygiene practice and substance use than female adolescents (Jaisoorya et al., 2016; Narain, Sardana, Gupta, & Sehgal, 2011; Neelkanth, Dohare, & Bhatia, 2017; Ratnaprabha, Kumar, & Kumar, 2018). Similar findings were found in the current study. This indicates that female schoolgoing adolescents were practising personal hygiene such as regular brushing of teeth, using soap or hand wash practice in daily routine.

Female adolescents were more elaborate in physical activities but males are more attentive in physical education classes (Dave, Nimbalkar, Vasa, & Phatak, 2017). The current study found that no gender difference in physical activity. But the mean rank various indicated that female school-going adolescents may practice regular physical exercise than male.

The current study did not find any kind of gender difference in emotional and behavioural problems of school-going adolescents. However, the mean rank of emotional and behavioural problems found deviation in gender. The studies also found similar findings of the current study that male adolescents had high risk in overall emotional and behavioural problems than female (Faizi et al., 2016; Nair et al., 2017). This indicates that the male adolescents had hyperactivity, conduct problems and peer problems.

Overall health found that female school-going adolescents in the current study were more vulnerable than male. This indicates that school-going adolescents need to be involved in healthy life care activities where the health needs of adolescent girls need to be given special focus.

4.6.2 Comparison between type of school - Government and Private

Chi-square and Z test were used to know the government and private (school type) difference in environment and health domains of school-going adolescents in the current study.

Table 4.28 Relationship between Environment Domains and type of school N=600

Environment Domains		Schoo	ol type	X^2	P-value	
		Government	Private	Λ	P-value	
	Low risk	189 (63)	202 (67.3)			
Home	Moderate risk	67 (22.3)	77 (25.7)	9.2	.01**	
	High risk	44 (14.7)	21 (7)			
	Low risk	234 (78)	233 (77.7)			
School	Moderate risk	62 (20.7)	63 (21)	.01	.99	
School	High risk	4 (1.3)	4 (1.3)			
	Low risk	203 (67.7)	212 (70.7)			
Social	Moderate risk	69 (23)	64 (21.3)	.69	.70	
Support	High risk	28 (9.3)	24 (8)			
	Low risk	250 (83.3)	267 (89)			
Overall	Moderate risk	46 (15.3)	31 (10.3)	4.1	.12	
Overall	High risk	4 (1.3)	2 (0.7)			

Source: Computed

Figures in parentheses are percentages

P<0.01**

Table 4.28 depicts the comparison of environment domains between government and private schools. School-going adolescents in government schools had a highly significant difference on high risk in the home environment (moderate to high risk=37%; X^2 =19.5; P=.000***) than private schools. This demonstrates that the parents of government school-going adolescents were not able to provide support on their studies or solve problems. It may be because of lack of parent's education or busy work schedule.

There was no significant difference in other domains such as school environment, social support and overall environment. The results also depict that the government school had high prevalence on social support (moderate to high risk=32.3%) and overall environment (moderate to high risk=16.6%), but private schools had a high prevalence in the school environment (moderate to high risk=22.3%). The government school-going adolescents may not get support from family in studies or solving personal problems, lack of peer support and so on. But there was an unsafe school environment depicted among school-going adolescents in private schools. The bullying behaviour, student-teacher and teacher-student violence and lack of kindness and lack of helping mind-set were seen in private schools than government schools.

Table 4.29 Relationship between Health and type of School N=600

Health Do	mains	School S	School Settings		
neattii De	omanis	Government	Private		
	Low risk	152 (50.7)	151 (50.3)		
Physical Activity	Moderate risk	106 (35.3)	100 (33.3)	.71	.69
I hysical Activity	High risk	42 (14)	49 (16.3)		
	Low risk	227 (75.5)	211 (70.3)		
Nutrition	Moderate risk	38 (12.7)	46 (15.3)	2.1	.33
14dd felon	High risk	35 (11.7)	43 (14.3)		
	Low risk	243 (81)	257 (85.7)		
Hygiene Practice	Moderate risk	22 (7.3)	15 (5)	2.4	.28
Trygiciic Tractice	High risk	35 (11.7)	28 (9.3)		
	Low risk	283 (94.3)	282 (94)		
Substance Use	Moderate risk	11 (3.7)	8 (2.7)	1.47	.47
Substance Osc	High risk	6 (2)	10 (3.3)		
	Low risk	254 (84.7)	260 (86.7)		
Violence	Moderate risk	17 (5.7)	16 (5.3)	.57	.75
	High risk	29 (9.7)	24 (8)		
Emotional &	Low risk	208 (69.3)	245 (81.7)		
Behavioural	Moderate risk	52 (17.3)	33 (11)	12.4	.002**
problems	High risk	40 (13.3)	22 (7.3)		
	Low risk	196 (65.3)	201 (67)		
Overall	Moderate risk	44 (14.7)	53 (17.7)	2.7	.25
	High risk	60 (20)	46 (15.3)		

Source: Computed Figures in parentheses are percentages

P<0.01**

Table 4.29 depicts the comparison of health domains between government and private schools. Government schools had a significant difference found in emotional and behavioural problems (moderate to high risk=30.6%; X^2 =19.5; P=.002**) domain than private schools. This demonstrates that mental health related

programmes and counselling services were very high in private schools than government schools.

However, there were no significant differences found in other health domains. Government schools depict high prevalence in hygiene practice (moderate to high risk=19%), violence (moderate to high risk=15.4%) and overall health domains (moderate to high risk=34.7%). Lack of practising daily hygiene, continuous unintentional injuries and violence, malnutrition problems, emotional & conduct problems, hyperactivity were more among school-going adolescents in government schools.

There were no significant school settings difference found on physical activity, nutrition and substance use of school-going adolescents. But the prevalence rate was high in private schools on physical activity (moderate to high risk=49.7%), nutrition (moderate to high risk=29.6%) and substance use (moderate to high risk=6%) of school-going adolescents. School-going adolescents in private school may much focus on studies than physical activity. Therefore, the current study found a high risk of physical activity among school-going adolescents in private schools than government schools. Some studies found that obesity in private schools had high prevalence rate than government school children (Jagadesan et al., 2014; Patnaik, Pattanaik, Sahu, & Rao, 2015). The current study also found the same and it indicates that the private school-going adolescents preferred more junk foods. Narain et al. (2011) reported that private school girls were more prevalent than government school girls and both gender in private schools smoked than government school students. The current study found that school-going adolescents in private schools were more prevalent in substance use than government schools. This indicates that economic stability, accessibility may cause high prevalence rate on substance use in private schools.

4.6.3 Comparison of Rural and Urban Settings

Chi-square and Z test were used to understand the rural and urban (settings) difference in environment and health domains of school-going adolescents in the current study.

Table 4.30 Relationship between Rural-Urban Settings and Environment Domains N=600

Environment Domains		Set	X^2	P-value	
Environnie	iii Domanis	Rural	Urban	Λ	r-value
	Low risk	193 (64.3)	198 (66)		
Home	Moderate risk	69 (23)	75 (25)	2.1	.33
Home	High risk	38 (12.7)	27 (9)		
	Low risk	226 (75.3)	241 (80.3)		
School	Moderate risk	69 (23)	56 (18.7)	2.3	.31
School	High risk	5 (1.7)	3 (1)		
	Low risk	216 (72)	199 (66.3)		
Social Support	Moderate risk	60 (20)	73 (24.3)	2.2	.32
Social Support	High risk	24 (8)	28 (9.3)		
	Low risk	206 (68.7)	202 (67.3)		
Overall	Moderate risk	48 (16)	61 (20.3)	2.5	.27
Overan	High risk	46 (15.3)	37 (12.3)		

Source: Computed

Figures in parentheses are percentages

Rural and urban settings of school-going adolescents were compared with regard to the health domains in table 4.27. There was no significant difference depicted in any of the environment domains of school-going adolescents. Rural school-going adolescents had more prevalence of risk in the home environment (moderate to high risk=35.7%) and school environment (moderate to high risk=24.7%) domains. Similar studies found in the current study that urban adolescents' parents were more supportive, helped their children with studies and understood their problems (Samanta et al., 2012). This indicates that urban school-going adolescents were safer in their home than in rural settings. Bashir & Bashir (2016) reported that lack of economic status of the parents of school-going adolescents in rural settings may indicate less parental encouragement in studies. School environment of school-going adolescents in rural settings had high risk than urban. This proves that the violence, peer problems, teacher-student issues were more in schools in rural settings.

The current study found that urban school-going adolescents had a high prevalence of social support (moderate to high risk=33.6%) and overall (moderate to high risk=32.6%) environment domains. Nautiyal et al. (2017) found the similar

findings depicted in the current study that adolescents in rural had more positive social support than the urban settings. Urban school-going adolescents had high risk in the overall environment may due to excessive internet use and lack of social support. Similar finding found that rural settings had a significant lower Internet addiction of adolescents than urban settings (Xin et al., 2018).

Table 4.31 Relationship between Rural-Urban Settings and Health Domains N=600

Hoolth D	Health Domains		Settings		P-value	
nealth D	omams	Rural	Urban	X^2	r-value	
	Low risk	158 (52.7)	145 (48.3)			
Physical Activity	Moderate risk	95 (31.7)	111 (37)	1.8	.38	
I hysical Activity	High risk	47 (15.7)	44 (14.7)			
	Low risk	215 (71.7)	223 (74.3)			
Nutrition	Moderate risk	36 (12)	48 (16)	6.9	.03*	
Nutition	High risk	49 (16.3)	29 (9.7)			
	Low risk	252 (84)	248 (82.7)			
Hygiene Practice	Moderate risk	24 (8)	13 (4.3)	6.8	.03*	
Trygiche Tractice	High risk	24 (8)	31 (13)			
	Low risk	286 (95.3)	279 (93)			
Substance Use	Moderate risk	7 (2.3)	12 (4)	1.6	.43	
Substance Use	High risk	7 (2.3)	9 (3)			
	Low risk	254 (84.7)	260 (86.7)			
Violence	Moderate risk	19 (6.3)	14 (4.7)	.84	.65	
	High risk	27 (9)	26 (8.7)			
Emotional &	Low risk	194 (67.4)	259 (86.3)			
Behavioural	Moderate risk	60 (20)	25 (8.3)	38.2	.000***	
problems	High risk	46 (15.3)	16 (5.3)			
	Low risk	189 (63)	208 (69.3)			
Overall	Moderate risk	54 (18)	43 (14.3)	2.7	.25	
	High risk	57 (19)	49 (16.3)			

Source: Computed Figures in parentheses are percentages P<0.05*, P<0.001***

Table 4.31 depicts the rural and urban difference in health domains of school-going adolescents. Rural school-going adolescents had a highly significant difference on emotional and behavioural problems (moderate to high risk=35.3%; X^2 =38.2; P=.000***) than urban. Similar findings were found in an Indian set up study (Nair et al., 2017). This indicates that mental health care and support were lacking in rural settings.

Rural school-going adolescents had a significant difference in nutrition (moderate to high risk=28.3%; X^2 =6.9; P=.03*) than urban, but urban school-going adolescents had a significant difference in hygiene practice (moderate to high risk=17.3%; X^2 =6.8; P=.03*). The malnutrition problems or lack of healthy diet practice may take place among the school-going adolescents in rural than urban

settings. The current study found among school-going adolescents depicts that lack of hygiene practice and similar findings were there in another study (Sadinejad et al., 2014).

The other health domains had no significant rural and urban difference found in the current study. The results also illustrate that rural school-going adolescents were more prevalent in violence (moderate to high risk=15.3%) and overall health (moderate to high risk=37%) domains. Das, Chattopadhyay, Chakraborty, Dasgupta, & Akbar (2015) reported that urban adolescents had high-risk behaviour than rural adolescents. However, the current study found that rural school-going adolescents had high risk in overall health. Lack of mental health, high-risk violence behaviour, and poor hygiene practice may be the negative effects of rural school-going adolescents.

But urban settings found more prevalence rate in physical activity (moderate to high risk=51.7%) and substance use (moderate to high risk=7%) than rural school-going adolescents. The busy academic schedule of urban school-going adolescents may be one of the major factors for high risk in physical activity. Tsering et al. (2010) reported that urban students were more prone to substance use and influence of peers in taking habits than rural students. Similar findings were found in the current study.

4.6.4 Correlation and Logistic Regression

The spearman correlation and binary logistic regression model indicates in the below tables.

Table 4.32 Correlation between Environment and Health Domains of Schoolgoing Adolescents N=600

Domains	Home	School	Social	Overall
Domanis			support	Environment
Physical Activity	.100*	.009	24	.075
Nutrition	.180***	.124**	.043	.148***
Hygiene Practice	.179***	.231***	.190***	.247***
Substance Use	.106**	.217***	.090*	.175***
Violence	.213***	.166***	.150***	.223***
Emotional &	.093*	.112**	.105**	.167***
Behavioural Problems				
Overall Health	.272***	.240***	.170***	.285***

Source: Computed P<0.05*, P<0.01**, P<0.001***

Table 4.32 shows the relationship between the environment and health domains of school-going adolescents, using Spearman's rank correlation. The health domains are indicated in the columns and environment domains are in the rows.

Column one shows that physical activity had a significant positive correlation with the home environment (r=.100) and no significant relationship was found with rest of the environment domains. This indicates that a high level of parents' support may have a low risk on physical activity of school-going adolescents. Ornelas, Perreira, & Ayala (2007) reported that there was no association between parental monitoring and physical activity of adolescents.

2nd column depicts that there was a highly significant positive correlation with home (r=.180) and overall environment (r=.148), the significant positive relationship found with the school environment (r=.124) and no relationship found with social support. This demonstrate that high level of endorse/provide/encourage from home and school on healthy food habits may have low risk among school-going adolescents.

3rd column shows that hygiene practice had a highly significant positive correlation with home (r=.179) & school environment (r=.231), social support (r=.190) and overall environment (r=.247). Proper guidance/support from home, school, friends and significant others on healthy personal hygiene practice may reduce high risk among school-going adolescents.

4th column illustrates the substance had a highly significant positive correlation with school (r=.217) and overall environment (r=.175), significant positive relationship revealed in home (r=.106) and social support (r=.090) of school-going adolescents. This demonstrates that a safe home, school, good friends and significant others of school-going adolescents may have low risk in substance use.

5th column indicates that violence had a highly significant positive correlation with home (r=.213) & school environment (r=.166), social support (r=.150) and overall environment (r=.223). Protection from home, school and friends of schoolgoing adolescents may reduce high risk in violence. Chapman, Buckley, Sheehan, Shochet, & Romaniuk (2011) reported significant relationship between school connectedness and reduced engagement in transport and violence risk-taking, as well as fewer associated injuries. Another study found that effective parent-adolescents may reduce violence and danger (Crissa et al., 2017).

6th column found that the emotional and behavioural problems of school-going adolescents had a highly significant positive correlation with the overall environment (.167) and significant positive relationship with home (.093), school (.122) and social support (.105). This clearly indicates that care and support from home, school, friends and significant others may reduce emotional and behavioural problems of school-going adolescents. Rapheal & Varghese (2015) reported a significant linear relationship between home environment and psychological wellbeing, stress and anxiety. Another study depicts that positive social support may remove emotional and behavioural distress among adolescents (Khan, 2015).

The last column of the correlation table indicates that overall health had a highly significant positive correlation with home (.272) & school environment (.240), social support (.170) and overall environment (.285). This demonstrates that the care and protection from home, school, friends and significant others on the overall health of school-going adolescents may reduce risk. Maharaj et al. (2009) reported that risk behaviour in adolescents is related to family of origin and home environment.

Table 4.33 Factors Influencing the Occurrence of Environment related Problems of School-going Adolescents N=600

Independent Variables	P-value	Exp(B)	95.0% CI	Model Summary
Age	.08	.893	(.78, 1.01)	χ2=52.56
Gender (male)	.000***	3.358	(2.33, .4.83)	df=5
School type (government)	.45	1.160	(.78, 1.71)	P=.000***
Settings (rural)	.61	.909	(.62, 1.31)	Cox & Snell R^2 =.084 Nagelkerke R^2 =.117
Socio-economic status	.07	.970	(.93, 1.00)	Overall cases=69.8%
Constant	.46	2.107	-	Overan cases=09.070
Source: Computed	CI: Co	nfidential Int	erval;	P<0.001***

Table 4.33 depicts the factors influencing the occurrence of environmentrelated problems of school-going adolescents. The results depicted on binary logistic regression analysis was performed to ascertain the effects of age, gender, school type, settings and socio-economic status on the likelihood that the participants have moderate to high risk in the environment. The binary logistic regression model was statistically significant, $\chi 2(5)=52.56$, P<0.001. The model explained 11.7% (Nagelkerke R²) of the variances in environment-related problems and correctly classified 69.8% of cases. Males were 33.58 times more likely to exhibit environment-related problems than female. The results found that the rest of the independent variables were not associated with environment-related problems. This demonstrates that male adolescents had violence behaviour and unsafe home and school. Regression model study reported that female had a high level of protective factors than male adolescents (Piko & Brassai, 2009). Siziya, Muula, & Rudatsikira (2007) depicts through multivariate logistic regression analysis that truancy is positively associated with male, aggressive behaviour and lower school grades.

Table 4.34 Factors Influencing the Occurrence of Health-related Problems of School-going Adolescents N=600

Independent Variables	P-value	Exp(B)	95.0% CI	Model Summary
Age	.89	.992	(.87, 1.12)	χ2=17.96
Gender (male)	.002**	1.710	(1.21, 2.14)	df=5
School type (government)	.60	.906	(.62, 1.32)	P=.003**
Area (rural)	.22	1.246	(.87, 1.77)	Cox & Snell R^2 =.030
Socio-economic status	.02*	.962	(.93, .99)	Nagelkerke $R^2 = .041$
Constant	.77	.75	-	Overall cases=66.5%

Source: Computed CI: Confidential Interval P<0.05*, P<0.01**

The factors influencing the occurrence of health-related problems of school-going adolescents are illustrated in table 4.34. The results depicted on binary logistic regression analysis was performed to ascertain the effects of age, gender, school type, settings and socio-economic status on the likelihood that the participants have moderate to high risk in health. The binary logistic regression model was statistically significant, χ2(5)=17.96, P<0.01. The model explained 4.1% (Nagelkerke R²) of the variances in health-related problems and correctly classified 66.5% of cases. Males were 17.10 times more likely to exhibit health-related problems than female. Increasing socioeconomic status was associated with an increased likelihood of exhibiting health-related problems. The results also found that the rest of the independent variables were not associated with health-related problems.

The current study results depict that gender and economic variables were associated with the overall health of school-going adolescents. Binary logistic regression illustrates that female adolescents had low risk in social isolation because of participation in physical education classes (Santosa et al., 2015). Harikrishnan, Arif & Sobhana (2017) found that total score on SDQ had a significant predictor with academic performance and socio-economic status.

This chapter concludes that the school-going adolescents had some level of risk in their environment and health. The next chapter will be qualitative analysis of environment and of school-going adolescents from the parents' and teachers' perspective.

CHAPTER V

PARENTS' & TEACHERS' PERCEPTION

The previous chapter deals with the quantitative results of environment and health of school-going adolescents. This chapter deliberates upon the parents' and teachers' perception of the environment and health of school-going adolescents in Kollam District. Qualitative method was used for data collection and data analysis. Qualitative findings were analysed through atlas ti and interpreted in the following sections. The first section focuses on the socio-demographic profile of parents' and teachers' of school-going adolescents those who attended in the interview conducted by the research. The parents' and teachers' perception of environment were elaborated in the second section. The final section entails the parents' and teachers 'perception of health of school-going adolescents.

5.1 Socio-Demographic Profile of Parents and Teachers

Key informant interviews were conducted among the parents and teachers of school-going adolescents. Their socio-demographic profile is interpreted in the current section.

Table 5.1 Socio-Demographic Profile of Parents N=24

Age of Parents'	Mean	SD
Age of Latents	41.63	3.48
Gender	Male	3 (12.5)
Gender	Female	21 (87.5)
Marital Status	Staying together	24 (100)
Mainai Status	Separated or divorced	0 (00)
	Higher Secondary	5 (20.8)
Education	Under Graduate	9 (37.5)
Education	Post Graduate and above	10 (41.7)
	Government Sector	3 (12.5)
	Private Sector	11 (45.8)
Occupation	Self Employed	2 (8.3)
	Home Maker	8 (33.3)
School type	Rural	12 (50)
School type	Urban	12 (50)
Settings	Government	12 (50)
Settings	Private	12 (50)

Source: computed

Figures in parentheses are percentages

Table 5.1 depicts the socio-demographic profile of the parents of school-going adolescents. The mean age of parents found to be 41.63 years and SD was 3.48. This indicates that the parents were between the ages of 36 to 48 years old. The majority

of them were female (87.5%), had a postgraduate degree or above (41.7%), were employed in the private sector (45.8%) and all of them were staying with their spouses and children. There was equal participant distribution both in school type and settings.

Similar findings were found in another study in terms of the age of parents, that the majority are female parents and in the marital status of parents of children and adolescents (Abera, Robbins, & Tesfaye, 2015) whereas divergent results were found in terms of the occupational status and education status. This means that the parents are well educated and they are doing jobs in different sectors.

Table 5.2 Socio-Demographic Profile of Teachers N=24

Age of Teachers'	Mean	SD
Age of Teachers	44.17	4.93
Gender	Male	7 (29.2)
Gender	Female	17 (70.8)
	Staying together	24 (100)
Marital Status	Separated or divorced	0 (00)
	UG with B.Ed.	3 (12.5)
Education	PG with B.Ed./M.Ed./SET	21 (87.5)
School type	Rural	12 (50)
School type	Urban	12 (50)
Settings	Government	12 (50)
bettings	Private	12 (50)
Teaching Experience	Mean	SD
Teaching Experience	15	4.85

Source: computed

Figures in parentheses are percentages

Socio-demographic profile of teachers is illustrated in table 5.2. The mean age of teachers is 44.17 years and SD is 4.93. This designates that the age of teachers was between 36 to 55 years old. Most of the teachers were female (70.8%), received education up to postgraduate level (87.5%) and all of them were staying with their spouse and family. The teaching experience of teachers found that the mean age was 15 years (SD=4.85). This depicts that they had 7 to 25 years of teaching experience. There was equal participant distribution both in school type and settings.

Hardre & Sullivan (2009) found parallel results that the majority of participants were female teachers also regarding the experience of teachers. The other study also found similar findings on the educational status of teachers (Rathi, Riddell, & Worsely, 2018).

5.2 Parents' and Teachers' Perception of Environment

This section infers the parents' and teachers' perception of the environment of school-going adolescents. The qualitative data analysis and interpretations are based on different themes and sub-themes of negative effects in school-going adolescent's environment. The findings are interpreted in sub-sections further down;

5.2.1 Themes and sub-themes definitions

The definition of themes and subthemes of environment leads to understanding the clear cut findings.

Table 5.3 List of Themes, Sub-Themes and Definitions of Environment

List	Theme	Sub-theme	Definitions				
		Excessive use of mobile and Internet	School-going adolescents' excessive use of different media through mobile phones.				
		Game addiction	Participants' explanation of school-going adolescents' excessive involvement in online games.				
1	Home Environment	Lack of home environment	This includes the unhealthy relationship between parents, parents' health and economic problems, lack of parental care and protection towards school-going adolescents.				
		Unhealthy parent and child relationship	Participants' explanation on issues in parents and child's relationship.				
		Lack of teacher- student relationship	Participants' perception of the teacher and student relationship issues.				
2	2 School Lack of teacher-parent relationship	Lack of teacher-parent relationship	Participants' opinion on the teacher and parent relationship issues.				
		Poor performance in studies	Participants' explanation of the problems related to the studies of school-going adolescents.				
3	Community	Unsafe on the way from home to school and return	The problems occurring among school-going adolescents during the way from home to school and return.				
	& support group	Peer influence or pressure	Participants' opinion on negative peer influence or pressure of school-going adolescents.				

Table 5.3 depicts the definitions of various themes and sub-themes of the environment. The major themes under environment are home, school, community and support group of school-going adolescents.

5.2.2 Frequency of participants' perception of each sub-themes of environment

The sub-section tries to infer the frequency of participants' perception of the environment. The results also focus on the sub-themes codes difference between school types and settings.

Table 5.4 Frequency of Parents' Perception of Environment N=24

TO I	G 1 4	Overall	School		Settings	
Theme	Sub-theme	N	types			
			G	P	R	U
	Excessive use of mobile and internet	18	9	9	8	10
Home	Game addiction	7	2	5	3	4
Home	Lack of home environment	13	5	8	6	7
	Unhealthy parent-child relationship	3	1	2	1	2
	Lack of teacher-student relationship	6	0	6	2	4
School	Lack of teacher-parent relationship	2	0	2	0	2
	Poor performance in studies	10	6	4	4	6
Community &	Unsafe on the way from home to school and return	15	7	8	11	4
support group	Peer influence or pressure	17	9	8	8	9
	Total	91	39	52	43	48

Source: computed

G=government; P=private, R=rural; U=urban

Table 5.4 shows the frequency of parents' perception of each sub-themes of the environment of school-going adolescents. This table also depicts the frequency of school-types and settings on each sub-theme under the theme environment. The results indicate that 24 parents were interviewed and over 91 responses were found on the environment. Excessive mobile and internet use among school-going adolescents was the most reported sub-theme by a majority of parents (N=18) and the least was lack of teacher-parent relationship (N=2). Parents from private schools (N=52) reported that school-going adolescents' overall environment are more prone to risks compared to the responses of the parents from government schools (N=39). Parents from urban areas (N=48) reported that the overall environment of school-going adolescents was unsafe than their rural counterparts (N=43).

Table 5.5 Frequency of Teachers' Perception of Environment N=24

Theme	Sub-theme	Overall N	School type		Settings	
		11	G	P	R 11 3 9 7 4 3 9 6	U
	Excessive use of mobile and internet	22	10	12	11	11
	Game addiction	8	3	5	3	5
Home	Lack of home environment	17	9	8	9	8
	Unhealthy parent-child relationship	9	4	5	7	2
	Lack of teacher-student relationship	7	5	2	4	3
School	Lack of teacher-parent relationship	5	4	1	3	2
	Poor performance in studies	15	10	5	9	6
Community &	Unsafe on the way from home to school and return	10	5	5	6	4
support group	Peer influence or pressure	15	7	8	8	7
	Total	108	57	51	60	48

Source: computed

G=government; P=private, R=rural; U=urban

The frequency of teachers' perception of each sub-themes of the environment of school-going adolescents is illustrated in Table 5.5. The results show 108 responses regarding the environment of adolescents based on interviews with 24 teachers. Most of the teachers stated that excessive mobile and internet use (N=22) was mostly seen among school-going adolescents and the least factor which affected the environment was the lack of teacher-parent relationship (N=5). Most of the teachers from government schools (N=57) thought that school-going adolescents had an unsafe overall environment compared to the opinions of private school teachers (N=51). Teachers from rural areas (N=60) reported that school-going adolescents had an unsafe overall environment than teachers from urban areas (N=48).

5.2.3 Participants' perceptions under each sub-theme of environment

Under the broad topic of environment, the current study found various negative effects in the home, school, community and support group. School-going adolescents have various problems under each theme of the environment. The parents' and teachers' testimonials and inferred linkages are illustrated under the following themes.

1. Home environment

Exploring the topic of home environment can help to learn more about adolescents and their relationship with their close ones. The parents' and teachers' opinions are mentioned in the following sub-themes.

Excessive use of mobile & internet

Most of the participants (parents=18/24 & teachers=22/24) reported that school-going adolescents were prone to excessive use of mobile and internet at home. Comments of participants are described as follows;

My son used to play online games.... affected his studies...last time his overall academic performance was very poor. (Parent 4: female, 41 years old, private school and rural setting)

Social media is a guest that comes between study and sleep.....when that person (social media) visits.... he (social media) steals the time dedicated to study and sleep. (Parent 13: Male, 44 years old, government school and urban setting)

WhatsApp or Instagram is endless.... endless.... film will be over in two and a half hours ...but social media is endless... upward scrolling is endless on the mobile phones.... our brain is automatically moving with it (social media)no time limitation for social media. Even us adults cannot control ourselves in using social

media.... then the children are more vulnerable.... It (social media) is a more addictive behaviour than substance abuse.......Children panic if a like or share is not received on social media.... addictive behaviour. (Parent 18, female, 45 years old, private school and rural setting)

Majority of the children have a separate room in their home...... they (children) close the door and stay inside with a mobile phone...... chatting and social media use till midnight or one am.... they only want phone... no food...no sleep...no studies. (Parent 22: female, 48 years old, private school and urban setting)

Most of the children are using Whatsapp and Facebook until midnight. Children are involved in various chatting groups....class groups... tutorial groups etc... majority of the chatting is not related to studies. (**Teacher 4:** male, 45 years old, government school and urban setting)

Media changes a person badly depending on the age and mindset of the individual using social media. It can affect children who are exposed to this at a very young age.... because they (children) do not know what is right and what is wrong at this age. (**Teacher 11:** female, 44, years old, government school and urban setting)

Boys are more likely to use social media ... because they are more interested in watching and doing videos on 'TikTok' and elsewhere. (**Teacher 13:** male, 48 years old, government school and rural setting)

One of my students is studying in 9th standard...her mother is working in a far place...she is staying with grandmother...mother bought a smartphone and had given to her.... She started chatting with classmates...inappropriate chatting at night.... tried to do kiss classmate....we caught up before that. (**Teacher 17:** male, 45 years old, government school and rural setting)

• Game addiction

Game addiction is common among school-going adolescents. A few respondents (parents=7/24 & teachers=8/24) stated that excessive online gaming was what affected the school-going adolescents' development the most. A few respondents expressed their views of the game addiction of school-going adolescents down below;

Today there are many harmful games.... children are addicted to it....because of the use of such games, they do not interact with family members. Even at the dining table, children are eating while looking at their mobile phones. (Parent 6: female, 45 years old, private school and urban setting)

Among all of us.....parents always discuss.... children are more interested in playing online games...especially boys. (Parent 7: female, 42 years old, private school and rural setting)

It would be nice if games like PUBG could be banned.... children are always on it.... It's high time that it's blocked. (**Parent 20:** female 46 years old, government school and rural setting)

A game that children can connect and play via the internet.... they will do it for as long as they want. (**Teacher 1:** female, 39 years old, private school and rural setting) Children buy mobiles mostly to play games.....more time playing the game. Nowadays many online games can be played together with friends...such games can be played for hours...It can lead to many difficulties among children. (**Teacher 13:** male, 48 years old, government school and rural setting)

• Lack of home environment

More than half of the study participants (parents=13/24 & teachers=17/24) conveyed that the lack of home environment affected the school-going adolescents' overall development. There was a lack of supportive environment from home and it had a negative effect on the development of school-going adolescents. The major narratives are;

A school-going adolescent started using substances because no one cares about him in his house. Only mother and sister in his house.... father died. (Parent 2: female, 38 years old, private school and urban setting)

My son told me that a child in his class misbehaved with others. The reason for that is the home condition. No one pays attention to him or tells him the right way. His father is an alcoholic...... he does not obey his mother. (Parent 5: female, 40 years old, private school and urban setting)

A kid in my child's class is behaving very badly. It seems to be because of the situation at his home. 'Mother is remarried.... stepfather would not say anything no matter what he did. (Parent 7: female, 42 years old, private school and rural setting) Problems between parents can affect children.... seriously affect a child's learning and behaviour.... many examples are around in this society (Parent 11: female, 38 years old, government school and rural area)

My daughter says that her friend's father physically and verbally abuses his mother.... I (friend) do not like my father....If I get a job I will go and live somewhere else with my mom...not going to stay with him (father). (Parent 18: female, 45 years old, private school and rural setting)

Father has no time.... mom has no time...no one in the family has time.... Now it has turned into not talking to each other inside the family. (Parent 21: female, 46 years old, government school and urban setting)

In some houses, women look after the house.... sometimes the father dies...sometimes the father will be in the Gulf (abroad)... the child comes from this background...most children do not listen to their mother...children will be misled by money. (**Teacher 13:** male, 48 years old, government school and rural setting)

Many parents are married two, three or four times...they (both parents) do not look at the children...they (both parents) are looking for their own happiness...children are often helpless...those children have more problems. (**Teacher 17:** male, 45 years old, government school and rural setting)

In this school, some children came from broken families. Those children cannot figure out what is right and what is wrong. They are often seen getting into a lot of trouble. (**Teacher 24:** male, 54 years old, private school, rural setting)

• Unhealthy parent-child relationship

Only 3 parents out of 24 reported that the parent's inattention creates a lot of problems among school-going adolescents. There were 9 out of 24 teachers who responded about the unhealthy parent-child relationship. Some of the major transcripts of participants are cited down below;

Due to the busy schedule of parents... they are not able to pay attention to their child.... that child had difficulties. (**Parent 4:** female, 41 years old, private school and rural setting)

Parents often do not think about how they were in their adolescent period. That is what often breaks down relationships with children. (**Parent 5:** female parent, 40 years old, private school and urban setting)

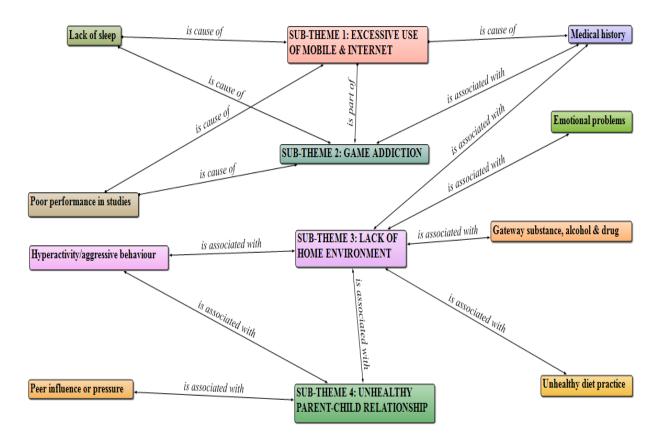
Children are often moving away from family members.... because.... parents do not have time to spend with their children. (Parent 6: female, 45 years old, private school and urban setting)

"Sir he grabbed me and pushed me away", a mother came and told me... "sir he grabbed me and pushed me away.......I (mother) went and hit the wall and fell....what do I (mother) do with my son.....sir".....I (teacher) was puzzled by such questions. (Teacher 13: male, 48 years old, government school and rural setting)

Communication between parents and children is rare. (Teacher 18: male, 55 years old, private school and urban setting)

Many parents today do not listen to their children. (**Teacher 19:** female, 46 years old, government school and rural setting)

Figure 5.6 Diagrammatic Representation of the Home Environment of Schoolgoing Adolescents connected with other Sub-Themes



Negative effects in the home environment had an association with lack of sleep, unhealthy diet practice, poor performance in studies, hyperactivity or aggressive behaviour, substance use, negative peer influence and emotional problems among school-going adolescents (figure 5.6).

2. School environment

The sub-themes under the school environment indicate the lack of teacherstudent relationship, lack of teacher-parent relationship and poor performance in studies. The participants expressed their opinion in the below sub-themes.

Lack of teacher-student relationship

A few of the participant (parents=6/24 & teacher=7/24) comments described lack of teacher-student relationship in the school environment.

Today's children have no respect for the teacher.... they only like supportive teachers. (Parent 18: female, 45 years old, private school and rural setting)

In my class, a group of children always speak out against what teachers say.

(**Teacher 10:** female, 41 years old, government school and urban setting)

Many children will not admit their mistake....at that time.... children turn against the teachers. (**Teacher 13:** male, 48 years old, government school and rural setting)

Today's law is in favour of children.....We live in a society where many recent events have portrayed teachers as bad and children as good. (**Teacher 19:** female, 46 years old, government school and rural setting)

• Lack of teacher-parent relationship

Only 2 parent participants out of 24 reported the lack of teacher-parent relationship and 5 teacher participants out of 24 also responded. Major transcripts are mentioned underneath;

Some parents came only for admission and then only for receiving the transfer certificate.... If we call them (parents) they won't come.... their children have more problems. (**Teacher 12:** male, 46 years old, government school and rural setting)

Often a large number of immature parents (those who got married at a very young age), blame the teachers as teachers often tell them about their child's problems.

(Teacher 4: male, 45 years old, government school and urban setting)

Many parents do not even pick up the phone when we call....do not inquire about their child's study...... some parents did not come even once to school after admission. (**Teacher 5:** female, 47 years old, government school and rural setting)

There is a lot of distance between teachers and parents today. A lot of child rights commissions who only favour the child's/parents' side came between them.

(**Teacher 11:** female, 44 years old, government school and urban setting)

A child is a terrible bully in my class....one day I told his parent.... the parent replied.... every evening he (child) comes to me (parent) and tells me about you... if anything happens to my child. I (parent) will take you to court. (**Teacher 22:** female, 40 years old, private school and rural setting)

• Poor performance in studies

Most of the participants (parent=10/24 & teacher=15/24) remarked that school-going adolescents were not able to study due to various factors. Comments are described as follows:

My daughter.... she would only study If I am sitting with her.... Otherwise, she won't study at all. (**Parent 9:** female, 39 years old, government school, urban setting)

Majority of the children cannot concentrate on their studies.... there can be various reasons such as negative thoughts, not eating properly, excessive use of mobile phone and so on. (Parent 16: female, 40 years old, government school and rural setting)

Majority of the boys are far behind in studies.... they want to get involved in something else. (**Teacher 5:** female, 47 years old, government school and rural setting)

Whenever exams are coming, some students will be opening their books the previous day only...that whole night they will be studying...and they will be coming here (school) and they will be drowsy while writing the exam.....so in that way, they will be getting fewer marks. (**Teacher 10:** female, 41 years old, government school and urban setting)

Even a child who is good at studies spends less time studying. Most of the children think that studying is something that they do for others. (**Teacher 14:** female, 45 years old, government school and rural setting)

Some children in this area could not complete their studies... because of financial problems...broken family... parents are interested in getting the girls married somehow. (**Teacher 17:** male, 45 years old, government school and rural setting)

The analysis of the sub-themes of the school environment found that there were negative effects in the teacher-student relationship, teacher-parent relationship and studies of school-going adolescents. The negative school environment sub-themes are associated with negative peer influence, emotional problems, hyperactivity or aggressive behaviour, unhealthy parent-child relationship, excessive use of mobile

and internet use, lack of home environment, game addiction, lack of sleep and unhealthy diet practice (figure 5.7).

Peer influence or pressure is associated with SUB-THEME 1: LACK OF TEACHER-STUDENT RELATIONSHIP is associated with Emotional problems is associated with SUB-THEME 2: LACK OF TEACHER -PARENT RELATIONSHIP Hyperactivity/aggressive behaviour Unhealthy parent-child relationship Excessive use of mobile & internet is associated wit Lack of home environment is associated with SUB-THEME 3: POOR is associated with PERFORMANCE IN STUDIES Game Addiction is associated with is associated with Lack of sleep

Unhealthy diet practice

Figure 5.7 Diagrammatic Representation of School Environment of Schoolgoing Adolescents with other Sub-Themes

3. Community & Support group

This theme infers the influences of being unsafe on the way from home to school and return and peer influence or pressure of school-going adolescents. Participants expressed their opinion in the succeeding sub-themes.

• Unsafe on the way from home to school and return

While in the majority of transcripts participants mentioned their comments on school-going adolescents being unsafe on the way from home to school and return, there were 15 parents out of 24 and 10 teachers out of 24 who responded further down on the sub-theme;

It is the situations where anyone can influence children...dangers are hidden. (Parent 2: female parent, 38 years old, private school and urban setting)

Not at all safe...... it's the time during which parents and no one else is there to look after them.... during this time that collective planning takes place...where to

go? To the beach or visit some other place.... many mistakes are made during this one time. (Parent 8: female, 36 years old, private school and rural area)

Difficulties are there.... various difficulties.... many outsiders are waiting at the bus stop wanting to mingle with children during the school time. (**Parent 10:** male, 43 years old, government school and rural setting)

Children should not go shopping after school...if children have more money they will go to the shop and get into a lot of trouble....do not give them (children) too much money (**Parent 11: female**, 38 years old, government school and rural area)

Children are not safe even in their own home during this time.... then imagine what happens on the way to school. (**Teacher 7:** female, 49 years old, private school and urban setting)

No school bus...no vehicle.... this place is a place where the child has to walk four kilometres through the forest and paddy fields. A wild elephant may be on the way...therefore many children were sometimes not able to go to school or return during school days....that is a problem...the second problem is harassment from anti-socials...This is what happened recently...A boy got a lift on a bike to come to school....after sometime police arrested the bike rider along with the boy...the person riding the bike was a thief.....we heard the news and we went to the police station and took him to school. (**Teacher 17:** male, 45 years old, government school and rural setting)

• Peer influence or pressure

More than half of the participants (parent=17/24 & teacher=15/24) commented that school-going adolescents had a negative peer influence and peer pressure. The participants' perspectives are described below;

Whenever my son attends a school event with the girls.... friends will make fun of him.... are you Krishna (God)......other friends call my son "Pennan" (male-girl)? So now he wants to withdraw from all events. (Parent 3: male, 46 years old, government school and rural setting)

My son is good at studies.... When the teacher asks him a question in class, even if he knows the answer, he is afraid to tell because of the fear of being abused by classmates. (Parent 6: female, 45 years old, private school and urban setting)

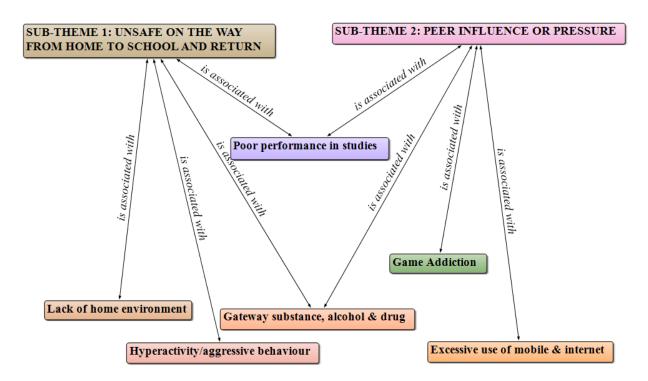
No matter what they do, they will die for their friends (**Teacher 6:** female, 42 years old, private school and urban setting)

Children's scripture is what their friends say (**Teacher 7:** female, 49 years old, private school and urban setting)

Often it is seen that the children who study are not studying in exams because they have friends who are lagging in studies......they are doing it for friends. (**Teacher 18:** male, 55 years old, private school and urban setting)

The theme community & support group and its sub-themes summarised that the school-going adolescents experienced unsafe conditions in public places and also from peers. The excessive mobile or internet use, game addiction, poor performance in studies, substance use, lack of home environment and hyperactivity or aggressive behaviour were connected with the theme community & support group of school-going adolescents (figure 5.8).

Figure 5.8 Diagrammatic Representation of Community and Support Group of School-going Adolescents with other Sub-Themes



In conclusion, the findings of the overall environment noted that the unsafe environment is due to various factors such as substance use, peer pressure, lack of relationship, lack of home environment and so on. The transcripts mentioned the association with the sub-themes of the environment of school-going adolescents. This indicates that the parents and teachers reported that the school-going adolescents were more unsafe in home, school, community and support group.

Similar findings were found in a study that lack of parental involvement had a significant risk with adolescents' internet usage (Xin et al., 2018). Chen & Astor (2008) reported parallel results with the current study that male students are more aggressive in their behaviour towards teachers.

5.3 Parents' and Teachers' Perception of Health

This section emphasises the parents' and teachers' perception of the health of school-going adolescents. The qualitative data analysis and interpretations based on different themes and sub-themes of negative effects in school-going adolescent's health. The findings are demonstrated in the below sub-sections.

5.3.1 Themes and sub-themes definitions

Table 5.9 List of Themes, Sub-Themes and Definitions of Health

List	Theme	Sub-theme	Definitions				
1	Physical	Lack of sleep	Participants' explanation of the sleep disturbance of				
	Health	Lack of sleep	school-going adolescents.				
2			This includes the school-going adolescents not eating				
		Unhealthy diet practice	vegetables and fruits, improper timing and poor intake of				
			water.				
	Nutrition	Skipping breakfast	Participants explaining the food intake of school-going				
			adolescents.				
		Attraction to junk food	This includes the most preferable food for school-going				
		, and the second	adolescents.				
3		Irregular physical	Participants' perception of the regular physical exercise				
	Physical	activity	of school-going adolescents.				
	Activity	Lack of physical environment	This includes the convenience of time and playground				
4		Unhealthy personal	for school-going adolescents. All discussions on the unhealthy hygiene practice of				
4	Hygiene	hygiene practice	school-going adolescents.				
	Practice	Poor hygiene	This includes participants' responses to the home and				
	Tractice	environment	school hygiene environment.				
5	Medical		Participants' view on the reason behind the major health-				
	condition	Medical history	related diseases of school-going adolescents.				
6		Gateway substance,	School-going adolescents' pattern and availability of				
	Substance	alcohol & drugs	substance use.				
	Use	Company	With whom do they use?				
7		Lack of awareness	Participants' explanation of the health and environment-				
	Awareness		related awareness classes and the attitude of school-				
			going adolescents towards the class.				
8			Participants' view on behaviours of school-going				
		Emotional problems	adolescents such as nervousness, being easily scared,				
	Emotional		worrying and fear				
	and	Conduct problems	School-going adolescents' problems related to lying,				
	Behaviour		cheating, stealing from home, school or elsewhere.				
	al Problems	Hyperactivity or	Participants' opinion on over activeness, restlessness,				
	Problems	aggressive behaviour	fidgeting and aggressive behaviour of school-going				
		D CD '1	adolescents.				
		Poor of Prosocial	This includes school-going adolescents' poor voluntary				
		Behaviour	service, lack of sharing or kindness towards others.				

The definitions of various themes and sub-themes of health are depicted in table 5.9. The major themes under health are physical health, nutrition, physical activity, hygiene practice, medical condition, substance use, awareness, emotional and behavioural problems of school-going adolescents.

5.3.2 Frequency of participant's perception of each sub-themes of health

The sub-section shows the frequency of participant's perception of health. The results also emphasise the sub-theme codes difference between school types and settings.

Table 5.10 Frequency of Parents' Perception of Health N=24

Theme	Sub-theme	Overall N	School type		Settings	
Theme	Sub-theme	14	G	P	R	U
Physical Health	Physical Health Lack of sleep		5	3	4	4
	Unhealthy diet practice	17	9	8	7	10
Nutrition	Skipping breakfast	16	7	9	6	10
	Attraction to junk food	10	4	6	5	5
Physical Activity	Irregular physical activity	20	10	10	8	12
Filysical Activity	Lack of physical environment	2	1	1	2	0
Hygiene Practice	Unhealthy personal hygiene practice	14	6	8	6	8
Hygiene Fractice	Poor hygiene environment	2	2	0	1	1
Medical Condition	Medical history	11	6	5	4	7
Substance Use	Gateway substance, alcohol & drugs	18	11	7	10	8
Substance Use	Company	5	3	2	1	4
Awareness	Lack of awareness	19	11	8	9	10
Emotional and	Emotional problems	8	4	4	3	5
Behavioural	Conduct problems	3	1	2	2	1
Problems	Hyperactivity or aggressive behaviour	16	7	9	8	8
Tiunichis	Poor prosocial behaviour	5	3	2	3	2
	Total	174	90	84	79	95

Source: computed G=government; P=private, R=rural; U=urban

The frequency of parents' perception of each sub-themes of the health of school-going adolescents is depicted in table 5.10. This table also shows the frequency of school-types and settings on each sub-theme under the theme of health. The findings revealed that 24 parents were interviewed and overall, 174 responses were found about the health. Most of the parents conveyed that irregular physical activity (N=20) was the problem mostly seen among school-going adolescents and the lack of physical environment (N=2) was the least of the problems. Parents from government schools (N=90) stated that school-going adolescents' overall health is more prone to risks than parents from private schools (N=39). Parents from urban

areas (N=95) reported that the overall health of school-going adolescents was unhealthier than in rural areas (N=79).

Table 5.11 Frequency of Teachers' Perception of Health N=24

7 01	Sub-theme	Overall N	School		Settings	
Theme			type			
			G	P	R	U
Physical Health	Lack of sleep	11	5	6	6	4
	Unhealthy diet practice	15	7	8	10	10
Nutrition	Skipping breakfast	12	7	5	4	10
	Attraction to junk food	12	5	7	5	5
Dhysical Activity	Irregular physical activity	9	3	6	4	12
Physical Activity	Lack of physical environment	3	2	1	3	0
Hygiona Practice	Unhealthy personal hygiene practice	10	5	5	5	8
Hygiene Practice	Poor hygiene environment	3	3	0	2	1
Medical Condition	Medical history	12	8	4	9	7
Substance Use	Gateway substance, alcohol & drugs	16	8	8	8	8
Substance Use	Company	5	2	3	4	4
Awareness	Lack of awareness	7	4	3	5	10
Emotional and	Emotional problems	7	5	2	6	5
Behavioural	Conduct problems	3	1	2	1	1
Problems	Hyperactivity or aggressive behaviour	16	8	8	9	8
Troblems	Poor Prosocial Behaviour	4	2	2	1	2
	Total	145	75	70	85	95

Source: computed G=government; P=private, R=rural; U=urban

Table 5.11 depicts the frequency of teachers' perception of each sub-themes of the health of school-going adolescents. This table also illustrates the frequency of school-types and settings on each sub-theme under the theme of health. The findings revealed that 24 teachers were interviewed and overall, 145 responses were found about the health. Most of the parents emphasised that gateway substance, alcohol & drugs (N=16) and hyperactivity or aggressive behaviour (N=16) was the most seen problem among school-going adolescents and the least of the problems were lack of physical environment (N=3), poor hygiene environment (N=3) and conduct problems (N=3). Teachers from government schools (N=75) stated that school-going adolescents' overall health is more prone to risks than parents from private schools (N=70). Teachers from urban areas (N=95) reported that the overall health of school-going adolescents was unhealthier than in rural areas (N=85).

5.3.3 Participants' perceptions under each sub-theme of health

Sub-section emphasises the different health-related themes of school-going adolescents from the parents' and teachers' perspective. The study found various negative effects on the themes and sub-themes of health. Testimonials from the participants and graphical illustrations based on them also emphasised the following sub-themes of health below;

1. Physical health

The theme of physical health reflects the lack of sleep among school-going adolescents. Participants expressed their opinion in the succeeding sub-themes.

Lack of sleep

Only 8 out of 24 parents and 11 out of 24 teachers expressed that school-going adolescents had a lack of sleep. Major comments are mentioned below;

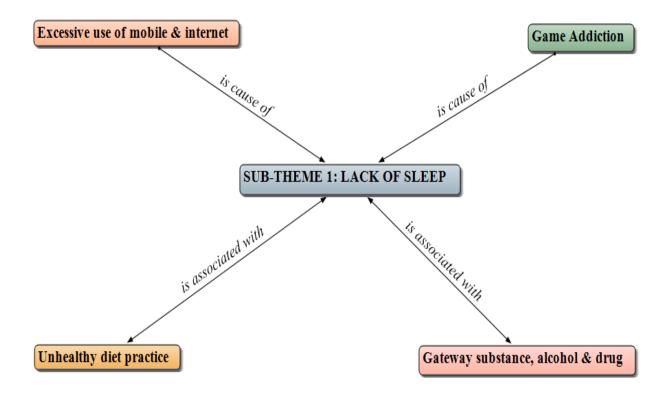
Children do not sleep at all because they watch mobile and television. My child has a hard time getting up in the morning. (**Parent 8:** female, 36 years old, private school and rural setting)

Children are sleeping in the morning classes.... when we ask.... the rest of the children will answer. He was online until 2 or 3 am. He does not use that time to study...do not use it for sleep.... He was looking for something on his mobile. (**Teacher 3:** female, 40 years old, private school and urban setting)

Nowadays children have less sleep often children do not sleep because of excessive mobile use. (**Teacher 20:** female, 40 years old, private school and rural setting)

The subtheme under the physical activity points out that the school-going adolescents had a lack of sleep. The factors affecting the lack of sleep were connected to substance use, excessive use of mobile and internet, game addiction and unhealthy diet practices (figure 5.12).

Figure 5.12 Diagram Representation of Physical Health of School-going Adolescents and its Linkage with Other Sub-Themes.



2. Nutrition

Nutrition is another theme under the health of school-going adolescents. The major nutrition sub-themes are unhealthy diet practice, skipping breakfast and attraction to junk food. The transcripts are included under each sub-theme.

• Unhealthy diet practice

More than half of the parents (17/24) and teachers (15/24) reported that school-going adolescents had unhealthy dietary practices. Major transcripts are labelled below;

In the case of my daughter, she did not eat vegetables as a child and not at all nowadays. (Parent 1: female, 37 years old, private school and rural setting)

It is difficult for my child to drink water and eat vegetables. I used to force my child into eating food and drinking water. (**Parent 2:** female, 38 years old, private school and urban setting)

My daughter is very hesitant to eat....one dosa....one idly...that's her eating pattern. (Parent 12: female, 38 years old, government school and rural setting)

My child and most of the children are not interested in having dosa, idly, vegetables, milk.... they do not want desirable food. (**Parent 15:** female, 47 years old, private school and urban setting)

Most children bring fast food items for lunch. (**Teacher 3:** female, 40 years old, private school and urban setting)

Children who are addicted to the substance have been affected by a bad diet. (**Teacher 12:** male, 46 years old, government school and rural setting)

• Skipping breakfast

Most of the parents (16/24) and teachers (12/24) expressed that school-going adolescents are skipping breakfast most of the time on school days. The participants' views are described as follows;

My child does not eat in the morning.... the main reason is that....my child does not have the time. (Parent 1: female, 37 years old, private school and rural setting)

My daughter often does not eat breakfast in the morning......breakfast is important because it is something to eat after a long break.... But....nowadays she goes to tuition at 6.30 am and does not eat.... many students are following this pattern.

(Parent 6: female, 45 years old, private school and urban setting)

Children do not eat in the morning...they eat something in the afternoon.... eat heavy at night. Today, children's diets are in disarray. (Parent 13: male, 44 years old, government school and urban setting)

For many girls...skipping breakfast is a way to stay slim. (**Teacher 6:** female, 42 years old, private school and urban setting)

Attraction to junk food

Majority of the participants (parent=10/24 & teacher=12/24) point out that school-going adolescents are mostly attracted to junk food. The participants' transcripts are cited below;

Children are generally less interested in home-made food. They like junk food. (Parent 2: female, 38 years old, private school and urban setting)

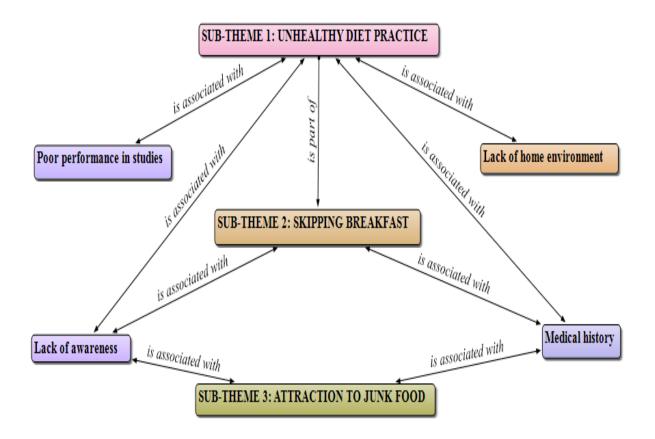
Children are more likely to consume fast food. Even though fast food these days is easy and tasty.... It does a lot of harm...Parents do not have time to prepare food at home.... they also encourage children to eat junk food. (Parent 17: female, 37 years old, private school and rural setting)

My son does not want home-cooked food.... He often argues that he wants porotta with chicken fry, burgers, sandwiches.... (Parent 23: female, 39 years old, government school and urban setting)

If a child brings fast food to class for lunch.... the rest of the children will eat that only. (**Teacher 8:** female, 36 years old, private school and urban setting)

The theme nutrition revealed school-going adolescents had unhealthy diet practice, they skip breakfast and are attracted to junk food. Figure 5.13 depicts that the lack of nutrition among school-going adolescents had a connection with lack of home environment, lack of awareness, medical history and poor performance in studies.

Figure 5.13 Diagrammatic Representation of Nutrition of School-going adolescents and its connection with other sub-themes.



3. Physical activity

The physical activity emphasises the lack of daily physical exercise and lack of environment. The participants' comments are cited in the following sub-themes.

• Irregular physical activity

Majority of participants (parent=20 & teacher=9) expressed that school-going adolescents are inactive as far as regular exercise is concerned. Major viewpoints from participants are quoted below;

Children themselves are not interested in doing daily exercise. No matter how much we say, they do not understand its significance. (Parent 5: female, 40 years old, private school and urban setting)

Cycling is a good form of exercise. My son has a bicycle and he does not use it properly. If you ride a bicycle on time, it's an exercise routine. Today with the advent of different vehicles, children are reluctant to even walk. In general, exercise is less common among children. (Parent 10: male, 43 years old, government school and rural setting)

My daughter is too lazy to exercise. In my opinion, girls are far behind in physical exercise. (Parent 19: female, 42 years old, government school and urban setting)

The school started classes like yoga last year.... But the children here did not want that.... yoga class stopped...Children are also reluctant to exercise daily. (**Teacher 11:** female, 44 years old, government school and urban setting)

Nowadays, children lack exercise...they have early morning tuition classes...then school class...then tuition...Saturday and Sunday also tuition...in-between time mobile use...Then where is the time for exercise? (**Teacher 24:** male, 54 years old, private school, rural setting)

• Lack of physical environment

A few participants (parent=2 & teacher=3) reported the lack of physical exercise due to the lack of environment of school-going adolescents. The participants' comments are mentioned below;

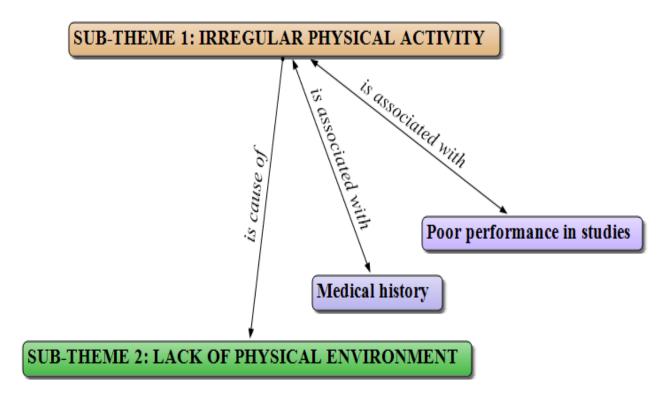
In my school time....we would have looked at the drill time at school...Now my daughter does not have a drill...I said at the PTA meeting that children need a drill period.....At that time, everyone opposed me (Parent 18: female, 45 years old, private school and rural setting)

Most parents today do not leave their children outside the home. Their children do not go out and play with others. (**Teacher 18:** male, 55 years old, private school and urban setting)

Higher Secondary Schools do not have physical training classes or play periods for children. Therefore, activities for physical fitness do not take place. (**Teacher 13:** male, 48 years old, government school and rural setting)

We do not give children time to exercise. The higher secondary school itself has physical training (PT) period. But we are taking classes even during the PT period...no physical training...no physical education. (**Teacher 18:** male, 55 years old, private school and urban setting)

Figure 5.14 Diagrammatic Representation of Physical Activity and its Connection with Other Sub-Themes.



The school-going adolescents had a lack of physical activity and a poor physical environment was indicated under the theme of physical activity. Figure 5.14 show that the lack of physical activity and physical environment had a linkage with a medical history and poor performance in studies.

4. Hygiene practice

The school-going adolescents' unhealthy personal hygiene and poor hygiene environment are emphasised under the theme of hygiene practice. Participants' statements are divided into the following sub-themes:

Unhealthy personal hygiene practice

Majority of the participants (parent-14 & teacher=10) reported that school-going adolescents had unhealthy personal hygiene practices. Major statements are mentioned below;

My son's genitals were itchy and infected.... because of his unhealthy hygiene practice. (Parent 3: male, 46 years old, government school and rural setting)

Children often stink when they do not wash their socks. (**Teacher 8:** female, 36 years old, private school and urban setting)

Many children do not do it properly as they wash their hands before eating. The school has taps and enough water to wash their hands. But children do not know how to wash their hands. (**Teacher 13:** male, 48 years old, government school and rural setting)

Often girls do not have facilities to change undergarments at school...The dress worn in the morning is left unchanged until the evening...dress becomes wetter...It can cause diseases. (**Teacher 14:** female, 45 years old, government school and rural setting)

Today it is becoming a fashion for most children to wear dirty clothes without taking a bath. (**Teacher 19:** female, 46 years old, government school and rural setting)

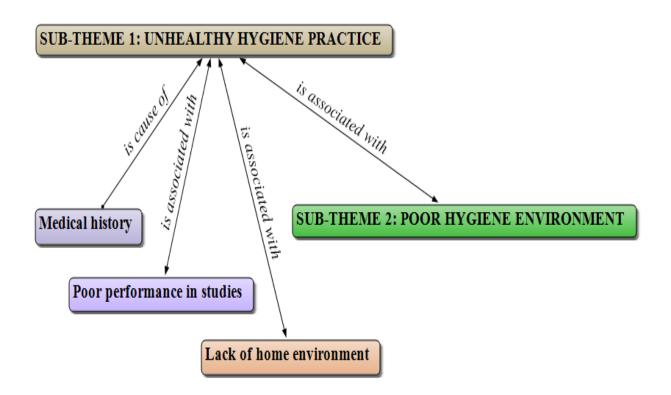
• Poor hygiene environment

A few participants (parent=2 & teacher=3) stated that school-going adolescents had a poor hygiene environment. The transcripts are mentioned below;

My house and the surrounding area are waterlogged during the rainy season. Hygiene is often poor. It can affect children.........A drainage system is required. (Parent 3: male, 46 years old, government school and rural setting)

The school, which has thousands of children, lacks toilet facilities.... interval time is very short.....often children, are not able to do their hygiene practice. (Parent 13: male, 44 years old, government school and urban setting)

Figure 5.15 Diagrammatic Representation of Hygiene Practice of School-going Adolescents and its Linkage with Other Sub-Themes.



In conclusion, the theme hygiene practice found that school-going adolescents were in poor hygiene practice. Poor hygiene practice is associated with the medical history, poor performance in studies and lack of home environment.

5. Medical condition

The theme emphasises the medical conditions of school-going adolescents. The participants mentioned the medical history of school-going adolescents in the following sub-themes.

Medical history

Almost half of the participants (parent=11 & teacher=12) reported that the school-going adolescents had a medical history of obesity, headache, anaemia, dizziness and so on. Major opinions are cited below;

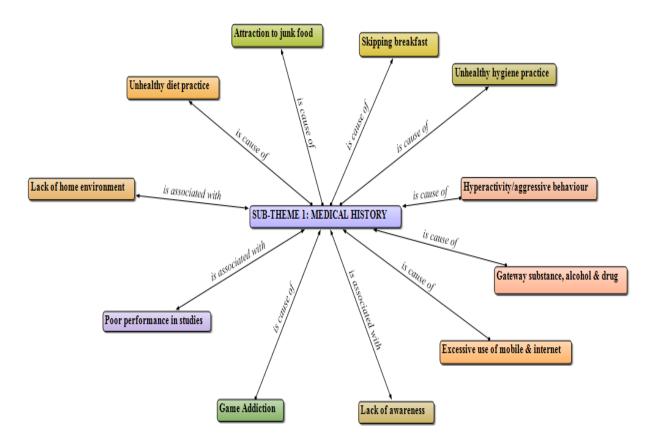
Eating too much junk food and not exercising can lead to obesity. It is found in many children. (Parent 6: female, 45 years old, private school and urban setting)

Children often fall unconscious at school assembly...Because of not eating breakfast.

(Parent 3: male, 46 years old, government school and rural setting)

Poor intake of food among children leads to anaemia, white spot on face, dizziness, fatigue and many...many.... different types of diseases. (Parent 11: female, 38 years old, government school and rural setting)

Figure 5.16 Diagrammatic Representation of Medical Condition of School-going Adolescents and its Connection with Other Sub-Themes.



Under the category of the medical condition, the theme concludes that school-going adolescents had a medical history. The medical history has linkage with unhealthy diet practice, skipping breakfast, attraction to junk food, unhealthy hygiene practice, substance use, excessive use of mobile or internet, game addiction, hyperactivity or aggressive behaviour, lack of awareness and lack of home environment.

6. Substance use

The theme reflects the substance use of school-going adolescents. The subthemes emphasised the use and availability of illegal substances. The participants' verbatims are categorised into the following sub-themes;

Gateway substance, alcohol and drugs

Majority of the participants (parent=18/24 & teacher=16/24) reported that the school-going adolescents are using gateway substances, alcohol and drugs. Participants' opinions are as follows;

My daughter came and told me that a child in her class is smoking and his behaviour is also bad.......friends are discussing this in class. (**Parent 9:** female, 39 years old, government school, urban setting)

I previously taught at a school in a rural area... but here it's more than there (rural area) Intoxicated children have been found in this school. (**Teacher 4:** male, 45 years old, government school and urban setting)

We seized substance from children.... if we go to the boy's toilet, we can see the cover of the discarded substance. (**Teacher 5:** female, 47 years old, government school and rural setting)

This school is located in a rural area.... Until a few days ago, it was heard that substance was more prevalent in the town or city area. But in recent years, the substance has become more prevalent in schools in rural areas. This school had a similar experience recently. (**Teacher 19:** female, 46 years old, government school and rural setting)

Company

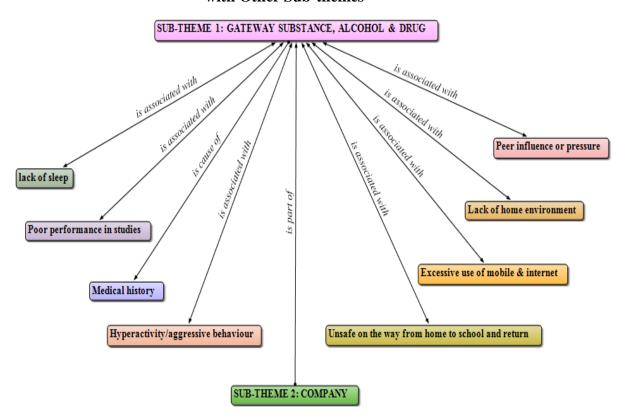
There were 10 participants (parent=5 & teacher=5) who stated that the school-going adolescents' substance use is due to the company such as peers and young adults. The transcripts are cited below;

I know children who are using the substance, selling it and pushing other children to use it. (Parent 2: female, 38 years old, private school and urban setting)

Children shouldn't be exposed to the substance. They get a good review from friends about the use of such items. They will fall into substance. (Parent 24: female, 44 years old, private school and urban setting)

Some children use drugs......such children do not come to class regularly.....if we go and inquire further about them, we find that they say they are going to school and leave home.... but they don't go to school and never return home.... It is this combination that creates the conditions for the child to use drugs. (**Teacher 13:** male, 48 years old, government school and rural setting)

Figure 5.17 Diagrammatic Representation of Substance Use and Its Linkage with Other Sub-themes



The theme of substance use summarised that school-going adolescents were more vulnerable in their environment. Substance use had an association with lack of sleep, poor performance in studies, medical history, hyperactivity or aggressive behaviour, being unsafe on the way from home to school and return, excessive use of mobile and internet use, lack of home environment and peer influence or pressure (figure 5.17).

7. Awareness

The theme emphasises awareness classes about various health and environment-related factors of school-going adolescents and their attitude towards it. The verbatim of participants are included in the below sub-themes;

Lack of awareness

There were 19 parents out of 24 and 7 out of 24 teachers who reported that there is a lack of awareness classes and school-going adolescents' negative attitude on awareness class. The participants' views are stated below;

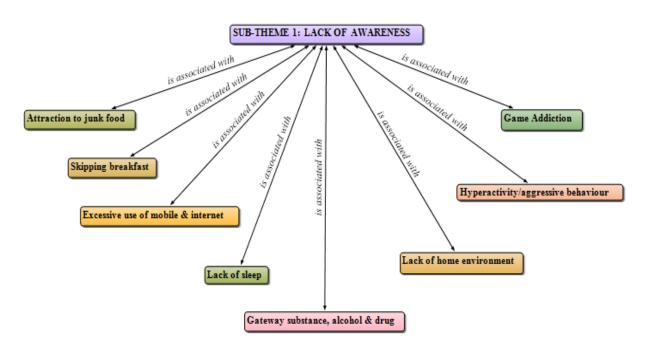
Awareness classes are often lacking for children and parents in schools. (Parent 3: male, 46 years old, government school and rural setting)

Although conducting an awareness class among children is important......it will not be accepted by them. They and their friends will say that what they say is right. (Parent 5: female, 40 years old, private school and urban setting)

Problematic children do not attend such awareness classes. They rarely come to regular class...... that is a big barrier. (**Teacher 19:** female, 46 years old, government school and rural setting)

The school often does not have time to give awareness classes......often because the syllabus has been completed...tight schedule.... Awareness classes are held once a year. (**Teacher 20:** female, 40 years old, private school and rural setting)

Figure 5.18 Diagrammatic Representation of Awareness of School-going Adolescents and its Linkage with Other Sub-Themes.



The theme awareness indicates that the school-going adolescents had a lack of awareness on health and the environment. Figure 5.18 depicts that the lack of awareness had an association with lack of sleep, poor performance in studies, hyperactivity or aggressive behaviour, game addiction, excessive use of mobile and internet use, attraction to junk food, skipping breakfast, substance use and lack of environment.

8. Emotional and Behavioural Problems

Emotional and behavioural problems are one of the major factors that affect the school-going adolescents' overall development. The sub-themes under the emotional and behavioural problems such as emotional problems, conduct problems, hyperactivity or aggressive behaviour and prosocial behaviour. The negative effects are mentioned in the following themes.

• Emotional problems

There were 8 out of 24 parents and 7 out of 24 teachers who expressed that the school-going adolescents had emotional problems. Participants' viewpoints are cited in the following lines;

My daughter says that she experiences nervousness when engaging in a new activity.... even when joining a new tuition centre...participation in new events also. (Parent 16: female, 40 years old, government school and rural setting)

Children are the ones who go after their desires......The mind is stubborn and wants what it likes.... They do not understand right and wrong.... when they are nervous, they worry too much......that's why we can say that they are addicted to emotions.

(Parent 24: female, 44 years old, private school and urban setting)

This age group desire to put everything in their hands. They are a group that prioritises emotions over sensible thoughts...that is a problem. (**Teacher 13:** male, 48 years old, government school and rural setting)

• Conduct problems

A few participants (parent=3 & teacher=3) expressed that the school-going adolescents had conduct problems. Major transcripts are given below;

One child bought chocolates for everyone in the class. He has no financial means at home.... Then we found out that it was stolen from the next house. (**Teacher 5:** female, 47 years old, government school and rural setting)

I found a child in my class having excessive money.... He said a friend gave it to him when asked.... But the truth was that he took it from the pocket of his uncle's shirt without his uncle's permission. (**Teacher 8:** female, 36 years old, private school and urban setting)

• Hyperactivity or aggressive behaviour

More than half of the participants (parent=16 & teacher=16) stated that school-going adolescents had hyperactivity or aggressive behaviour. Participants' opinions are cited below;

My son had never been angry before.....but now he shows sudden anger...if I tell him don't use his mobile phone too much...sudden anger will come. (Parent 7: female, 42 years old, private school and rural setting)

If my son doesn't get what he demands..... he gets angry with me... the door of his room will be dragged shut.... often creates a terrible atmosphere. (Parent 23: female, 39 years old, government school and urban setting)

Students are crazy to do bike racing.... twice the highway police had caught the bike racing students nearby this school.... the highway police informed the matter to school principle. (**Teacher 10:** female, 41 years old, government school and urban setting)

Many children tend to ride their bikes too fast to show off to others...... Two or three children have taken medical leave in the past year due to this reason. (**Teacher 13:** male, 48 years old, government school and rural setting)

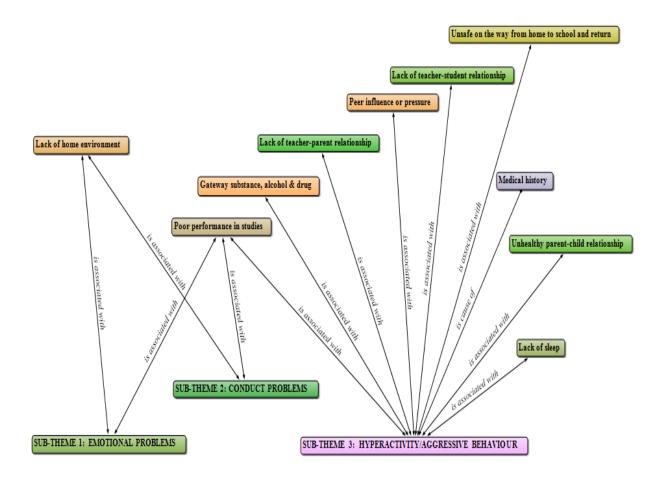
• Poor prosocial behaviour

There were 5 parents out of 24 and 4 teachers out of 24 who conveyed that school-going adolescents are not interested to be involved in prosocial behaviour. Some of the transcripts are mentioned below;

In social service...... children are now seen turning their backs on society........ they are not paying attention or watching around and they are moving forward.... they are crammed into their own little world...poor service mentality. (Parent 13: male, 44 years old, government school and urban setting)

Children engage in social activities only if we push them.... some fewer children do it voluntarily.... everyone will do social service...they will only do it if they are together. (**Teacher 8:** female, 36 years old, private school and urban setting)

Figure 5.19 Diagrammatic Representation of Emotional and Behavioural Problems and its Connection with Other Sub-Themes.



The theme of emotional and behavioural problems concludes that school-going adolescents had negative mental health. Figure 5.19 shows that the emotional and behavioural problems had linkage with poor performance in studies, lack of home environment, being unsafe on the way from home to school and return, lack of teacher-student relationship, lack of teacher-parent relationship, unhealthy parent-child relationship, peer pressure, lack of sleep, medical history and substance use. The section on parents' and teachers' perception of health mentioned that the school-going adolescents had health-related issues. Each theme and sub-themes under the section found numerous associations with health-related problems. This indicates that school-going adolescents are more vulnerable to health-related practices at home, school and community. Similar findings from other studies are cited below;

Many of the risk behaviours in adolescents were shown to be related to the adolescents' family of origin, home environment and parent-child relationships Maharaj, Nunes, & Renwick, (2009) reported that risk behaviours in adolescents are related to the home environment and parent-child relationships. A qualitative study found that the major problems of adolescents are addictive behaviour, not paying attention to studies, getting angry over small issues, fighting back, disobedience, and stealing (Adhikari et al., 2015). Another qualitative study suggested that parents and adolescents need more knowledge about adolescent health and development (Parvizy & Ahmadi, 2009).

This chapter reflects that the parents' and teacher's perception of environment and health of school-going adolescents. The results revealed that the school-going adolescents were unsafe at home, school & community, unhealthy health practice due to various reasons. The next chapter emphasises on the scope of social work practice in schools.

CHAPTER VI

SCOPE OF SOCIAL WORK PRACTICE IN SCHOOLS

The previous chapter prominence the parents' and teachers' perception of environment and health of school-going adolescents. This chapter emphasises the scope of social work practice in schools. The quantitative and qualitative data findings are included in this chapter. The first segment comprises of quantitative data collected from school-going adolescents, parents and their class teachers. Interviews were also conducted among the parents and teachers of school-going adolescents to understand the scope of social work practice in schools. The qualitative data elucidated on the scope of social work practice is included in the second segment. The segments are as follows;

6.1 School-going Adolescents', Parents' and Class Teachers' Opinion on Social Work Practice in Schools.

This section determined the opinion of school-going adolescents, parents and class teachers on social work practice in schools. The knowledge about counselling, availability of counsellors in schools, aid from the counsellor and whether they attended any training programs are deliberated in the tables below;

Table 6.1 School-going Adolescents' Opinion on Social Work

Practice in Schools

Values	Yes	No
Knowledge about counselling	481 (80.2)	119 (19.8)
Aid from school social worker or counsellor	148 (24.7)	452 (75.3)
Taken any help from private counsellor	68 (11.3)	532 (88.7)

Source: Computed

Figures in parenthesis are percentages

Table 6.1 depicts the school-going adolescents' opinion on social work practice in schools. The results revealed that a large number (80.2%) of them know about counselling while a fifth (19.8%) are not aware of professional counselling. More than three fourth (75.3%) of school-going adolescents never consulted or received help from school social worker or counsellor while a fourth (24.7%) of them had received help from school social worker or counsellor. A majority of school-going adolescents (88.7%) never consulted a private counsellor and little more than one-tenth (11.3%) of them had availed the services of a private counsellor. The table summarised that the school-going adolescents had some level of difficulties and few of them had sought and/or received professional help.

Table 6.2 Parents' Opinion on Social Work Practice in Schools

Values	Yes	No
Your child share his/her personal problems	528 (88)	72 (12)
Heard about school social worker or counsellor	367 (61.2)	233 (38.8)
Attended training programs for the welfare of your child	223 (37.2)	377 (62.8)
Your child taken any counselling services	84 (14)	516 (86)

Source: Computed

Figures in parenthesis are percentages

The opinion of the parents of school-going adolescents on social work practice in schools is shown in table 6.2. The majority of parents (88%) stated that their child shared his/her personal problems with them while a tenth (12%) reported otherwise. More than half of the parents (61.2%) have heard about school social worker or counsellor while almost two-fifths did not (38.8%). The majority of parents (62.8%) did not attend any kind of training programs for the welfare of their child. Majority of the parents (86%) mentioned that their child was never taken for counselling services while only 14% of them took their child for counselling sessions. The overall parents' opinion indicates that the parents need to understand their child's problems and seek professional help for such matters.

Table 6.3 Class Teachers' Opinion on Social Work Practice in Schools

Values	Yes (%)	No (%)
Permanent social worker or counsellor in your school	20 (33.3)	40 (66.7)
Counselling will be an extra burden on you	13 (21.7)	47 (78.3)
Attended any training programs for the welfare of your children	27 (45)	33 (55)
Able to handle all difficulties of your students	40 (66)	20 (33)

Source: Computed

Figures in parenthesis are percentages

More than half of the class teachers (66.7%) stated that there were no permanent social worker or counsellor in their school while a third (33.3%) reported the services of a permanent social worker or counsellor is in their schools. A majority of class teachers (78.3%) revealed that for them counselling was not a burden while more than a fifth (21.7%) of them stated that it was a burden for teachers to also act as counsellors. More than half of the class teachers (55%) did not attend any kind of training programs for the welfare of their students and the rest of them (45%) attended. Majority of the class teachers (66%) said they could handle all the difficulties of their students but a fifth (20%) of them were not able to handle their students. This indicates that the school social work or counselling practice needs to be promoted in schools.

This section concludes that the school-going adolescents were not getting professional services for their mental, personal or scholastic life and their parents and teachers needed some level of training in awareness of mental health. The school social work practice is necessary for the development of school-going adolescents and it should act as handholding support to the parents and teachers. Gallant & Zhao (2011) reported that the majority of students stated awareness of school counselling services at their school.

6.2 Parents' and Teachers' Perception of Social Work Practice in Schools

The section is based on the understanding of social work practice in schools from the perspective of parents and teachers of school-going adolescents. The qualitative interpretation will be followed in this section.

Participants' transcripts are cited below;

Counsellor is required.....school-going adolescents may have doubts about many things or have many difficulties...parents and teachers always do not have time to solve them or help them....they may not be knowledgeable to do that also. (Parent 4: female, 41 years old, private school and rural setting)

My child told me....school counsellor called her for counselling.....asked her name, marks, whether she is studying well....and left her to class...how this kind of counselling is beneficial for children? (Parent 7: female, 42 years old, private school and rural setting)

In my opinion, counselling or related services should not be limited to school. It should be extended to the community. Then only it will be beneficial for children. (Parent 10: male, 43 years old, government school and rural setting)

Most children today do not have an aim or goal. The counsellor must work on developing that. Children do not reveal anything easily....only if the children's faith is gained... then only we can understand their problems and provide a solution. (**Teacher 2:** female, 43 years old, private school and urban setting)

Counselling is good......In my opinion, if the teachers are trained as counsellors, it will be easy to solve the problems of children...therefore counselling training programmes are essential for teachers. (**Teacher 3:** female, 40 years old, private school and urban setting)

Counselling is good but some counsellors disclose the problems of children with others by mentioning that particular child's name....it happened at this school..that's not right. (**Teacher 5:** female, 47 years old, government school and rural setting)

Definitely one counsellor at least in every school. The counsellor should focus on needy or children who faced difficulties. (**Teacher 6:** female, 42 years old, private school and urban setting)

Counselling is essential.....many children share things with the counsellor that they cannot share with anyone else....many changes happen among children due to this process. (**Teacher 8:** female, 36 years old, private school and urban setting)

Counsellor is required.....counsellors are supporting to teachers...because we do not know how to handle an aggressive student...similarly many problems we are not able to solve...we are not getting any kind of training. (**Teacher 13:** male, 48 years old, government school and rural setting)

In our school, counsellors are coming twice in a week. Counsellor is needed on every school day because children have a lot of difficulties. (**Teacher 17:** male, 45 years old, government school and rural setting)

Today's children are smart. They are prepared to answer the questions of counsellors. They collect information from the peer who already got counselling. Therefore children may not answer the exact things.....I do not think there is any benefit with the counselling going on in this school. (**Teacher 18:** male, 55 years old, private school and urban setting)

This section concludes that social work practice is needed in the school premise. The counselling services has lack of;

- professional skills development for social workers/counsellors
- permanent social workers/counsellors
- training programmes for teachers
- outreach programmes
- strategies or followup in counselling services

Dash & Mohan (2015) reported that teachers point out that counselling services are necessary for schools only for children who have problems. Teachers had different perceptions, negative and positive experiences with counselling services (Khansa, 2015). Another study found that students' and teachers' mean perception of guidance and counselling services helps on student's future career, and personal problems (Arfasa, 2018). A study reported that the majority of teachers pointed out that school social workers are needed in schools and their role is to handle the different situations of children (Meenu, 2010).

This chapter indicates the scope of social work in schools. It concludes that school social workers or counsellors have a major role in handling the problems of school-going adolescents and giving handholding support to their parents and teachers. Social work practice in schools should be implemented from the support of multidisciplinary teams such as health and mental health professionals. The next chapter focuses on the major findings of the current study, summary and suggestions for enhancing development in the field of school social work.

CHAPTER VII

CONCLUSION

The previous chapter described the qualitative results of parents' and teachers' perception. This chapter is divided into three sections. The first section presents the findings of the study based on the objectives of the study. Integration of major findings and summary is presented in the second section. The third and final section discusses Social Work Research and practice; as well as policy implications based on the findings of the study.

6.1 Major findings

The current study titled "Environment and Health of School-going Adolescents in Kollam District, Kerala" is cross-sectional and descriptive in nature. The mixed-method approach was used for the collection of primary data. The multistage cluster sampling method was used for the selection of sample in Kollam District. The sample size castoff in the current study is;

Quantitative method: 600 school-going adolescents, 600 parents, 60 class teachers from 19 high & higher secondary schools in Kollam District.

Qualitative method: 24 parents and 24 teachers from 19 high & higher secondary schools in Kollam District.

The major findings are indicated in the objectives of the current study down below;

Objective 1: To identify the socio-demographic details of school-going adolescents.

In every scientific research, socio-demographic details are one of the major influencing factors. Therefore, the current study also indicates the following;

Socio-demographic details – Quantitative

The socio-demographic details of six hundred school-going adolescents indicate that the mean age was 14.98 among 13 to 17-year-old school-going adolescents and the standard deviation was 1.41. Little more than half of the school-going adolescents were females (52.8%), 68% of them believed in Hinduism, 20.8% belonged to the unreserved category and more than one-eighth of them belonged to a nuclear family (83.3%).

There were six hundred parents whose socio-demographic details found that the mean age was 42.85 and SD is 5.89. The majority of the respondents (63%) were females and most of them (41.5%) educated up to graduation. Most of the

respondents were homemakers and more than one-ninth of them (94.8%) are staying with their spouses. The socio-economic status revealed that the majority of the families belonged to the upper-middle-class (38.3%).

The socio-demographic details of sixty class teachers revealed that the mean age of class teachers was 42.30 (SD 1.75). More than two-thirds of the participants were female class teachers (75%) and studied up to Post Graduation (PG) with B. Ed or M. Ed (83.4%). More than nine-tenths of class teachers were married (96.7%) and the mean age on the teaching experience of class teachers was 13.33 (SD 6.46).

Socio-demographic details – Qualitative

The socio-demographic details of twenty-four parents found that the mean age was 41.63 (SD 3.48). The majority of them were female (87.5%) and most of them had a postgraduate degree or above (41.7%). Less than half of the respondents were employed in the private sector (45.8%).

There were twenty-four teachers and it was found that the mean age of teachers is 44.17 (SD 4.93). The majority of the teachers were female (70.8%) and most of them had education up to postgraduate level (87.5%). The teaching experience of teachers found that the mean age was 15 years (SD 4.85).

Objective 2: To assess the environment, social support and health of school-going adolescents.

The results were assessed based on IAHQ and SDQ of parents' and teachers' version. The major findings of environment, social support and health of school-going adolescents are revealed below;

Environment

The current study determined the prevalence of home environment, school environment and social support among school-going adolescents. The major findings regarding the environment are indicated as follows;

Home Environment

The results found that less than half (45.3%) of the school-going adolescents had a home computer, 32.7% had internet access at home and 40.5% of them were using social networking sites. The protective factors revealed that less than half (47.4%) of parents of school-going adolescents *never-rarely* checked their child's homework, 15.8% of parents *never-rarely* understood the problems of their child and 15.8% of parents (*never-rarely*) did not know what their child's activities were during the leisure time.

School Environment

More than half of the school-going adolescents had an average performance marks-wise (54%). Less than one-tenth of school-going adolescents (7.3%) missed their classes or school without permission for more than three days in the past month. Protective factors of school-going adolescents in school found that less than one-tenth (7.2%) of them *most of the times-always* got negative pressure from their peers in the past month. One-tenth (10.3%) of school-going adolescents *never-rarely* got kindness and help from other students.

Social Support

Less than half (48.9%) of the school-going adolescents had *low-moderate* social support from significant others. One third (29.9%) of them had *low-moderate* social support from family. Little less than a quarter (24.2%) of them were getting *low-moderate* social support from friends. One third (30.9%) of them had *low-moderate* overall social support.

Health

The major findings regarding the health of school-going adolescents are indicated in the sub-categories below;

Physical Health

The BMI found that 22.5% of school-going adolescents were in the category of underweight, severely underweight, overweight, severely obese and moderately obese. The results revealed that 17% of school-going adolescents had a lack of sleep or excessive sleeping practice.

Physical Activity

The results found that more than half (51.5%) of school-going adolescents were physically active for less than two days a week and that too a total of at least 30 minutes or less. A quarter (24.9%) of school-going adolescents spend more than three hours during a typical day sitting & watching television, playing on the computer, or doing other sedentary activities outside of school.

Nutrition

As far as nutrition is concerned, 71.5% of school-going adolescents prefer non-vegetarian food. Little less than one third (29.3%) of school-going adolescents *most* of times-always are vegetables cooked or fried in oil. Less than half (44%) of school-going adolescents did not eat-less than one time fruits per day in the past week. A quarter (25.5%) of school-going adolescents had fish or meat two or more times per

day in the past week. Also, 25.1% of school-going adolescents ate fast food one and more times per day in the past week.

Hygiene

There were 2% of school-going adolescents who brushed their teeth *less than* one time or never per day in the past month. Little more than one-tenth (12%) of school-going adolescents *sometimes-never* washed their hands before eating food in the past month. One-tenth (9.9%) of school-going adolescents *sometimes-never* washed their hands after using the toilet. More than one-tenth (13%) of school-going adolescents *sometimes-never* used soap before washing their hands in the past month.

Medical Care and Medical History

Little less than a quarter (24.4%) of school-going adolescents were *sometimes*never able to go to the clinic when they were sick. More than half (50.5%) of schoolgoing adolescents did not take treatment for their illness from the clinic/hospital due
to various reasons. More than one-tenth (14.3%) of school-going adolescents were
diagnosed with some major illness. Less than half (6.2%) of the school-going
adolescents missed their class due to toothache in the past year.

HIV/AIDS

One-fifth (19.8%) of school-going adolescents did not hear about HIV infection or AIDS. More than half (53.7%) of them stated that their school never taught about HIV/AIDS. The majority of school-going adolescents (65.3%) never discussed HIV/AIDS with their parents.

Substance use

Regarding substance use, 4% of school-going adolescents have tried tobacco or cigarette. More than one-tenth (13.8%) of school-going adolescents' male parents or guardians did smoke. Little less than one-tenth (9.5%) of school-going adolescents said that smoking is not harmful to health.

Less than one-tenth (8.8%) of school-going adolescents tried alcohol. There were 8.7% of school-going adolescents who had tried alcohol at home/other places/street/bar/someone else's home. Little less than one-fifth (19.7%) of school-going adolescents' close friends had tried alcohol.

There were 2.8% of school-going adolescents who tried illegal drugs and 1.6% of them used more than one times in the past year.

Violence, Domestic Violence, Abuse and Unintentional Injury

More than one-tenth (14.6%) of school-going adolescents had been injured seriously three or more times in the past year. There were 36.1% of school-going adolescents who *sometimes-never* wore a helmet while riding on a motorbike. More than half (61%) of school-going adolescents *sometimes-never* wore a seat belt when they rode in a car. Less than one-tenth (6.5%) of school-going adolescents *most of the times-always* got insulted by others. More than one-tenth (11.1%) of school-going adolescents felt unsafe at home and 10.7% of them felt unsafe at school.

Emotional and behavioural problems

Self-reported emotional and behavioural problems of school-going adolescents revealed that one-fifth (20%) of them had *borderline-abnormal* in emotional problems, 18% of them had *borderline-abnormal* in conduct problems, 17.3% had *borderline-abnormal* in hyperactivity, 19% had *borderline-abnormal* in peer problems. There were 24.5% of school-going adolescents who were detected *borderline-abnormal* in overall emotional and behavioural problems. 17.4% of school-going adolescents had poor (*borderline-abnormal*) prosocial behaviour.

Parents' report of emotional and behavioural problems of school-going adolescents found that there were 22.7% of them had *borderline-abnormal* in emotional problems, 20.7% had *borderline-abnormal* in conduct problems, 18.2% had *borderline-abnormal* in hyperactivity, 26.2% had *borderline-abnormal* in peer problems and overall 25.8% had *borderline-abnormal* in emotional and behavioural problems. There were 16.9% of the school-going adolescents had poor (*borderline-abnormal*) prosocial behaviour.

According to teachers' report of emotional and behavioural problems of school-going adolescents, emotional problems rated as *borderline-abnormal* was observed at 16%, 19.7% *borderline-abnormal* in conduct problems, 12% *borderline-abnormal* in hyperactivity, 19.7% *borderline-abnormal* in peer problems and 26.6% of school-going adolescents had *borderline-abnormal* in overall emotional and behavioural problems. There were 20.8% of the school-going adolescents who had poor (*borderline-abnormal*) prosocial behaviour.

The Pattern of relationship in the environment and health of school-going adolescents

The gender difference found that male school-going adolescents had a high risk in the home environment, school environment, social support and overall environment. School-going adolescents in government schools had a highly significant difference in high risk in the home environment than private schools. Rural school-going adolescents had more prevalence of risk in the home environment and school environment domains. Urban school-going adolescents had a high prevalence of social support and overall environment domains.

A significant difference found between male prone to high risk in nutrition, hygiene practice, substance use, violence and overall health domains than female school-going adolescents. Government schools had a significant difference found in emotional and behavioural problems domain than private schools. Rural school-going adolescents had a highly significant difference in emotional and behavioural problems than urban. Rural school-going adolescents had a significant difference in nutrition than urban, but urban school-going adolescents had a significant difference in hygiene practice.

Physical activity had a significant positive correlation with the home environment. There was a significant positive correlation with home, school and overall environment. The hygiene practice, substance use, violence, emotional and behavioural problems had a highly significant positive correlation with home, school, social support and overall environment. Overall health had a highly significant positive correlation with home, school, social support and overall environment.

The binary logistic regression model found that male school-going adolescents are more likely to exhibit environment-related problems than female. There was no association found in other independent variables such as age, school type, settings and socio-economic status.

Gender and socioeconomic status were significantly associated with the healthrelated problems in the binary logistic regression model. There was no association found in the age, school type and settings with health-related problems.

Objective 3 To understand the parents' and teachers' perception of the environment, social support and health of school-going adolescents.

Environment

Parents' perception of the environment of school-going adolescents found that excessive mobile and internet use, peer influence or pressure, unsafe on the way from home to school and return was the most stated subthemes. Parents from private schools informed that school-going adolescents' overall environment are more prone to risks compared to the responses of the parents from government schools. Parents from urban areas stated that the overall environment of school-going adolescents was unsafe than their rural counterparts.

Teachers' perception of the environment of school-going adolescents revealed that excessive mobile and internet use, lack of home environment, poor performance in studies, peer influence or pressure was the most reported subthemes. Most of the government school teachers mentioned that the environment of school-going adolescents is unsafe than private school teachers. Teachers from rural areas reported that school-going adolescents had an unsafe overall environment than teachers from urban areas.

Health

Parents' perception of the health of school-going adolescents exposed that irregular physical activity, lack of awareness, gateway substance, alcohol & drugs, unhealthy diet practice, skipping breakfast and hyperactivity or aggressive behaviour was most reported subthemes. Parents from government schools stated that school-going adolescents' overall health is more prone to risks than parents from private schools. Parents from urban areas reported that the overall health of school-going adolescents was unhealthier than in rural areas.

Teachers' perception of the health of school-going adolescents found that gateway substance, alcohol & drugs, hyperactivity or aggressive behaviour, unhealthy diet practice, skipping breakfast, attraction to junk food, medical history was the most stated subthemes. Each theme and sub-themes under the health of school-going adolescents found numerous associations with health-related problems. Teachers from government schools stated that school-going adolescents' overall health is more prone to risks than parents from private schools. Teachers from urban areas reported that the overall health of school-going adolescents was unhealthier than in rural areas.

The study also revealed that there was a linkage between environment subthemes and health subthemes of school-going adolescents.

Objective 4: To determine the scope of social work practice in schools.

The school-going adolescents' opinion on social work practice in schools found that a fifth (19.8%) is not aware of professional counselling. A quarter of school-going adolescents had received help from a school social worker or counsellor and more than one-tenth (11.3%) of them had availed the services of a private counsellor.

Parents' opinion on social work practice in schools revealed that 38.8% had not heard about school social worker or counsellor. The majority of parents (62.8%) did not attend any kind of training programs for the welfare of their child.

A third (33.3%) of the class teachers when asked for an opinion on social work practice in schools stated that there is a permanent social worker or counsellor is in their schools. More than half of the class teachers (55%) did not attend any kind of training programs for the welfare of their students. A fifth (20%) of class teachers were not able to handle their students.

The qualitative findings show that there was a lack of professional skills development for social workers/counsellors, lack of strategies in school social work or counselling services.

6.2 Summary

The current study titled environment and health of school-going adolescents in urban-rural settings and government-private schools in Kollam District, Kerala. The study design is in cross-sectional descriptive design with the mixed method. There were 600 school-going adolescents, 600 parents, 60 class teachers who were taken for quantitative data collection and in-depth interview conducted among 24 parents and 24 teachers.

Quantitative findings are based on the IAHQ, SDQ parents and teacher version, school social work-related questions. Male school-going adolescents had more environment and health-related problems. School-going adolescents in government schools had a poor home environment. Rural school-going adolescents had a poor home and school environment. School-going adolescents in rural settings had nutritional problems, emotional and behavioural problems. Gender had an association with health and environment-related problems. This found that school-going adolescents had some level of environmental and health-related problems.

School social work practice in schools found the lack of school social workers or counsellors, poor strategies in counselling services and the problems of school-going adolescents are increasing day by day.

Qualitative results are based on the KII with parents and teachers of school-going adolescents. Parents from private schools and urban settings responded more to the unsafe environment of school-going adolescents. Government and rural teachers stated more about the unsafe environment of school-going adolescents. Government and urban parents reported health risk problems. Government and urban teachers stated the health risk problems.

To conclude, the quantitative findings found that school-going adolescents had some level of environmental and health-related problems. The qualitative findings were strongly supporting the quantitative findings. The current study strongly revealed that the school-going adolescents had environment and health-related problems in gender (male-female), settings (rural-urban), types of school (government-private) and socio-economic status.

6.3 Suggestions

The suggestions from the study are indicated in the following categories;

Social work implications

- 1. The current study has revealed that social work practice in schools is necessary along with a multidisciplinary team.
- 2. Strengthening the professional skills of school social worker/counsellor may play a major role in reducing the difficulties among school-going adolescents and their close ones.
- 3. School health and mental health programmes need to be more effective and have to do extensive activities for the benefit of school-going adolescents.
- 4. For example, the study has observed that a lot of programmes are going on in schools. But the majority of the programmes are not going on properly or have no follow-ups. Therefore, there is a need to do long-term interventions and follow-up programmes among school-going adolescents.
- 5. The study also suggested that counselling services and programmes need to be extended in and around every school. More outreach programmes are required.

- 6. The study also recommended that counselling services or awareness programmes should be focused more on school-going adolescents (high and higher secondary schools).
- 7. Social work interventions should be more focused on rural settings and government schools. The awareness programmes, health and mental health programmes should be conducted in schools periodically.
- 8. Periodical environment and health assessment, long-term intervention and follow-up plans need to be implemented in schools by a systematic approach.
- 9. Parents and teachers training and programmes need to be more strengthened in schools.
- 10. Mental health programmes and psychosocial care and support need to be implemented in every high and higher secondary school with the support of psychiatric social worker and mental health professionals.

Research implications

- 1. The research implication from the study highlights the need for evidence-based targeted interventions by school social workers.
- 2. Longitudinal studies based on the environment and health of school-going adolescents needs to be planned in rural and urban settings.
- 3. Intervention studies based on each domain of environment and health need to be planned to test out the efficacy of school social work interventions in rural and urban settings.
- 4. A study can be carried out on the school counsellors' opinion on school social work and the scope of school social work practice in schools.
- 5. An intervention study can be carried out on the effectiveness of counselling services in schools.

Policy implications

- 1. Policy advocacy and programmes need to be specifically focused on school-going adolescents.
- 2. A Permanent school social worker or counsellor needs to be in every high and higher secondary school.
- 3. School health and mental health policy programmes need to be strengthened in the school and community settings.

APPENDIX I

Permission Letter from Authority of Education



केन्द्रीय माध्यमिक शिक्षा बोर्ड CENTRAL BOARD OF SECONDARY EDUCATION

CBSE/RO-TVPM/HU(RS)-MZU/2019

Dated 31-May 2019

The Principals
CBSE Affiliated Schools
Kollam District



Sub: Desired intellectual assistance to the Research Scholar pursuing Ph.D. from Mizoram University.

Dear Principals,

The bearer of this letter **Mr. Harikrishnan U, Ph.D Scholar** (Reg. No: MZU/Ph.D/1156 of 03.10.2018), is pursuing his Ph.D from Department of Social Work, School of Social Sciences, Mizoram University, Aizawl, Mizoram on the title – "Environment and Health of School going Adolescents in Kollam District, Kerala".

The sphere of his academic research is presently focused in Kollam district of Kerala and is primarily revolves around health, environment and social support aspects of students from Class-VIII to Class-XII of the Schools identified by him and his institution for conducting research. The researcher needs to collect information from school children, parents and teachers by using questionnaire and interview method which I have been assured, shall be kept strictly confidential/anonymous (or as per your convenience) and used for research purposes only.

Considering the qualitative nature of his research, I shall be grateful if reasonable time as per your convenience may kindly be spared to enable him to successfully accomplish his research field work.

The candidate will contact you to seek appointment over phone prior visiting your School. Kindly allow him access to your School premises as per your convenience. To establish his identity, Mr. Harikrishnan U shall be in possession of his photo Identity Card.

Thank you

Yours faithfully,

(SACHIN THAKUR) Regional Officer Kerala Region

Regional Officer
Central Board of Secondary Education
Regional Office, Pattom,
Thiruvananthapuram, Kerala – 695004

क्षेत्रीय कार्यालय, तिरुवनंतपुरम, एल.आई.सी. मंडल कार्यालय परिसर, ब्लाक-ब, दूसरी मंजिल, पट्टम, तिरुवनंतपुरम-695004, केरल Regional Office, Thiruvananthapuram, UC Divisional Office Campus, Block-B, 2[™] Floor, Pattom, Thiruvananthapuram-695004, Kerala फोन/Telephone : 0471-2534404, ई.मेल/E.mail Id : rotrivandrum.cbse@nic.in वेबसाइट/Website: www.cbse.nic.in As es as Lorg poor no. 4 4/3551/10/ 27. 2. 3. 500 as as as 1/6/219. とうかからいいのとのこのののののかのから es 2 th Sun es as granged as Euron monous as well as のなからしゃれるといるとのはいろろいれるとのよれることが きゃいのこと とりとしているして (とのののなり かられてかかる apreniment me ou com me per mente per de les per mente (cg. wg) 2, or or or or or or or or or 20102 Suhueng \$ 95 pa co 2 3 m waded. (1) Mar. o om 48x colong (41030) (5) (2) (2000 4) (4100 8) (4) coa. 20 48 25 coat. of slongs (4 60 20) (4088) JEON. POR. (FO.88) ころうしゅいからしいいいいい (コマアンコロカの からかん 00 2 20 m on (- 162) M) -104 or 2 mg of and on mendellar monomonal poly meres (coal Demmanni.

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U. See Sala Cons. Cos)

No. A5/2032/2019/L.Dis

District Educational Office Punalur, Nellippally.P.O PIN – 691331 Dated 07.06.2019 Phone – 0475 2224700 E-Mail deopunalur @ gmail.com.

From

The District Educational Officer, Punalur.

To

Headmaster/Headmistress Govt. H.S.S Kulathupuzha/ Govt. HSs Ottakkal/ Govt. HSS Karukone.

Sir,

Sub:- Request for permission to conduct a research study among school going Adolescents in Kollam, District.

Ref:- Department of social work, University of Mizoram, Letter dtd 30th April 2019.

Invite you attention to the reference letter Sri. Harikrishnan.U is scholar of the Mizoram University and he is conducting a study in Environment and Health of school going Adolescent in Kollam District, Kerala.

Department head of the said University requested to grant permission to conduct the study. Request is examine and found genuine hence decided to grant permission on condition that the headmaster of the school should ensure for conducting this programme does not affect the Academic and Physical Environment of school.

1

Yours faithfully,

District Educational Officer Punalur

APPENDIX II

Permission Letter from School Principals

Permission given to Mr. Harikaishnan Jor concluding study in our institution.
Completed the data collection.



PRINCIPAL ST. JOHN'S SCHOOL ANCHAL - 691 306 KOLLAM, KERALA

Permission given to Mr. Haikiishnan Jor Concluding study in our institution. Completed the data collection.



PRINCIPAL PUSHPA GIRIYIL GENTRAL SCHOOL EDAMON-34

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From

Head Master GHSS, Karana Signally

permissing given to Mr. Havikrish ugn. U and complete the Late collection from

Dala Collection is Conglette



J. CLARET
Headmintress
Boxt: HSS, Karunagappatly

Permission given to M: Harikrishman for Correlating streety in our instistration.

Completed the data Collection.



B. SHEELA

Principal

Govt. Model H. S.S.

Kulasekharapuram

5 helley

Permission given to Mr: Harikeishman Box Concluding study in our institution. completed the data Collection.



BINDU. N BINDU. N HSST History HSST History Charge of Principal Charge of Principal Charge of Principal Charge of Principal HSST History HSST Charge of Principal HSST Charge of Principal G.H.S.S. Punalur, Kollam G.H.S.S. Punalur, Kollam

Permission given to Mr: Horikaishan for Conducting Study in our School. Data Collection Completed. Higher Secon Permi sois gover to Mr. Harikrishnas for conductor g ostudy on our school Dala collection Completed Hay anti Vasanthakumari. A Headmistress Govt. H.S.S., Paravur Thekkumbhagom P.O., Kollam

Permissing Sivey to Mr. Hariknishnen for Conducting study in our school.

Data Collection Completed

भोकुमार.एम.एन. SREEKUMAR. M.N.

केन्द्रीय विद्यालय KENDRIYA VIDYALAYA कावनाड(पोस्ट)कोल्लम KAVANAD.P.O., KOLLAM **KERALA-691003**

Permission given to Me: Harikaishnan for concluding stredy in our imstitution. completed the data collection.



Permission given to Mr. Harikrishnan for Conducting Study in Our instituition Completed the data Collection.





Permission given to Mr. Harikrishnan for Conducting Study in our Institution. Completed the data collection.







Permission given to Mr. Harikaishnan Jos Conducting study in our institution Completed the data collection.



PRAKASH KUMAR .K PRINCIPAL VIVEKANANDA H.S.S & V.H.S.S . POREDOM

Permission given to Mr Harrkrishnan for conclucting study in our institution completed the data collection.



SHEELA A.
Headmistress
Govt. H.S.S.
Kulathupuzha, Kollam-691310

Foun

Kavilhi T. T. (principal)
Sieldhardha Central School
Inthor
Kollan.

16/07/19.

Permission given to Mr. Harikinshnan. U for Conduct his project work in our School.

SCHOOL AUTO SOROM OF THE STREET OF THE STREE

Principal Siddhartha Central School

Permission geven to Mr. Harikushnan for conducting Study in our School Dada Collection Completed. Permission given to Mr. Harikaishnan for conducting study in our schwa. Dala collection completed.

ERAVIPURAM DO.

Principal Mahatma Central School Permission given to Mr. Harukrishnan for concluding study in our institution.

Completed the data collection Jumps

SCHOOLA CENTRAL SCHOOLA CENTRA

Manju Ramachandran
Principal
Sree Buddha Central School
Karunagappally, Kollam, PIN 690 523
Shool No: 06676 Aff.No: 930128
E-mail: sbcskarunagappally@gmail.com

Permission given to Ma: Harikaishnan bor concluding study in our institution completed the data collection.



19.9.2019.

A . Padmaja Thankachi Principal H S S For Boys Punalur



Toc H (RESIDENTIAL) PUBLIC SCHOOL

(CBSE Aff. No. 930336) PAPER MILL P.O., PUNALUR, PIN 691332 Phone: 0475-2221562, 2225325

email:tochplr@gmail.com

From

Dr.CILLA ABRAHAM (Principal) Toc H Public School, Paper Mill P.O,Punalur Kollam.

Permission given to Mr. Harikrishna U for conducting study in our institution.

Completed the data collection.

Punalur,

25/10/2019

Dr.CILLA ABRAHAM

Principal

Dr. CILLA ABRAHAM.
Principal
TocH (RES.) PUBLIC SCHOOL
PAPER MILL P.O., PUNALUR.
KOLLAM DT., PIN:- 691332

APPENDIX III

Permission letter from author of IAHQ

1/28/2021

Gmail - Requesting for the details of Indian Adolescent Health Questionnaire



Hari Archal <hariarchal@gmail.com>

Requesting for the details of Indian Adolescent Health Questionnaire

Harikrishnan Unni Krishnan Nair <hariarchal@gmail.com> To: Grace Sailo <gracesailo@gmail.com>

31 October 2018 at 12:26

-------Forwarded message -------From: **Katelyn Long** katelyn Long katelyn.noel.long@gmail.com Date: Sun, Aug 12, 2018 at 12:31 AM

Subject: Re: Requesting for the details of Indian Adolescent Health Questionnaire

To: Harikrishnan Unni Krishnan Nair <hariarchal@gmail.com>

Dear Mr. Harikrishnan,

Apologies for my delay, I am on maternity leave and not answering email regularly. A copy of the IAHQ is in the attached manuscript. Best wishes for your study.

Sincerely, Kate

> On Sat, Jul 28, 2018 at 8:25 PM, Harikrishnan Unni Krishnan Nair <hariarchal@gmail.com> wrote: Respected Sir/Madam,

I am a Ph. D scholar under department of Social Work, Mizoram University, Mizoram, India. I am going to study Environment and Health among school going Adolescents in Kollam district Kerala. kindly help me to access the Indian Adolescent Health Questionnaire to my study. Please reply as soon as possible [Quoted text hidden]

Long et al, Development and Validation of IAHQ.pdf

APPENDIX IV

Information sheet

Title: Environment and Health of School going Adolescents in Kollam District, Kerala.

Purpose of the Study: My name is Harikrishnan U, Ph. D Scholar in the Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India. As the part of fulfilment for the award of Ph. D in Social Work, I am undertaking a study to find out the Enviornment and Health among the school going adolescents in Kollam District, Kerala. I wish to interact with boys and girls (aged 13-17 years) who are currently studying in class VIII to class XII, their teachers & parents and administer a few questionnaires. I am being supervised under Dr. Grace Lalhlupuii Sailo, Assistant Professor, Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India.

What does Study Involve?

The study involves an interview to assess the Environment and Health of High School and Higher Secondary school going adolescents. The interview questions are attached so that you can consider them before deciding whether or not to participate. It is likely to last for about an hour and a half. You can keep only information sheet with you.

What will happen to my Information?

The information given by all participants will remain entirely confidential and your name will not be divulged to anyone else. The interview data will be kept secure. The final report of the study may include quotation from the interviews but these will be anonymous. No individual will be identified in any way in any report of the study. You will receive a summary of the findings if you wish.

Benefits and Risks: There is no risk and benefits associated with this research.

Your Rights as a Participant of the Study

Your entry to the study is entirely voluntary. You are entitled to decline to answer any question in the interview, and can withdraw from the study at any time without having to give any explanation. If you decide to participate, you will be given the summary of findings at the conclusion of the study on request.

Do you have further questions?

If you have further queries, please write to Harikrishnan U at the address below, or phone him on 9633723023 between 6 p.m-8 p.m. Alternatively, you can email: hariarchal@gmail.com

By

Harikrishnan U Ph. D Scholar Department of Social Work, Mizoram University, Mizoram, India-796004

Information Sheet (Malayalam Version)

ഗവേഷണ പഠനത്തെ കുറിച്ചുള്ള വിവരങ്ങൾ (Information Sheet)

വിഷയം: കേരളത്തിലെ കൊല്ലം ജില്ലയിലെ സ്കൂളിൽപോകുന്ന കൗമാരപ്രായക്കാരുടെ ചുറ്റുപാടിനേയും ആരോഗ്യത്തെയും കുറിച്ചുള്ള പഠനമാണ്.

പഠനത്തിന്റെ ഉദ്ദേശം: ഞാൻ മിസോറമിലെ മിസോറാം യൂണിവേഴ്സിറ്റിയിലെ സോഷ്യൽ വർക്ക് വിഭാഗത്തിലെ ഗവേഷണ (Ph. D in Social Work) വിദ്യാർത്ഥിയാണ്. എന്റെ Ph. D പൂർത്തിയാക്കുവാൻ വേണ്ടി ഒരു പഠനം നടത്തി പ്രബന്ധം മിസോറം യൂണിവേഴ്ലിറ്റിയിൽ സമർപ്പിക്കേണ്ടത് അനിവാര്യമാണ്. അതിനായി ഞാൻ തിരഞ്ഞെടുത്തത് കൊല്ലം ജില്ലയിലെ യൂളിൽപോകുന്ന കൗമാരപ്രായക്കാരുടെ ചുറ്റുപാടിനേയും ആരോഗ്യത്തെയും കുറിച്ചുള്ള പഠനമാണ്. പഠനത്തിന്റെ ഭാഗമായിട്ട് എട്ടാം യൂന്യ് മുതൽ പന്ത്രണ്ടാം ക്ലാസ്കുവരെയുള്ള കുട്ടികളോടും, അവരുടെ അധ്യാപകരോടും, രക്ഷിതാക്കളോടും സംസാരിക്കണ്ട ആവശ്യമുണ്ട്. പ്രധാനമായും കുട്ടികളുടെ ചുറ്റുപാടിനെയും ആരോഗ്യത്തെയും കുറിച്ചുള്ള ചോദ്യങ്ങൾ ചോദിക്കുകയും വിവരങ്ങൾ ശേഖരിക്കുകയും ചെയ്യും. ഇതെല്ലാം പഠനത്തിന്റെ ഭാഗമാണ്. മിസോറാം യൂണിവേഴ്സിറ്റിയിലെ സോഷ്യൽ വർക്ക് വിഭാഗത്തിലെ അസിസ്റ്റൻറ്റ് പ്രൊഫസറായ pr. ഗ്രേസ് ലാൽലുപ്പുയി സായിലോ, ആണ് എന്റെ പഠനത്തിന്റെ മേൽനോടും വഹിക്കുന്നത്.

പഠനത്തിൽ ഉൾപ്പെട്ടിരിക്കുന്നതെന്താണ്?

ഹൈസ്കൂൾ & ഹയർ സെക്കന്ററി സ്കൂൾ കുട്ടികളുടെ ആരോഗ്യത്തേയും ചുറ്റുപാടിനെയും കുറിച്ചുള്ള പഠനമാണ്. നിങ്ങള്ക്ക് സ്വമേധയാ ഈ പഠനത്തിൽ പങ്കെടുക്കാവുന്നതാണ്. ഈ പഠനത്തിൽ ഒരു മണിക്കൂർ നീളുന്ന ചോദ്യാവലി മാത്രമേയുള്ളു. നിങ്ങളുടെ കുട്ടിയുടെ സ്കൂളിൽ നിന്നും അനുമതി വാങ്ങിയിട്ടാണ് ഈ പഠനം നടത്തുന്നത്. Information Sheet മാത്രമേ നിങ്ങൾക്ക് നിങ്ങളുടെ പക്കൽ സൂക്ഷിക്കാൻ അവകാശമുള്ളൂ. ചോദ്യാവലി പൂരിപ്പിച്ചാലും ഇല്ലെങ്കിലും തിരികെ എന്നെ ഏല്ലിക്കേണ്ടതാണ്.

നിങ്ങൾ തരുന്ന ഉത്തരം എന്ത് ചെയ്യും?

നിങ്ങൾ നൽകിയ വിവരങ്ങൾ പൂർണ്ണമായും രഹസ്യമായിത്തന്നെ നിലനിൽക്കും, നിങ്ങളുടെ പേരോ മേൽവിലാസമോ മറ്റാരോടും വെളുപ്പെടുത്തുകയില്ല. ചോദ്യോത്തരങ്ങൾ എന്റെ പക്കൽ സുരക്ഷിതമായിരിക്കും. പഠനത്തിന്റെ അന്തിമ റിപ്പോർട്ടിൽ ഒരു കുട്ടിയുടെയോ രക്ഷിതാക്കളുടെയോ പേര് വിവരങ്ങൾ വെളിപ്പെടുത്തുകയില്ല.

നേട്ടങ്ങളും / കോട്ടങ്ങളും: ഈ പഠനത്തിലൂടെ നിങ്ങൾക്ക് യാതൊരു വിധത്തിലുള്ള കോട്ടങ്ങളും ഉണ്ടാവില്ലെന്ന് ഞാൻ ഉറപ്പു നൽകുന്നു.

പഠനത്തിൽ പങ്കെടുക്കുന്ന നിങ്ങളുടെ അവകാശങ്ങൾ

പഠനത്തിൽ നിങ്ങൾ പങ്കാളിയാകുന്നുണ്ടെങ്കിൽ അത് സ്വമേധയായാണ്. ഏതു സമയത്തു വേണമെങ്കിലും നിങ്ങൾക്ക് ഈ പഠനത്തിൽ നിന്നും വിശദീകരണമൊന്നുമില്ലാതെ പിൻവാങ്ങാവുന്നതാണ്. എല്ലാ ചോദ്യത്തിനും നിങ്ങൾ കർശനമായി ഉത്തരം നൽകണോ വേണ്ടയോ എന്ന് തീരുമാനിക്കുന്നത് നിങ്ങളാണ്. നിങ്ങൾക്ക് ഒരു ചോദ്യം ഇഷ്ടമായില്ലെങ്കിൽ അത് ഉപേക്ഷിക്കാവുന്നതാണ്.

ഈ പഠനത്തെ കുറിച്ച് കൂടുതൽ വിവരങ്ങൾ അറിയണമെങ്കിൽ എന്നെ വിളിക്കുകയോ ഇമെയിൽ അയക്കുകയോ ചെയ്യാവുന്നതാണ്. എന്റെ Phone No**: 09633723023**, Email id: **hariarchal@gmail.com**

നിങ്ങൾ എന്റെ പഠനം പൂർത്തിയാക്കുവാൻ എന്നെ സഹായിക്കുമെന്ന് ഞാൻ വിശ്വസിക്കുന്നു. ഈ കത്തിൽ പറഞ്ഞിരിക്കുന്നത് കാര്യങ്ങൾ തികച്ചും ശരിയുമാണ്. ഈ കത്ത് എന്റെ ഒരു അഭ്യത്ഥനയായി നിങ്ങൾ കണക്കാക്കണം.

എന്ന്,

ഹരികൃഷ്ണൻ. യൂ

ഗവേഷണ വിദ്യാർത്ഥി (Ph. D Scholar)

സോഷ്യൽ വർക്ക് വിഭാഗം, മിസോറം യൂണിവേഴ്ലിറ്റി, മിസോറം, ഇന്ത്യ - 796004

APPENDIX V

Consent Form for School-going Adolescents and Parents

Code No:

Title o	of the Study: Environment a	and Health of School goin	g Adolescents in Kollam	District,		
Kerala						
	of Researcher: Mr. Harikrish Sciences, Mizoram University	•				
	of Supervisor: Dr. Grace Lall of Social Sciences, Mizoram	-	-	al Work,		
•	have read the information she	et and consent to be interv	iewed, please show your ag	greement		
1.	I confirm that I have read the asked to do	information sheet and unde	erstand what I will be			
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without my legal rights being affected, and without having to give a reason					
3.	I understand that all my infor	mation will be strictly conf	idential.			
4.	I agree to take part in the abo	ve study				
School	l Name			,		
Name	of the student	Date	Signature			
 Name	of the parent	Date	Signature & Phon	 e no		
I have	e explained the nature, demand	s and foreseeable risks of the	ne above research to the par	ticipant		
	Harikrishnan U		Signatur	Δ.		

Consent Form (Malayalam Version)

m	ാ മ്മതപത്രം			
Code No:				
വിഷയം : കേരളത്തിലെ കൊല്ലം ജി ചുറ്റുപാടിനെയും ആരോഗ്യത്തെയും കുറി		കുന്ന കൗമാരപ്രായക്കാ	രുടെ	
ഗവേഷകന്റെ പേര്: ഹരികൃഷ്ണൻ. യൂ വർക്ക് വിഭാഗം, മി		ഫി (Ph. D Scholar), സോം മിസോറം, ഇന്ത്യ – 796004		
സൂപ്പർവൈസറിന്റെ പേര്: Dr. ഗ്രേസ് സോഷ്യൽ വർക്ക് 796004		ലോ, അസിസ്റ്റന്റ് പ്രൊപ ണിവേഴ്ജിറ്റി, മിസോറം, ഇ		
നിങ്ങൾ ഗവേഷണത്തെക്കുറിച്ചുള്ള വിവരങ്ങൾ പൂത താഴെപറയുന്നവയിൽ ടിക്ക് (🗸) ചെയുക	ർണമായും മനസ്സിലാക്കി ഇര	നിൽ പങ്കുചേരാൻ താല്പര്യമുണ്ടെ	തിക്കു	
1. ഗവേഷണ പഠനത്തെ കുറിച്ചുള്ള	ദ വിവരങ്ങൾ അടങ്ങുന	n Information		
sheet പൂർണമായും ഞാൻ വായിച്ച				
2. ഞാൻ സ്വമേധയാ ഈ പഠനത്തിര എനിക്ക് പിന്മാറാനുള്ള അവകാഗ		ഘട്ടത്തിലും		
3. എന്റെ വിവരങ്ങൾ ഗവേഷകൻ				
വിശ്വസിക്കുന്നു.				
4. ഞാൻ ഈ പഠനത്തിൽ പങ്കു ചേര	ാൻ താത്പര്യപ്പെടുന്നു.	8		
നിങ്ങളുടെ സ്കൂളിന്റെ പേര് 	തിയതി	ഒപ്പ്		
രക്ഷിതാവിന്റെ പേര്	തിയതി	ഒപ്പ് & ഫോൺ No		
എന്റെ പഠനത്തെ കുറിച്ച് സൂളിനെയും കുട്ടിയേയും	ര കൂടിതാവിവന്തും - പറഞ്ഞു	ammilais 2 01		
	ഗത്മാത്ര വരവത്തു വാതിവാധ	보다자였다니아이다.		
ഹരിക്യഷ്ണൻ. യൂ				
ഗവേഷണ വിദ്യാർത്ഥി	തിയതി	ഒപ്പ്		

Consent Form for Class Teachers

Title of the Study: Environment and Health of School going Adolescents in Kollam District, Kerala.

Name of Researcher: Mr. Harikrishnan U, Ph. D Scholar, Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India, 796004, E-mail id: hariarchal@gmail.com

Name of Supervisor: Dr. Grace Lalhlupuii Sailo, Assistant Professor, Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India.

If you have read the information sheet and consent to be interviewed, please show your agreement by ticking the following

1.	I confirm that I have read the information sheet and understand what I will be asked to do	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without my legal rights being affected, and without having to give a	
	reason	
3.	I understand that all my information will be strictly confidential.	
4.	I agree to take part in the above study	

School Name		••••••
Name of the teacher	Date	Signature & Phone no
I have explained the nature, der	mands and foreseeable risk	s of the above research to the participant
Harikrishnan U Name of researcher	Date	 Signature

Consent Form for Interview

Title of the Study: Environment and Health of School going Adolescents in Kollam District, Kerala.

Name of Researcher: Mr. Harikrishnan U, Ph. D Scholar, Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India, 796004, E-mail id: hariarchal@gmail.com

Name of Supervisor: Dr. Grace Lalhlupuii Sailo, Assistant Professor, Department of Social Work, School of Social Sciences, Mizoram University, Mizoram, India.

If you have read the information sheet and consent to be interviewed, please show your agreement by ticking the following

1.	I confirm that the interview is based on environment and health of Adolescents	
2.	I understand that my participation is voluntary and I agree that the interview with me will be audio recorded.	
3.	I understand that all my information will be strictly confidential.	
4.	I agree to take part in the interview.	

Male Teacher		Parent	
Female Teacher		Guardian	

Name of the interviewee	 Date	Signature
Harikrishnan U		
(Interviewer)		
Name of researcher	Date	Signature

Consent Form for Interview (Malayalam Version)

അഭിമുഖത്തിനുള്ള സമ്മതപത്രം

(Consent Form for Interview)

വിഷയം: കേരളത്തിലെ കൊല്ലം ജില്ലയിലെ സ്കൂളിൽപോകുന്ന കൗമാരപ്രായക്കാരുടെ ചുറ്റുപാടിനെയും ആരോഗ്യത്തെയും കുറിച്ചുള്ള പഠനമാണ്.

ഗവേഷകന്റെ പേര്: ഹരിക്യഷ്ണൻ. യൂ, ഗവേഷണ വിദ്യാർത്ഥി (Ph. D Scholar), സോഷ്യൽ വർക്ക് വിഭാഗം, മിസോറം യൂണിവേഴ്ലിറ്റി, മിസോറം, ഇന്ത്യ – 796004

സൂപ്പർവൈസറിന്റെ പേര്: Dr. ഗ്രേസ് ലാൽലൂപ്പൂയി സായിലോ, അസിസ്റ്റന്റ് പ്രൊഫസർ, സോഷ്യൽ വർക്ക് വിഭാഗം, മിസോറം യൂണിവേഴ്ലിറ്റി, മിസോറം, ഇന്ത്യ – 796004

നിങ്ങൾ ഗവേഷണത്തെക്കുറിച്ചുള്ള വിവരങ്ങൾ പൂർണമായും മനസ്സിലാക്കി ഇതിൽ പങ്കുചേരാൻ താല്പര്യമുണ്ടെങ്കിൽ താഴെപറയുന്നവയിൽ ടിക്ക് (🍑) ചെയുക

1.	കൗമാരപ്രാ ഇന്റർവ്യൂ	യക്കാരുടെ ചുറ്റുപാടിരെ അണ്.	നയും ആരോഗ്യതെ	തയും കുറിച്ചുള്ള						
2.	ഞാൻ സ്വമേധയാ ഈ പഠനത്തിൽ പങ്കുചേരുന്നു. ഞാനും ഗവേഷകനും തമ്മിലുള്ള അഭിമുഖം റെക്കോർഡുചെയ്യാൻ ഞാൻ സമ്മതിക്കുന്നു.									
3.		ഞാൻ കൊടുക്കുന്ന വിവരങ്ങൾ ഗവേഷകൻ രഹസ്യമായി സൂക്ഷിക്കുമെന്നു ഞാൻ വിശ്വസിക്കുന്നു.								
4.	ഞാൻ ഈ ഉ	ഇന്റർവ്യൂവിൽ പങ്കു ചേ	പരാൻ താത്പര്യപ്പെ	Symy.						
അധ	ഗ്യാപകൻ പ്രാപകൻ			രക്ഷിതാവ്						
അധ	ുപിക			രക്ഷാധികാരി						
		പ്പടുന്ന വ്യക്തി പേര്	തീയതി	ഒപ്പ്						
ഹരിക	കൃഷ്ണൻ. യൂ									
(അഭിമു	ുഖം നടത്തുന	നയാൾ)								
ഗവേഷ	ചണ വിദ്യാർ	ി ത്ഥി	തിയതി	ഒപ്പ്						

APPENDIX VI

Questionnaire for School-going Adolescents

1.	Age	13 VIII	14 IX	1. X		16 XI	17 XII	
2. 3.	Education Stream	VIII Science	IX Commerce	Huma			AII Others	
3. 4.	Religion	Science Hinduism	Christianity	Truma Mus		_	nners Others	
5.	Category	General	OBC	S		C	ST	
6.	0 0	ny physical dis		Ye			No	
7.	•	stay currently?	•	Но		Į.	lostel	
8.		e you staying?	Parents	With	With	With	Others	
•	Wildir Wildir ti	e you stuying.	1 arcius	mother		relatives	o incre	
9.	Family type	Nuclear	Joint		U	ended		
	Total grade of		For CBSI	E students		For state s	students	
	last exam		A1 (91-10			A+ (above		
			B1 (71-80			A (80-89), B+ (70-79)		
			C1 (51-60			B (60-69), C+ (50-59)		
			D (33-40)	, E (32 &	below)	C (40-49),	D+ (30-39)	
						D (20-29),	E (below 20)	
11.	Whom do you	seek help from	Father	· Mother		friend	ls Others	
	regarding academics?		Both Fath	ther Siblings		Teachers		
			& Mother					
12.	12. Did you face any traumatic			Yes		No		
	events?		If ye	es				
13.	Your attachme	ent to your	highly	Att	ached	less	Not at all	
	family?							
14.	Who do you th		Oneself	T_{e}	acher	Parents	Others	
	responsible for	r your	Chesely	10	acre.	1 60 6105	o incre	
	problems?							
15.	Do you feel con		T 7	C	C .	7	N	
	express your p		Very		mfort	less	Not at all	
1.0	problems to yo		comfort					
16.	Do you have a	ny idea about		Yes			No	
17	counselling?	talson ans halm						
1/.	Have you ever from a School	taken any nen	,	Yes		No		
	Counselor/Sch	ool Social	res				140	
	Worker?	iooi sociai						
18	If Yes are you	comfortable		Yes			No	
10.	with counsellin			100			110	
19.	Have you take			Yes			No	
	counselling ser			200				
	counselling bei	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						

Multidimensional Scale of Perceived Social Support

Instructions: Read the statement carefully and tick appropriate options which is favour to you.

- 1 = Very Strongly Disagree (VSD), 2 = Strongly Disagree (SD), 3 = Mildly Disagree (MD)
- 4 = Neutral (N), 5 = Mildly Agree (MA), 6 = Strongly Agree (SA), 7 = Very Strongly Agree (VSA)

Sl. No	Statement	VSD	SD	MD	N	MA	SA	VSA
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share my joys and sorrows	1	2	3	4	5	6	7
3.	My family really tries to help me	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me	1	2	3	4	5	6	7
6.	My friends really try to help me	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong	1	2	3	4	5	6	7
8.	I can talk about my problems with my family	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends	1	2	3	4	5	6	7

Health Questionnaire

Instruction: Each statement is related to you and give appropriate tick mark or answer.

4. Which of the following are you trying to do about your weight? I am not trying, Lose weight,

Gain weight, Stay the same

5. How much sleep do you usually get each night during the school week? Less than six hours

6-7hours, 8-9hours, 10 & more hours

Physical Activity

- 6. During the last week, on how many days you physically active for a total of at least 30 minutes per day? 1, 2, 3, 4, 5, 6, 7
- 7. Are you involved in any sports/games/dance in school? Yes No

- **8.** How important is it to you to feel like you are physically fit? Very, Important, Somewhat, Not too
- 9. Outside of school, how much time do you spend during a typical day sitting & watching television, playing on the computer, or doing other sitting activities? Less than 1 hour per day, 1-2 hours per day, 3-4 hours per day, 5-6 hours per day, 7-8 hours per day, More than 8 hours per day

Nutrition

- **10. Dietary Preference** Vegetarian Non-Vegetarian
- 11. During the past month, how often did you go hungry because there was not enough food in your home? Never, Rarely, Sometimes, Most of the time, Always
- 12. During the past week, how many times per day did you eat fruit, such as apple, mango, banana, pineapple, papaya, jackfruit, guava, or chikoo? I did not eat, Less than one time, One time per day, 2 times per day, 3 times, 4 times, 5 or more times
- **13. How often are the vegetables you eat cooked or fried in oil?** *Newer, Rarely, Sometimes, Most of the time, Always*
- **14.** During the past week, how many times per day did you eat meat or fish, such as chicken, beef, mutton or shrimp? I did not eat, Less than one time, One time per day, 2 times per day, 3 times, 4 times, 5 or more times
- 15. During the past week, on how many days did you eat at a fast food restaurant or at places serving quick meals (er. McDonalds, KFC, Nirula's, Manginis, Pizza Hut, Samosas, Patties, Pastries, rolls/frankies, pani puri/phuckha, chaat, burgers, noodles, tikkis, or ice creams)? I did not eat, Less than one time, One time per day, 2 times per day, 3 times, 4 times, 5 or more times
- 16. In your school, have you been taught about the benefits of healthy eating, including eating more fruits and vegetables? Yes, No, Unsure
- **17.** In your home, are you taught about the benefits of healthy eating? (eg. Balanced portions, eating more fruits and vegetables etc.) *Yes, No. Unsure*
- 18. Is there a source of clean drinking water at school? Yes, No. Unsure
- 19. Is there a source of clean drinking water at home? Yes, No, Unsure
- **20.** What is the source of drinking water at home? Piped, Municipality, Well, River, lake or pond, purchased, Filtered, Unsure

Hygiene

- **21.** During the past month, how many times per day did you usually clean or brush your teeth? I did not, Less than 1 time per day, 1 time per day, 2 times per day, 3 times per day, 4 or more
- **22.** During the past month, how often did you wash your hands before eating? *Never, Rarely, Sometimes, Most of the time, Always*
- 23. During the past month, how often did you wash your hands after using the toilet or latrine? Never, Rarely, Sometimes, Most of the time, Always
- **24.** During the past month, how often did you use soap when washing your hands? *Never, Rarely, Sometimes, Most of the time, Always*
- **25.** Are the toilets or latrines clean at school? Yes, No, There are no toilets or latrines at school

Medical Care and Medical History

- 26. When you are sick, are you able to get a clinic or hospital if you need to a see a Doctor? Never, Rarely, Sometimes, Most of the time, Always
- 27. If you were not able to go to a clinic or hospital when you needed to see a doctor, what was the reason? always go, Cost, No one to take place, Clinic too far, Family treated me at home, Went to traditional healer, Did not like health care providers
- 28. During the past year, did a toothache cause you to miss class or school? Yes, No
- 29. Have you ever been told by a Doctor that you have the flowing? You may choose more than one option. Asthma, Diabetes, Anaemia, Tuberculosis, Malnutrition, Malaria, Obesity, Cancer, I have never
- 30. Have you ever received a vaccination of any type? Yes, No. Unsure

HIV/AIDS

- 31. Have you ever heard of HIV infection or AIDS? Yes, No
- 32. In your school, have you ever been taught about HIV infection or AIDS? Yes, No
- 33. Have you ever talked about HIV infection or AIDS with your parents or guardians? Yes, No
- 34. Can a person who looks healthy have an HIV infection?

Cigarette, Tobacco Use, Alcohol and Drugs

- **35. Have you ever smoked cigarettes or chewed guthka or pan masala?** Never, Tried it a few times, Smoke occasionally, Smoke regularly
- **36.** During the past month, on how many days did you smoke cigarettes? I do not, 1 to 2 days, 3 to 9 days, 10 or more days, Every day
- 37. Have any of your close friends ever tried smoking cigarettes or chewed guthka or pan masala? Yes, No, Unsure
- **38. Which of your parents or guardians smoke?** Neither, Father or Male, Mother or Female. Both
- **39.** Do you think smoking is harmful to your health? Yes, No, Unsure
- **40.** During the past month, have you seen any anti-smoking media messages (such as television, posters, newspapers, magazines or movies)? *Yes, No, Unsure*
- 41. Have you ever tried alcohol (except for religious purposes)? Yes, No
- **42.** In the past 6 months, how many times have you tried alcohol? I have not, Once, A few times, Once a month, More than once a month, Once a week, More than once a week
- **43.** If you have tried alcohol, where were you the first time you had a drink of alcohol? I have not, At home, At bar, pub, At restaurant, At school, At someone else's home, Street or park, Some other place
- **44.** If you do drink alcohol, do you typically drink until you are intoxicated (drunk)? Yes, No
- **45.** Have any of your close friends ever tried beer, wine or other liquor (except for religious purposes)? Yes, No, Unsure
- **46.** Have any of your close friends ever used illegal drugs (example include ghanja, weed, pot, hash, charas, inhaling fluids crack coacaine etc)? Yes, No, Unsure
- **47. During the past year, how many times have you used illegal drugs** (example include ghanja, weed, pot, hash, charas, inhaling fluids crack coacaine etc)? *I have not*, *1 or 2 times*, *3-9 times*, *10 or more*

Violence, Domestic Violence, Abuse, and Unintentional Injury

- **48.** During the past year, how many times were you seriously injured? 0, 1 to 2, 3 to 4, 5 to 6, 7 or more
- **49. Do you wear a helmet when ride on a motorbike or scooter?** *Newer, Rarely, Sometimes, Most of the time, Always*
- **50.** During the past year, what was the major cause if the most serious injured that happened to you? I was not seriously injured, I fell, Vehicle accident, Attacked/ abused/ fighting, Fire or burnt, Inhaled or swallowed, Other:.........
- **51. Do you wear a seat belt when you ride in the car?** Newer, Rarely, Sometimes, Most of the time, Always
- 52. During the past year, were you injured in a motor vehicle accident, either as a passenger in the vehicle or as a pedestrian on the street? Yes, No
- 53. Have you ever NOT GONE to school because you felt you would be unsafe either at school or on your way to school? Yes, No
- 54. During the past year, how frequently have you experienced someone saying something intentionally rude or insulting to you? Newer, Rarely, Sometimes, Most of the time, Always
- 55. Have you ever seen a violent act take place at home, school, or in your neighbourhood? Yes, No
- **56.** Do you feel safe when at home? Newer, Rarely, Sometimes, Most of the time, Always
- **57. Do you feel safe when at school?** Newer, Rarely, Sometimes, Most of the time, Always

58. Do you feel safe when hanging out with friends? Newer, Rarely, Sometimes, Most of the time, Always

Family and Home Environment

- **59.** Do you have a computer at home? Yes, No
- 60. If Yes, does your home computer have internet access? Yes, No
- **61. Do you use any social networking cites on the internet?** (Examples: Facebook, Orkut, Twitter, Bebo, Myspace, Friendster, hi5, Bharatstudent.com) *Yes, No*
- 62. Do you have your own cellular or mobile telephone? Yes, No
- **63.** Do you have a television at home? Yes, No
- **64. Do you live with both of your parents?** *Yes, I live with both parents, No, I live with my mother, No, I live with my father, No, I don't live with either parents:*......
- **65.** Do you live with any other extended family besides your parents and siblings? Check all that apply? No, I do not, My mother's parents, My father's parents, Uncle(s), Aunt(s), Other:.....
- 66. During the past month, how often did your parents or guardians check to see if your home work was done? Newer, Rarely, Sometimes, Most of the time, Always
- 67. During the past month, how often did your parents or guardians understand your problems? Newer, Rarely, Sometimes, Most of the time, Always
- 68. During the past month, how often did your parents or guardians really know what you were doing with your free time? Newer, Rarely, Sometimes, Most of the time, Always
- **69.** How far did your father go in school? Less than primary school, Completed primary, Went to secondary school, Graduated from secondary school, Went collage not completed, Graduated from college, More educated beyond college, Unsure
- **70.** How far did your father go in school? Less than primary school, Completed primary, Went to secondary school, Graduated from secondary school, Went collage not completed, Graduated from college, More educated beyond college, Unsure
- **71. Is your father?** Working full time Working part time, Stay at home, Retired or disabled, Going to school, not working at a job, Unemployed, Unsure
- **72. Is your mother?** Working full time Working part time, Stay at home, Retired or disabled, Going to school, not working at a job, Unemployed, Unsure

School Environment

- 73. Is doing well in school important to you? Yes, No
- 74. Is doing well in school important to your family? Yes, No, Unsure
- 75. On average, what are your marks in school? Very high, High, Average, Low, Very low
- **76. How do you travel to and from school on most days?** Bus, Car, Taxi or Auto, Cycle, Bike/Motor-bike, Walk, Metro
- 77. During the past month, how often did you miss classes or school without permission? 0, 1 to 2, 3 to 4, 5 to 6, 7 or more
- 78. How regular do you do something negative because you feel pressure from your peers? *Newer*,
- 79. During the past month, how often were most of the students in your school kind and helpful? Rarely, Sometimes, Most of the time, Always

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your Name			Male/Female	
Date of Birth	Not True	Somewhat True	Certainly True	
I try to be nice to other people. I care about their feelings				
I am restless, I cannot stay still for long				
I get a lot of headaches, stomach-aches or sickness				
I usually share with others (food, games, pens etc.)				
I get very angry and often lose my temper				
I am usually on my own. I generally play alone or keep to myself				
I usually do as I am told				
I wony a lot				
I am helpful if someone is hurt, upset or feeling ill				
I am constantly fidgeting or squirming				
I have one good friend or more				
I fight a lot. I can make other people do what I want				
I am often unhappy, down-hearted or tearful				
Other people my age generally like me				
I am easily distracted, I find it difficult to concentrate				
I am nervous in new situations. I easily lose confidence				
I am kind to younger children				
I am often accused of lying or cheating				
Other children or young people pick on me or bully me				
I often volunteer to help others (parents, teachers, children)				
I think before I do things				
I take things that are not mine from home, school or elsewhere				
I get on better with adults than with people my own age				
I have many fears, I am easily scared				
I finish the work I'm doing. My attention is good				

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Questionnaire for School-going Adolescents (Malayalam Version)

Code No:	
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കൗമാരപ്രായക്കാർക്കുള്ള ചോദ്യങ്ങൾ

ന്നിർദ്ദേശങ്ങൾ: ചോദ്യങ്ങൾ എല്ലാം നിങ്ങളെ സംബന്ധിച്ചിട്ടുള്ളതാണ്. അനുയോജ്യമായ ഉത്തരങ്ങൾ രേഖപ്പെടുത്തുക.

1.	ലിംഗം	പുര	രുഷൻ			m	<i>์</i> (<i>ത</i> ใ			
2.	വയസ്സ്	13	14			15	16	17		
3.	വിദ്യാഭ്യാസം	VIII	IX			X	XI	XII		
4.	സ്ട്രീം	സയൻസ്	കോമേഴ്സ്		ഹ്യൂമാ	നിറ്റീസ്	മറ്റുള്ള	301		
5.	മതം	ഹിന്ദു	ക്രിസ്ത്യൻ		מצו	ทูปo	മറ്റുള്ളവ			
6.	വിഭാഗം	General	OBC		3	5C	ST			
7.	നിങ്ങൾ അംഗ	പരിമിതരാണോ?			<u>୭</u>	<i>ണ</i> ട്	ഇല്ല			
8.	ഇപ്പോൾ എവി	ടെയാണ് താമസി	കുന്നത്?		വീ	ട്ടിൽ	ഹോറ്റ	у <i>ൽ</i>		
9.	ആരുടെ കൂടെ താമസിക്കുന്ന		മാതാപിതാക്കളുടെ കൂടെ	INTERNATION CONTRACTOR	യുടെ ടെ	അച്ഛന്റെ കൂടെ	ബന്ധുക്കളുടെ കൂടെ	മറ്റുള്ളവ		
10	കുടുംബ തരം	അണുകുടുംബം			കൂട്ട	ട്ടുകുടുംബം				
11	പഠന സംബസ		അച്ഛൻ			'(870/212)	കുട്ടുകാർ			
	വിഷയത്തിൽ സഹായമാണ് ആവശ്യം?	- 0	അച്ഛനും അമ്മയ	30	ma	ഹാദരങ്ങൾ	അധ്യാപകർ	മറുള്ളവ		
12	അപകടകരമാ സംഭവങ്ങയില			ഉണ്ട്			ഇല്ല			
22 - 23	കടന്നു പോയി	ട്ടുണ്ടോ?	ഉണ്ടെങ്കിൽ							
13	നിങ്ങളുടെ കു നിങ്ങൾക്കെത്ര ബന്ധമുണ്ട്?		വളരെ		ബ	ന്ധമുണ്ട്	കുറവ്	ஐபூ		
14	നിങ്ങളുടെ പ്ര കാരണക്കാർ ര നിങ്ങൾ വിചാ	ആരാണെന്നാണ്	MJWo	അധ്യാപകർ			വീട്ടുകാർ	മറുള്ളവ		
15	നിങ്ങളുടെ വ്യ കാര്യങ്ങൾ അ സംസാരിക്കുറ ആശ്വാസകരമ തോന്നാറുണ്ടേ	ധ്യാപകരോട് നതു മായി	വളരെ ആശ്വാസം	2	ആ	owciowo	കുറവ്	ഇല്ല		
16	നാങ്ങളക്കാകാ കുറിച്ച് കേട്ടിട്ട			ഉണ്ട്			ഇല്ല			
17	സ്കൂളിലെ കൗദ സോഷ്യൽ വര് അടുത്തുനിന്ന എപ്പോഴെങ്കില ലഭിച്ചിട്ടുണ്ടോ	ു നിങ്ങള്ക്ക് ും സഹായം		ഉണ്ട്			ഇല്ല			
18	കൗൺസിലിങ് സ്വീകരിച്ചിട്ടു അതിൽ നിങ്ങ സംത്യപ്തരാണേ	ണ്ടെങ്കിൽ ംൾ		ഇല്ല						

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നൂളിൽനിന്നും അല്ലാതെ വേറെ ഏതെങ്കിലും കൗൺസിലിങ് സേവനങ്ങൾ	ഉണ്ട്	ഇല്ല
ലഭിച്ചിട്ടുണ്ടോ?		

നിങ്ങൾ അഭിമുഖികരിക്കുന്ന ബുദ്ധിമുട്ട് ഓരോ വാക്കുകളായിട്ടെഴുത്തുക? സ്ക്രൂളിലെ പ്രശനം, വീട്ടിലെ പ്രശ്നം, സ്വമേധയാ ബുദ്ധിമുട്ട്)

മുൽടിടിമെന്ഷനാൽ സ്കെയിൽ - പെർസെയ്വ്ഡ് സോഷ്യൽ സപ്പോർട്ട്

നിർദ്ദേശങ്ങൾ: ചോദ്യങ്ങൾ എല്ലാം നിങ്ങളെ സംബന്ധിച്ചിട്ടുള്ളതാണ്. അനുയോജ്യമായ ഉത്തരങ്ങൾ രേഖപ്പെടുത്തുക.

- 1 = വളരെ ശക്തമായി വിയോജിക്കുന്നു (VSD) 2 = ശക്തമായി വിയോജിക്കുന്നു (SD) 3 = അല്പം വിയോജിക്കുന്നു (MD) 4 = നിരഷ്പക്ഷത (N)

- 7 വളരെ ശക്തമായി സമ്മതിക്കുന്നു (SA) 7 വളരെ ശക്തമായി സമ്മതിക്കുന്നു (VSA)

SI. No	Statement	VSD	SD	MD	N	MA	SA	VSA
1.	എന്നിക്ക് സഹായം വേണ്ട സമയത്തു ഒരു വ്യക്തി എന്നെ സഹായിക്കുക എപ്പോഴും കൂടെയുണ്ട്	1	2	3	4	5	6	7
2.	എന്റെ സന്തോഷഘട്ടത്തിലും ആപത്കട്ടത്തിലും ഒരു വ്യക്തി എന്റെ കൂടെ എപ്പോഴും ഉണ്ട്	1	2	3	4	5	6	7
3.	എന്നെ സഹായിക്കാൻ എന്റെ കുടുബത്തിലെ എല്ലാവരും ശ്രമിക്കാറുണ്ട്	1	2	3	4	5	6	7
4.	എന്റെ കുടുംബത്തിൽ നിന്നും എനിക്ക് വൈകാരിക പിന്തുണ കിട്ടാറുണ്ട്	1	2	3	4	5	6	7
5.	എന്നിക്ക് ആശ്വാസം നല്ലാൻ പ്രത്യേക വ്യക്തി എപ്പോഴും എന്റെ കൂടെ ഉണ്ട്	1	2	3	4	5	6	7
6.	എന്റെ സുഹൃത്തുക്കൾ എന്നെ സഹായിക്കാറുണ്ട്	1	2	3	4	5	6	7
7.	എന്നിക്ക് മനസിലാക്കാൻ പറ്റും എന്റെ സുഹ്യത്തുക്കൾ തെറ്റായരീതിയിൽ സഞ്ചരിച്ചാൽ.	1	2	3	4	5	6	7
8.	എന്റെ കുടുംബവുമായി എന്റെ പ്രശ്നങ്ങളെക്കുറിച്ച് സംസാരിക്കാനാകും	1	2	3	4	5	6	7
9.	എന്റെ സന്തോഷത്തിലും സങ്കടത്തിലും എന്റെ സുഹൃത്തുക്കൾ കൂടെയുണ്ട്.	1	2	3	4	5	6	7
10.	എന്റെ വികാരങ്ങളെക്കുറിച്ച് കരുതലുള്ള എന്റെ ജീവിതത്തിൽ ഒരു പ്രത്യേക വ്യക്തി ഉണ്ട്.	1	2	3	4	5	6	7
11.	തീരുമാനങ്ങൾ എടുക്കാൻ എന്നെ സഹായിക്കാൻ എൻറെ കുടുംബം തയ്യാറാണ്.	1	2	3	4	5	6	7
12.	എന്റെ സുഹൃത്തുക്കളുമായി എന്റെ പ്രശ്നങ്ങളെക്കുറിച്ച് സംസാരിക്കാം.	1	2	3	4	5	6	7

ആരോഗ്യത്തെ സംബന്ധിച്ചുള്ള ചോദ്യങ്ങൾ

1)	താങ്കൾക്ക് എത്ര ഉയരമുണ്ട്?	Centimetre/Feet					ഉറപ്പില്ല			
2)	താങ്കൾക്ക് എത്ര ഭാരം ഉണ്ട്?	Kg	J							
3)	നിങ്ങളുടെ ഭാരം എങ്ങനെ വിവരിക്കും?	വളരെ ഭാരം	ചെറുതായി ഭാരം	ശരിയാർ ഭാരം	63)	തായി വർ 1000	വളരെ ഭാരം			
4)	നിങ്ങളുടെ ഭാരം സംബന്ധിച്ച് നിങ്ങൾ എന്താണ് ചെയ്യാൻ ശ്രമിക്കുന്നത്?	തൊൻ ശ്രമിക്കുന്നില്ല	ഭാരം കുറക്കും	3			് പോലെതന്നെ ഇരിക്കുക			

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5)		പോകുന്ന റിങ്ങൾക്ക് ഉറക്കം	ആ	റു മണി താടെ		<i>108</i>	4	6-7 മണിക		Д6	8-9 M™æ6	റൂർ		പത്തിൽ കൂടുതൽ മണിക്കൂർ	
ശാ	രീരിക പ്രവർത്തന <u>ം</u>	ങ്ങൾ													
6)	എത്ര ദിവസം, 30 ആഴ്ചയിൽ ശാരീരിക				STOTO) 1			2	3	4		5		6	7
7)	സ്കൂളിലെ കല പങ്കാളികളാണോ?	കായിക	പ്ര	വർത്തന	നങ്ങള	ിൽ	നി	ങ്ങൾ	(അതെ				உ	1
8)	ന്നിങ്ങള്ക്ക് ശാരീരിക ക്ഷമതയുടെ എത്രത്തോളം തോന്നുന്നു??					വള	360	പ്രധാ ണ്	ാനമാ	ഏ6	റക്കു	ുറെ		M	തും ഇല്ല
9)	സ്കൂളിൽ അല്ലാതെ ഒരു ദിവസം എത്ര നേരം TV കാണും, കമ്പ്യൂട്ടറിൽ കളിക്കും, അല്ലെങ്കിൽ മറ്റ് ഇരുന്നുകൊണ്ടുള്ള പ്രവർത്തനങ്ങളി ൽ ചെയ്യാറുണ്ട്?		9			നിൽ 1-2 ദിവന അൂർ ത്തിൽ 4 മണിക്ക ർ		ിൽ 3- 4 നിക്കു	ദിവസത്തി ൽ 5-6 മണിക്കൂർ		<i>ത്ത</i>	വസ റിൽ 7 8 നിക്കു ർ	-	മണ അ	บดชาเช 8 กลอกวง อชาเชิ รรุชาชิ
പേ	<u>.</u> ാഷകാഹാരം														
10)	ഏതു ആഹാര കൊടുക്കുന്നത്?	മുന്ഗഒ	mm	mm	บูวഹ	000		മാംസ	10aN)	100					
11)	വീട്ടിൽ ഭക്ഷണ നിങ്ങൾ കഴിഞ്ഞ എത്ര തവണ വിശന്ന	മാസത്തി					ൂർവ്വ യി	ചില	lപ്പോൾ	മിക	_{ഗൈ:}	0430	a	<i>൱ല്ലാ</i> ർ	<i>യിപ്പോഴും</i>
12)	നിങ്ങൾ കഴിഞ്ഞ ആഴ്ചയിൽ എത്ര തവണ പഴവർഗ്ഗങ്ങൾ ആയ ആപ്പിൾ, മാങ്ങ, വാഴപ്പഴം, പൈനാപ്പിൾ, ചക്കപ്പഴം എന്നിവ കഴിച്ചു?	ഞാൻ കഴിച്ചി ല്ല		ു മയത്തി ദിവസവും ദിവസവും മൂന്നു കുറവ് ഒരു തവണ രണ്ടു തവണ തവണ				1	5 ൽ രതിലധി o തവണ						
13)	എണ്ണയിൽ വേവിച്ച വറുത്തതോ ആയ പച്ചക്കറികൾ എത്ര (കഴിക്കാറുണ്ട്?		ଌଡୀ	ക്കലുമി <i>ല്ല</i>	Œ	വൂ <i>ർ</i> വ്വ യി	מממ	ചില	(പ്രാൾ	മിക്ക	ଧ୍ୱୋତ	PZO	A) t	ല്ലായ	ിപ്പോഴും
14)	കഴിഞ്ഞ ആഴ്ചയിൽ നിങ്ങൾ എത്ര തവണ, ചിക്കൻ, ഗോമാംസം, ആട്ടിറച്ചി അല്ലെങ്കിൽ ചെമ്മീൻ തുടങ്ങിയവ കഴിച്ചിട്ടുണ്ട്?	ഞാൻ കഴിച്ചി ല്ല		ണയി കുറവ്		ദിവസവ ഒരു തവ		a	ദിവസവും രണ്ടു തവണ		മൂന്നു തവണ		4 തവണ		5 ൽ രതിലധി o തവണ

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15)	കഴിഞ്ഞ ആഴ്ചയിൽ എത്ര തവണ നിങ്ങൾ ഫാസ്റ്റ് ഫുഡ് (മക്ഡൊണാൾഡ്സ്, kFc, നിരുളാസ്, മാംഗിനിസ്, പിസ്സ ഹട്ട്, സമോസാസ്, പാറ്റീസ്, പേസ്റ്റീസ്, റോൾസ് / ഫ്രാങ്കീസ്, പാനി പൂരി / ഫൂഖ, ചാറ്റ്, ബർഗറുകൾ, നൂഡിൽസ്, (ടികിസ്, ഐസ്ക്രീം) കഴിച്ചിട്ടുണ്ട്?	ഞാൻ കഴിച്ചി ല്ല	ഒരു സമയർ ൽ കുറ		ദീവന ഒരു ർ	บณูอ ภัณฑ		വസവും രണ്ടു തവണ	മൂന്നു തവണ	⁴ തവണ	5 ൽ അതിലധി കം തവണ
16)	കൂടുതൽ പഴങ്ങളും പച്ചക്കറികളും ഉൾറ്റെ ഭക്ഷണത്തെക്കുറിച്ചു നിങ്ങളുടെ സ്കൂളിൽ കിട്ടിയിട്ടുണ്ടോ?								അതെ	ഇല്ല	୭୦ଧୀଣ୍ଟ
17)	ആരോഗ്യകരമായ ഭ പഠിപ്പിക്കാറുണ്ടോ?	ച്ച് നിങ	ങ്ങളുടെ വീട്ടിൽ നിന്നും				അതെ	ഇല്ല	ഉറപ്പില്ല		
18)	നിങ്ങളുടെ സ്കൂളിൽ	ള്ളത്ത	തിന്റെ	ഉറവിടം	ഉണേ	180?	അതെ	ഇല്ല	ഉറപ്പില്ല		
19)	നിങ്ങളുടെ വീട്ടിൽ	ള്ളത്ത	നിന്റെ	ഉറവിടം	ഉണേ	GO?	അതെ	ഇല്ല	୭୦ଧାଣ୍ଟ		
20)	നിങ്ങളുടെ വീട്ടിലെ കുടിവെള്ളത്തിന്റെ സ്രോതസ്സ് എവിടെന	a	ബെ പ്പ് വഴി	മുന പ്പാല	ງທຸງ	നദി, തടാകം അല്ലെങ ൽ കുള	37	കിണർ	വിലയ്ക്ക് <i>വാങ്ങു</i> <i>ന്നു</i>	ഫിൽറ്റ ർ ചെയ്യത്	୭୦ଧାଥୁ
ശുച	പിതപരിപാലനം പ					300,000-00					
21)	ഒരു ദിവസം എത്ര പ്ര പല്ലുതേച്ചിരുന്നു കഴ മാസത്തിൽ?		ഞാ തേച്ചി		ഒരു തവണയി ൽ കുറവ്			വസവും വ്ലസവും	ദിവസ വും രണ്ടു തവണ	മൂന്നു തവണ	4 തവണ
22)	കഴിഞ്ഞ മാസത്തിര കഴിക്കുന്നതിനു മുറ കഴുകി?		നവണ ഒ	കെ	ഒരി ക്ക ലുമി ല്ല	<i>അപൂ</i> ര		ചിലരേ ൾ	പ്പാ മിക്കദ്വേ	ଧ୍ର୨୧୪୦	എല്ലായിപ്പോ ഴുo
23)	കഴിഞ്ഞ മാസത്തിൽ നിങ്ങൾ കക്കൂസ് (toilet or latrine) പോയിക്കഴിഞ്ഞിട്ടു കൈ കഴുകാറുണ്ട്?				ഒരി ക്ക ലുമി ല്ല	<i>അപൂ</i> ര യ	สิญของ ก	ചിലരേ ൾ	പ്വാ മിക്കരു	ભુગ્રજૃા	എല്ലായിപ്പോ ഴുo
24)	കഴിഞ്ഞ മാസത്തിൽ നിങ്ങൾ എത്ര തവണ കൈ സോപ്പിട്ടു കഴുകിയിട്ടുണ്ട്?			വണ	ഒരി ക്ക ലുമി ല്ല	<i>അപൂ</i> ര യ		ചിലദ്ദേ ൾ	പ്വാ മിക്കദ്വേ	പ്പാഴും	എല്ലായിപ്പോ ഴുo
25)	നിങ്ങളുടെ സ്കൂളിലെ കക്കൂസ് (toilets or latrines) എപ്പോഴും വ്യത്തിയാണോ?				<i>അ</i> തെ				ൂൾ കക്കൂസ്	toilets or la	trines) <i>ഇ밅</i>

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26)	ന്നിങ്ങൾ രോഗിയായ നിങ്ങള്ക്ക് ഡോകൂറെ	ിരിക്കുമ്പേ കാണാനു)ൾ ഒള		ഒരിപ്പ		അപൂർ		DUB	മിക്കപ്പോഴ	30	എല്ലായിപ്പോ
	അവസരം കിട്ടുമോ				ലുമില്ല വൃമാര							970
27)	നിങ്ങള്ക്ക് രോഗമുള്ള സമയത്തു നിങ്ങള്ക്ക് ഡോക്ടറെ കാണാനോ ആശുപത്രിയിൽ പോകാനോ പറ്റിയില്ല, അതിന്റെ കാരണമെന്ത്?	ചെലവ്	എട്ടു: പ്പോ കാണ ണ	1430 1120	കെ ണ്ടുരേ	ആരും ര കൊ ണ്ടുപോ (കാന്നില്ല ദൂ		തനെ ശുശ്രൂപ) Y	പരമ്പരാഗ ചികിത്സക പോകും		ആശുപത്രി പോകുന്നത് ഇഷ്ടമല്ല
28)	കഴിഞ്ഞ വർഷത്ത് നഷ്ടപെട്ടിട്ടുണ്ടോ?) വർഷത്തിൽ പല്ലുവേദന കാരണ ട്ടിട്ടുണ്ടോ?					റ് സ്കൂളി	ല ക്ലാസുക	ഡെ	അതെ		ഇല്ല
29)	ന്നിങ്ങള്ക്ക് ഈ രോഗങ്ങളിൽ	ആസ്ത	20	പ്രമേദ	വാ	M	രനീമിയ	<i>&</i> 110	00		തല	<i>Jവേദന</i>
	ഏതെങ്കിലും ഉണ്ടെന്നു ഡോക്ടർ പറഞ്ഞിട്ടുണ്ടോ? ഒന്നിൽ കൊടുത്താൽ ഉണ്ടെങ്കിൽ ടിക്ക് ചെയ്യാവുന്നതാണ്.	പോഷക ക്കുറ			മലേറിയ			അമിതവണ്ണ	ηο	കാൻസർ	?	ഒരു രോഗവുമില്ല
0)	നിങ്ങള്ക്ക് എപ്പോ ലഭിച്ചിട്ടുണ്ടോ? ച്ച് ഐ വി / എജ്സ്	ഴെങ്കിലും	ഏതെ	ങ്കിലും	വാക്സ	ിനേ	റഷൻ	അതെ		ഇല്ല		୭୦ଧାଣ୍ଟ
ነ ሀ)÷ (1)	നിങ്ങൾ എച്ച് ഐ വ	ി / എയ്ഡ്ന	<mark></mark> ്നെകു	ുറിച്ചു (കേട്ടിട്ടു	ണ്ടേ	30?			അതെ		<i>ഇല്ല</i>
32)	നിങ്ങള്ക്ക് സ്കൂളിൽ കിട്ടിയിട്ടുണ്ടോ?	നിന്നും പ	ฏച്ച് പെ	. വെ	/ എയ്ല്	സ് പ	കുറിച്ചുള	ള ക്ലാസുക	യെ	അതെ		ഇല്ല
33)	നിങ്ങൾ എപ്പോ എയ്ഡ്സ്നെകുറിച്ച				ളൊട്	C	എച്ച് ഒ	എ വി	/	അതെ		ഇല്ല
34)	നിങ്ങൾ വിചാരിക്കു വി അണുബാധയുടെ		ആരോഗ	വൃമുള്ള	ള ഒരാൾ	ക്ക്	എച്ച് പെ	() അവ	ח	ഇല്ല		୭୦ଧାଣ୍ଟ
സി	ഗരറ്റ്, പുകയില ഉപം	യോഗം, മ	ദ്യം, മയ	യക്കു മ	മുന്ന്							
35)	നിങ്ങൾ എപ്പോഴെങ്കിലും പാൻ മസാല അഖ പുകവലിച്ചിട്ടുണ്ടോ?				പ്ലങ്കിൽ	63(രിക്കലു മില്ല	പരീക്ഷി ച്ചിട്ടുണ്ട്	ற	ടയ്ക്കിടെ		സ്ഥിരമായി
36)			<i>ഞാ</i> ചെയ്യ			ഒന്ന് രണ്ടു 3 to 9 ദിവസം ദിവസം		0	പത്തിൽ കൂടുതൽ ദിവസം		ല്ലാ ദിവസവും	

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37)	നിങ്ങളുടെ അടുത്ത സുഹൃ മസാല ചവക്കുന്നതായിട്ടോ നി	ത്ത് പും ങ്ങൾ ക	കവലിക്കു ണ്ടിട്ടുണ്ടേ		(അതെ	ഇല്ല		୭ନଧାକୁ		
38)	നിങ്ങളുടെ ഏതു പുകവലിക്കുന്നത്?	രക	ഷിതാവാ	ണ് <i>ആരും</i> ചെയ്യില്ല				าั/ ก	രണ്ടു പേരും		
39)	പുകവലി നിങ്ങളുടെ ആരേ നിങ്ങൾ കരുതുന്നുണ്ടോ?	ോഗ്യത്ത്	ിന് ദോഹ	ഷകരമാണെന്ന <u>്</u>	(അതെ ഇല്ല			୭୮ଧାକ୍ଷ		
40)	കഴിഞ്ഞ മാസങ്ങളിൽ, നിങ്ങൾ കണ്ടിട്ടുണ്ടോ ട്രെലിവിഷൻ മാഗസിനുകൾ അല്ലെങ്കിൽ സി	8, പേ	ാസ്റ്ററുകൾ	, പത്രങ്ങൾ,		അതെ ഇല്ല			୭୦ଧୀଣ୍ଟ		
41)	41) നിങ്ങൾ എപ്പോഴെങ്കിലും മദ്യം പരീക്ഷിച്ചിട്ടുണ്ടോ? <i>അതെ</i>										
42)	കഴിഞ്ഞ ആറ് മാസത്തിനി! തവണ നിങ്ങൾ മദ്യം പരീക്ഷി.	<i>ഞാൻ</i> പയോഗിച്ചിട്ടില്ല		ଉଦ (പാവ ശൃo	കുറച്ച തവദ		മാസത്തിൽ ഒരിക്കൽ				
		ദരു മാസത്തി അധികം	.00	୩୭୫୴ୀ ନଦ୍ଧ ୩୭୫ ଜୈ ନଦୀഷନ ଜୈ			ൽ കൂടുതൽ				
43)	നിങ്ങൾ മദ്യപിച്ചിട്ടുണ്ടെങ്കിൽ ആദ്യമായി മദ്യം		താൻ ഗഗിച്ചിട്ടില്ല	വീട്ടിൽ വ	l <u>भ</u> ू	ബാറ	ിൽ വച്ച്	na	സ്റ്റാറന്റിൽ		
	ആദ്യമായി മദ്യം കഴിച്ചതെവിടെ വച്ച്?	സ്കൂള	ിൽ വച്ച്	മറ്റൊരാളു വീട്ടിൽ		സ്ട്രീറ്റ്	/ പാർക്ക്	2	റ്റൊരിടത്ത്		
44)	ന്നിങ്ങൾ മദ്യം കഴിക്കുകയാണെ ലഹരിപിടിച്ചിരിക്കുന്നതുവരെ	നങ്കിൽ ന സാധാര	റിങ്ങൾ ണ കുടിക്	കുമോ?		രാ	രതെ		ഇല്ല		
45)	ന്നിങ്ങളുടെ അടുത്ത സുഹ്യത്ത ആരെങ്കിലും ബിയർ, വൈൻ ര പരീക്ഷിച്ചിട്ടുണ്ടോ?			തരെ		É	ഇല്ല	୭୦ଧୀମ୍ମ			
46)	നിങ്ങളുടെ അടുത്ത സുഹ്യത്ത ആരെങ്കിലും മയക്കുമരുന്നു ഉപ			? അതെ		٤	തല്ല		୭೧ନ୍ଧାଣ୍ଟ		
47)	കഴിഞ്ഞ വർഷം, എത്ര തവണ നിങ്ങൾ നിയമവിരുദ്ധമായ മയക്കുമരുന്ന് ഉപയോഗിച്ചു?		ഞാൻ ഉപയോഗ ട്ടില്ല		1 or തവ	.700	9 തവണ	പത്തിൽ കൂടുതൽ			
അ	കമണം, ഗാർഹിക പീഡനം,	ദുരുപരേ	യാഗം, അ	 രവിചാരിതമാ	യ പ	പരിക്കും	കൾ				
48)	കഴിഞ്ഞ വർഷത്തിൽ നിങ്ങൾ തവണ ഗുരുതരമായ പരിക്കേറ്റ		0	1 to 2		3 to	4	5 to 6	7 ൽ കൂടുതൽ		
49)	സുടവിൽ സാത്ര പെയുമ്പോൾ നിങ്ങൾ ⁶³⁰		ഒരിക്കു മില്ല	ലു അപൂർവ്വ യി	מש	റാ ചിലപ്പോൾ		ിക്കപ്പോ ഴും	എല്ലായിപ്പോ ഴും		

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50)	കഴിഞ്ഞ വർഷങ്ങളിൽ നിങ്ങൾക്ക് സംഭവിച്ച ഏറ്റവും ഗുരുതരമായ പരിക്ക് എന്തായിരുന്നു?		തരമായി ക്കറ്റിട്ടില്ല	ഞാൻ വീണു	വിവറനവ	lകടമുണ്ടായ <u>ി</u>		
		അക്രമം / ദുരുപയോ ഗം / അടികൂട ൽ	പൊള്ളലേറ്റു	വീഴുക	മറുള്ളവ			
51)	നിങ്ങൾ കാറിൽ കയറുന്ന സമയത്ത് സീറ്റ് ബെൽറ്റ് ധരിക്കാറുണ്ടോ?	ഒരിക്കലു മില്ല	അപൂർവ്വമാ യി	ചിലപ്പോൾ	മിക്കപ്പോ ഴും	എല്ലായിപ്പോ ഴും		
52)	കഴിഞ്ഞ വർഷത്തിൽ, വാഹനത്തിൽ റ അല്ലെങ്കിൽ സ്വന്തം വാഹനം ഓടിച്ചപേ	വച്ചോ റോഡി ാലൊ പരിക്ക്	ലൂടെ നടന്നപ്പോ പറ്റിയിട്ടുണ്ടോ:	റെളാ ?	അതെ	ഇല്ല		
53)	സ്കൂളിലോ സ്കൂളിൽ പോകുന്ന വഴിക്കോ നിങ്ങൾ സ്കൂളിൽ പോകാതിരുന്നിട്ടുണ്ടേ		രക്ഷിതമല്ലെന്നു	്രതോന്നിയിട്ട്	അതെ	ഇല്ല		
54)	കഴിഞ്ഞ വർഷത്തിൽ, നിങ്ങള്ക്ക് ആരുടെയെങ്കിലും പക്കൽനിന്നു അവഹേളനമോ അപമര്യാദയായിട്ടുള്ള പെരുമാറ്റം അനുഭവിച്ചിട്ടുണ്ടോ?	ഒരിക്കലു മില്ല	അപൂർവ്വമാ യി	ചിലപ്പോൾ	മിക്കപ്പോ ഴുo	എല്ലായിപ്പോ ഴും		
55)	വീട്ടിൽനിന്നോ, സ്കൂളിൽ നിന്നോ, അ അക്രമങ്ങൾ ഉണ്ടായിട്ടുണ്ടോ?	രയൽവാസിക	കളിൽ നിന്നോ	, നിങ്ങൾക്ക്	അതെ	ഇല്ല		
56)	വീട്ടിലായിരിക്കുമ്പോൾ നിങ്ങൾ സുരക്ഷിതരാണോ?	ഒരിക്കലു മില്ല	അപൂർവ്വമാ യി	ചിലപ്പോൾ	മിക്കപ്പോ ഴും	എല്ലായിപ്പോ ഴും		
57)	സ്കൂളിൽ നിങ്ങൾ സുരക്ഷിതരാണോ?	ഒരിക്കലു മില്ല	അപൂർവ്വമാ യി	ചിലപ്പോൾ	മിക്കപ്പോ ഴുo	എല്ലായിപ്പോ ഴും		
58)	കൂട്ടുകാരുടെ കൂടെ പുറത്തു പോകുമ്പോൾ നിങ്ങൾ സുരക്ഷിതരാണോ?	ഒരിക്കലു മില്ല	അപൂർവ്വമാ യി	ചിലപ്പോൾ	മിക്കപ്പോ ഴും	എല്ലായിപ്പോ ഴും		
കുട	ടുംബ ചുറ്റുപാട്							
59)	നിങ്ങളുടെ വീട്ടിൽ കമ്പ്യൂട്ടർ ഉണ്ടോ?				അതെ	ഇല്ല		
60)	വീട്ടിലെ കമ്പ്യൂട്ടറിൽ ഇന്റർനെറ്റ് സംറ	ഗ്വധാനമുണ്ടേ ച	0?		അതെ	ഇല്ല		
61)	ന്നിങ്ങൾ ഇന്റർനെറ്റിൽ ഏതെങ്കിലും ഉപയോഗിക്കുന്നുണ്ടോ? ഉദാഹരണങ്ങൾ	സോഷൃൽ ഒ ർ: ഫെയ്ലബുക	നെറ്റ്വർക്കിംഗ് ഒ്, ഓർക്കുട്ട്, ട്വി	സൈറ്റുകളെ റ്റർ)	അതെ	ഇല്ല		
62)	നിങ്ങള്ക്ക് സ്വന്തമായിട്ട് മൊബൈൽ ഹേ	ഥാൺ ഉണ്ടോ	?		അതെ	ഇല്ല		
63)	നിങ്ങളുടെ വീട്ടിൽ TV ഉണ്ടോ?				അതെ ഇല്ല			
64)	നിങ്ങൾ മാതാപിതാക്കളോടൊപ്പമാണോ	В	<i>ന്റെ</i>	ഇല്ല, ര	അമ്മയുടെ കൂടെയാണ്			
	താമസിക്കുന്നത്?	ഇല്ല, ര കൂ	അച്ഛന്റെ ടയാണ്		ല്ല, രണ്ടു പേരു വടയില്ല:			

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65)	നിങ്ങൾ വേറെ ആരുടെ കൂടെ താമസിക്കുന്നത്?	യാണ്		ഇല്ല, ഞാൻ റാമസിക്കുന്നില്ല	മാതാപിര കൂ	คร ั		അച്ഛന്റെ ഹിതാക്കളുടെ കുടെ		
			(610)	മ്മാവന്റെ കൂടെ	(610 <u>VV</u> 13W)	ടെ കൂടെ		<u>99</u> 0		
66)	കഴിഞ്ഞ മാസത്തിൽ, നിങ്ങളുടെ മാതാപിതാക്കൾ നിങ്ങളുടെ ഹോം വർക്ക് ചെക്ക് ചെയ്തിട്ടുണ്ടോ?	ഒരിക ലുമിട്ട		അപൂർവ്വമായി	ചിലപ്പോ ൾ	മിക്കപ്പേ	<i>୦</i> ୧୪୦	എല്ലായിപ്പോഴും		
67)	കഴിഞ്ഞ മാസത്തിൽ, നിങ്ങളുടെ പ്രശ്നങ്ങൾ നിങ്ങളുടെ മാതാപിതാക്കൾ മനസ്സിലാക്കാൻ ശ്രമിച്ചിട്ടുണ്ടോ?	ഒരിക്കു ലുമില്ല	486	അപൂർവ്വമായി	ചിലപ്പോ ൾ	മിക്കപ്പോഴും		എല്ലായിപ്പോഴും		
68)	കഴിഞ്ഞമാസത്തിൽ നിങ്ങൾ ഒഴിവു സമയങ്ങളിൽ എന്താണ് ചെയ്യുന്നതെന്ന് നിങ്ങളുടെ മാതാപിതാക്കൾക്കറിയാ മോ?	ഒരിക്ക ലുമില്ല		അപൂർവ്വമായി	ചിലപ്പോ ൾ	മിക്കപ്പേ	'04Jo	എല്ലായിപ്പോഴും		
69)	നിങ്ങളുടെ അച്ഛൻ എത്ര വരെ പഠിച്ചിട്ടുണ്ട്?	പ്രൈ	Jമറ <u>ി</u>	സ്കൂളിൽ താഴെ	പ്രൈമറി സ്കൂൾ പൂർത്തി യാക്കി	സെക്കന സ്കൂളിൽ േ		സെക്കന്ററി സ്മൂൾ പാസ് ആയി		
		കോര	<u>ଥେ</u> ଆ	ൽ പോയിട്ടുണ്ട്	കോളേജ് പൂർത്തീ കരിച്ചു	ഉയർദ വിദ്യാഭ്യ		୭୯ଧୀଣ୍ଟ		
70)	നിങ്ങളുടെ 'അമ്മ എത്ര വരെ പഠിച്ചിട്ടുണ്ട്?	പ്രൈ	Jമ <i>റ</i> ി	സ്കൂളിൽ താഴെ	പ്രൈമറി സ്കൂൾ പൂർത്തി യാക്കി	സെക്കന സ്കൂളിൽ ഭേ		സെക്കന്ററി സൂൾ പാസ് ആയി		
		കോര	3 227	ൽ പോയിട്ടുണ്ട്	കോളേജ് പൂർത്തീ കരിച്ചു	ഉയർദ വിദ്യാഭ്യ		୭୦ଧାକ୍ଷ		
71)	നിങ്ങളുടെ അച്ഛൻ എന്തു ചെയുന്നു ?	മുട	୬୪ୁ ପ୍ରାମ	ർ സമയവും ജോല	<i>റയുണ്ട്</i>	വീട്ടിലിക	റുന്നു	റിട്ടയേർഡ് / അംഗപരിമിതിയു ണ്ട്		
				ବିട୍ରଁ ରେଚେ ଅଥେଥୀ ଖା	ാ ണ്	തൊഴി	ne	୭୦ଧୀଥୁ		

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72)	നിങ്ങളുടെ 'അമ്മ എന്തു ചെയ്യുന്നു?	മുട	ഴുവൻ സ ജോലിർ			പാർട്ട് ടൈം ജോലി ആണ്		വീട്ടിലിക്കുന്നു			റിട്ടയേർഡ് / ംഗപരിമിതിയു ബ്ട്	
			ജോലി ഒന്നും ചെയ്യുന്നില്ല						ില്ല	୭୵ଧାଥ		
സ്കൂൾ	ചുറ്റുപാട്											
73)	സ്കൂളിലെ കാര്യങ്ങൾ ഒ കൊടുക്കുന്നത്?	ചയ്യുന്നര	പയ്യുന്നതിലാണോ നിങ്ങൾ പ്രാധാന്യം			ംഗ്രാധ	അര	ח		ഇല്ല		
74)	നിങ്ങളുടെ കുടുംബം ചെയ്യുന്നതിലാണോ പ്രാധാന	സ്കൂള് ൃം കൊട		കാര്യങ്ങൾ ത്?		അത		ഇല്ല		୭୦ଧାକ୍ଷ		
75)	ശരാശരി, സ്കൂളിൽ നിങ്ങള്ക് കിട്ടാറുണ്ട്?	ക് എത്ര	മാർക്ക്	വള <u>ം</u> ഉയർ(<i>ർന്ന</i>	ശരാശരി		าณง ทั	വളരെ കുറവാണ്	
76)	എങ്ങനെയാണു സൂളിലേക്ക് യാത്ര	ബ	เกงั	കാ			63	เวยรุว/รวลูใ		ெ	സെക്കിൾ	
	ചെയ്യാറുള്ളത്?	ണൈ	വക്ക് <i>/ മേ</i>	ാട്ടോർ ഒ	ബെ	ଡଚ		മെട്രോ				
77)	7 0/2	തവണ നുവാദം ടുത്തി?		0		1 to 2		3 to 4	4 5 to		7 ൽ കൂടുതൽ	
78)	നിങ്ങളുടെ സഹപാഠി നിന്നുള്ള ന ഉണ്ടാകാറുണ്ടോ?	കളിൽ)മ്മർദ്ദം	ഒരിക്ക	റലുമില്ല		രപൂർ! മായി		ചിലപ്പോൾ	മിർ പ്പോ:	10000	എല്ലായിപ്പോ ഴും	
79)	കഴിഞ്ഞ മാസത്തിൽ, നി സുഹൃത്തുകൾ എത്രമാത്ര രീതിയിൽ നിങ്ങളോടു പെര	ം നല്ല	നല്ല <i>ഒരിക്ക</i>			അപൂർവ്വ ച മായി		ചിലപ്പോൾ മീഷ പ്പോ.			എല്ലായിപ്പോ ഴും	

കഴിവുകളെയും ബുദ്ധിമുട്ടുകളെയും കുറിച്ചുള്ള ചോദ്വാവലി (SDQ)

ഓരോ ചോദ്യത്തിനും നേർക്ക് മൂന്ന് ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. ശരിയല്ല, ഏകദേശം ശരിയാണ്, തീർച്ചയാ	തിലെ ഡേത	ഗണ് - ഏറ്റ	വാം ഉച്ചത
മായ ഉത്തരത്തിന് നേർക്ക് ശരിയടയാളം 🗸 രേഖപ്പെടുത്തുക			
ചില ചോദ്യങ്ങൾക്ക് കൃത്യമായി ഉത്തരം പറയാൻ ബുദ്ധിമുട്ടുണ്ടാകാം എങ്കിലും ആവുന്നത്ര കൃത്യത ദയവായി ഉത്തരം എഴുതുക നിങ്ങളുടെ കഴിഞ്ഞ ആറുമാസക്കാലത്തെ അനുഭവങ്ങളുടെ അടിസ്ഥാനത്തിലാം ങ്ങൾ എഴുതേണ്ടത്.		- 00	70
കൂട്ടിയുടെ പേര്	ആൺ/െ.) हारे	
ജനനത്തീയതി			
	ന്ദര്യമങ്	ഏകദേശം ശരിയാണ്	തിർച്ചയായും ശരിയാണ്
ഞാൻ മറ്റുള്ളവരുമായി നല്ല രീതിയിൽ പെരുമാറാൻ ശ്രമിക്കാറുണ്ട് - അവരുടെ വികാരങ്ങളെ മാനിക്കാറുണ്ട്.			
ഞാൻ അക്ഷരനാണ്. അധിക സമയം സ്വസ്ഥമായി ഇരിക്കാൻ എനിക്കാവില്ല.			
എന്നിക്ക് മിക്കപ്പോഴും തലവേദനയും, വയറുവേദനയും, ഓക്കാനവും വരാനുണ്ട്		_ 🗆	
തോൻ പൊതുവേ മറ്റുള്ളവരുമായി പങ്കുവയ്ക്കുന്ന കൂട്ടത്തിലാണ്. (വിശേഷപ്പെട്ട ഭക്ഷണ പദാർത്ഥങ്ങൾ, കംപ്യൂട്ടർ ഗെയിംസ്/കാസറ്റുകൾ, പേന തുടങ്ങിയവ)			
എനിക്ക് പെട്ടെന്ന് കലികയറും മിക്കപ്പോഴും എന്റെ നിയന്ത്രണം വിട്ടുപോകാറുണ്ട്.			
ഞാൻ മിക്കവാറും ഏകനാണ്. ഒറ്റയ്ക്ക് കളിക്കുകയോ ഏകനായി ഇരിക്കുകയോ ആണ് എന്റെ പതിവ്.			
മുതിർന്നവർ ആവശ്യപ്പെടുന്നത് ഞാൻ അപ്പാടെ അനുസരിക്കാറുണ്ട്			
ഞാൻ ഒരുപാട് ആധികൾ ഉള്ളവനാണ്. (വേണ്ടതും വേണ്ടാത്തതും ഓർത്ത് ഞാൻ എപ്പോഴും വിഷമിക്കാറുണ്ട്)			
മറ്റുള്ളവർ മുറിവേല്ക്കുമ്പോഴോ, വിഷമിക്കുമ്പോഴോ, അസുഖം ബാധിക്കുമ്പോഴോ ഞാൻ സഹായിക്കാറുണ്ട്.			
എനിക്ക് അടങ്ങിയിരിക്കാനാവില്ല. ഒരിടത്ത് ഇരിക്കുമ്പോഴും എന്റെ കൈകാലുകളോ ശരീരത്തിന്റെ മറ് ദാഗ ങ്ങളോ നിരന്തരം അനങ്ങികൊണ്ടേയിരിക്കും.			
എനിക്ക് ഒന്നോ അതിലധികമോ നല്ല കൂട്ടുകാരുണ്ട്.			
ഞാൻ ഒരുപാട് തല്ല് കൂടാറുണ്ട്. മറ്റുള്ളവരെക്കൊണ്ട് എനിക്ക് ഇഷ്ടപ്പെട്ടത് ചെയ്യിക്കാൻ എനിക്ക് കഴിയും.			
ഞാൻ പൊതുവേ ദുഃഖിതനും/യും ഖിന്നനും/യും കരയുന്നവനു/വളുമാണ് (മനസ്സ് തകർന്നവനു/വളു) മാണ്			
എന്റെ സമപ്രായക്കാർ പൊതുവേ എന്നെ ഇഷ്ടപ്പെടുന്നു			
എന്റെ ശ്രദ്ധ എളുപ്പം പാളിപ്പോകാറുണ്ട്. എകാഗ്രത നിലനിർത്താൻ ഞാൻ ബുദ്ധിമുട്ടാറുണ്ട്			
പുതിയ സാഹചര്വങ്ങളിൽ ഞാൻ എളുപ്പം പതറിപ്പോകാറുണ്ട്. എന്റെ ആത്മവിശ്വാസം എളുപ്പം നഷ്ടപ്പെടുന്നു.			
എന്നെക്കാൾ ചെറിയ കുട്ടികളോട് എനിക്ക് ദയാവായ്പുണ്ട്			
ഞാൻ കുള്ളം പറയുകയും ചതിക്കുകയും ചെയ്യുമെന്ന് മറ്റുള്ളവർ പലപ്പോഴും ആരോപിക്കാറുണ്ട്.			
മറ്റ് കുട്ടികളോ, ചെറുപ്പക്കാരോ എന്നെ പരിഹസിക്കുകയും ഉപദ്രവിക്കുകയും ചെയ്യാറുണ്ട്			
മറ്റുള്ളവരെ സഹായിക്കുന്നതിൽ (മാതാപിതാക്കൾ, അദ്ധ്വാപകർ, കുട്ടികൾ) ഞാൻ മിക്കരോഴും മൂന്നിട്ട് നിൽക്കാ റൂണ്ട്			
എന്തും നന്നായി ആലോചിച്ചതിനുശേഷമോ ഞാൻ പ്രവർത്തിക്കാറുള്ളു			
വീട്ടിൽ നിന്നും സ്കൂളിൽ നിന്നും മറ്റ് സ്ഥലങ്ങളിൽ നിന്നും എന്റേതല്ലാത്ത സാധനങ്ങൾ എടുക്കുന്ന കൂട്ടത്തി ലാണ് ഞാൻ			
മറ്റ് കുട്ടികളോട് ഇടപെടുന്നതിനേക്കാൾ നന്നായി മുതിർന്നവരോട് ഇടപഴകും			
എനിക്ക് ഒത്തിരി ഭയപ്പാടുകളുണ്ട് ഞാൻ എളുപ്പം വിരണ്ടുപോകാറുണ്ട്.			
എന്തെങ്കിലും ചെയ്യാൻ തുടങ്ങിയാൽ അത് ചെയ്തുതീർക്കുന്ന കൂട്ടത്തിലാണ്. എന്റെ ശ്രദ്ധ നന്നായി നില നിർത്താനാവുന്നുണ്ട്			

നിങ്ങൾക്ക് മറ്റ് അഭിപ്രായങ്ങളോ, ആകാംക്ഷകളോ ഉണ്ടോ?

മറുപുറത്തെ ചോദ്യാവലി കൂടി ഭയവായി ശ്രദ്ധിക്കുക

Appendix VII

Questionnaire for Parents

1. Age.....

2. Gender : *Male*, *Female*

3. Education : Illiterate, Primary, SSLC, Pre-degree, UG & above

4. Occupation : Daily wage workers, Agriculture, Business, Professionals,

Household work

Modified Kuppuswamy Socioeconomic scale (Question No.7 to 10)

- **5. Head of the family**: *Myself, Husband, Wife, Other*.....
- **6. Occupation of the head**: Legislators, senor Officials & Managers, Professionals, Technicians and Associate Professionals, Clerks, Skilled workers and shop & market sales workers, Skilled Agricultural & Fishery Workers, Craft & Related Trade workers, Plant & Machine Operators and Assemblers, Elementary Occupation, Un employed
- 7. Education of head of the family: Professional or Honours, Graduate, Intermediate or diploma, High school, Middle school, Primary, Illiterate
- **8. Total monthly income of family**: >Rs.126,360, Rs.63,18 to Rs.126,356, Rs.47,266 to Rs.63178, Rs.31,591 to Rs.47,262, Rs.18,953 to Rs.31,589, Rs.6,327 to Rs.18952, Rs.<6,326
- 9. Do your children share very personal problems with you? Yes, No
- **10. How often do you participate in your child's school activities?** *Sometimes, Regularly, Once in a while, Never*
- 11. Does your child participate in extracurricular activity? Yes, No
- 12. Whom did you first consult to find out the problems of your child? Friends, Colleagues, Administrators, Counsellors, No body
- 13. Have you heard about school social worker/counsellor? Yes, No
- 14. Do you think that school social worker or counsellor is needed in your school? Yes, No
- 15. Do you have sufficient idea about counselling? Adequate, Partially, In adequate
- 16. Have you attended any parent training program or training programs for the welfare of Children? Yes, No
- 17. Are you able to handle all issues or difficulties of your child? Yes, No
- 18. If you found your child have some difficulty whom you discuss first.....
- **19. Did your child take any counselling help? If Yes, any changes?** Yes, No, Changes happened after counselling, Some changes after counselling, No Changes after counselling

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months.

Child's Name			Male/Female
Date of Birth	Not True	Somewhat True	Certainly True
Considerate of other people's feelings			
Restless, overactive, cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other children (treats, toys, pencils etc.)			
Often has temper tantrums or hot tempers			
Rather solitary, tends to play alone			
Generally obedient, usually does what adults request			
Many worries, often seems worried			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
Has at least one good friend			
Often fights with other children or bullies them			
Often unhappy, down-hearted or tearful			
Generally liked by other children			
Easily distracted, concentration wanders			
Nervous or clingy in new situations, easily loses confidence			
Kind to younger children			
Often lies or cheats			
Picked on or bullied by other children			
Often volunteers to help others (parents, teachers, other children)			
Thinks things out before acting			
Steals from home, school or elsewhere			
Gets on better with adults than with other children			
Many fears, easily scared			
Sees tasks through to the end, good attention span			

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Questionnaire for Parents (Malayalam Version)

കൗമാരപ്രായക്കാരുടെ രക്ഷിതാക്കൾക്കുള്ള ചോദ്യങ്ങൾ

1.	വയസ്സ്									
2.	ലിംഗം	ചിംഗം പുരുഷൻ					സ്ത്രീ			
3.			നിരക്ഷരൻ			<i>എസ്സ്. എസ്സ്.</i> എൽ .സി	പ്രീഡിഗ്രി	ബിരുദം / ബിരുദാനർ ബിരുദം		
4.			വസ വേതന തൊഴില			ബിസിനസ്	ഡ്രൊഫഷണലുക	കൾ വീട്ടുജോല്		
5.	വൈവാഹി നില	ക	വിവാഹിതൻ	6	ൻപിരി ഞ്ഞു റക്കുന്നു	വിവാഹമോചിതർ	വിധവ /വിഭാര്യൻ	അവിവാഹിതൻ		
പരിം	ഷ്ടരിച്ച കുപ്പുന്ന പ	บบออ	। ി <i>സോഷ്യോഇക്കരേ</i>	നാമിക	ട് സ്കെയി	ൽ (ചോദ്യം 7 മുതൽ 1	0 വരെ)			
6.	ഗ്യഹനാഥൻ		ാഥൻ തൊൻ ഭർത്താവ്			ഭാര്യ	മറുള്ളവ			
7.	ഗൃഹനാഥൻ റെ തൊഴിൽ		നിയമനിർമാതാ ക്കൾ, സെനറ്റർ ഉദ്യോഗസ്ഥർ, മാനേജർമാർ)ഫഷണ വുകൾ	ടെക്ലീഷ്യമ്പാരും അസോസിയേറ്റ് പ്രൊഫഷണലുക ളും	କ୍ଟാർക്ക്		ഷോപ്പ്, മാർക്കറ്റ് സെയിൽസ്	
			വിദഗ്യ കൃഷിക്കാരൻ/ ഫിഷറി തൊഴിലാളി	ബ ര തെ	ാഫ്റ്റ് & സപ്പെട്ട ട്രേഡ് ചഴിലാളി കൾ	പ്പാൻറ് & മെഷീൻ ഓപ്പറോർമാർ, അസെംബ്ലേജ്	പ്രാഥമിക തൊഴിൽ	തെ	ാഴിൽരഹിതനാണ്	
8.	ഗൂഹനാഥൻ റെ വിദ്യാഭ്യാസം		പ്രൊഫഷണൽ അല്ലെങ്കിൽ ഓണറേഴ്ല്	ബ	<i>റിരുദം</i>	ഇന്റർമീഡിയറ്റ് അല്ലെങ്കിൽ	ഹൈസ്കൂൾ		മിഡിൽ സ്കൂൾ	
			, , , , , , , , , , , , , , , , , , ,			ഡിപ്പോമ	പ്രാഥമികം		നിരക്ഷരൻ	
9.				ി വള	രെ വ്യക്ത	ിപരമായ പ്രശ്നങ്ങൾ	୭୩୫ଁ		ഇല്ല	
10.	പങ്കുവെക്കാറുണ്ടോ? നിങ്ങളുടെ കുട്ടിയുടെ സ്കൂൾ പ്രവർത്തനങ്ങളിൽ നിങ്ങൾ എത്രത്തോളം പങ്കെടുക്കുന്നു?			่⊿ก∈	ലപ്പോൾ	പതിവായി	ഒരു സമയത്ത്		ഒരിക്കലും	
11.	നിങ്ങളുടെ കുട്ടി പാഠ്യേതര പ്രവർത്തനങ്ങളിൽ പങ്കെടുക്കാറുണ്ടോ?						ഉണ്ട്		ഇല്ല	

12.	നിങ്ങളുടെ കുട്ടിയുടെ പ്രശ്നങ്ങൾ കണ്ടെത്താനായി ആദ്യം ആരെയാണ് സമീപിക്കുന്നത്?	സുഹൃത്തും	9 6Ид	100	പ്രവൻ കർ	അഡ്ബനിസ് റ്റർമാർ	ଓ ୫୯୩୩	<i>സിലേഴ്സ്</i>	ആരുമില്ല	
13.	നിങ്ങൾ സ്കൂൾ സാമൂഹ് കേട്ടിട്ടുണ്ടോ?	ൃ പ്രവർത്തക) <u>é</u>	<u>୭</u> ଣୀ ଁ		한빛				
14.	നിങ്ങളുടെ സ്മൂളിൽ ഉപദേശകനോ ആവശ്യം	ഉണ്ട്		ഇല്ല						
15.	കൗൺസിലിംഗിനെക്കുറിച്ചു മതിയായ അറിവുണ്ട് മതിയായ ആശയം ഉണ്ടോ?				ഭാഗികമായി		അപര്യാപ്പമാണ്			
16.	. നിങ്ങളുടെ കുട്ടികളുടെ ഉന്നമനത്തിനു വേണ്ടി ഏതെങ്കിലും പരിശീലന പരിപാടികളിൽ പങ്കെടുത്തിടുണ്ടോ?						୭୩୪ଁ ୭ମୁ			
							ഉണ്ട്			
17.	നിങ്ങളുടെ കുട്ടികളുടെ പ്രശ്നങ്ങൾ കൈകാര്യം ചെയ്യാൻ നിങ്ങൾക്ക് കഴിയാറുണ്ടോ ?					ഉണ്ട്		ഇല്ല		
18.	നിങ്ങളുടെ കുട്ടികൾക്ക് നിങ്ങൾ ആരെയാണ് ആ	В								
19.		എന്തെങ്കിലും തിയിട്ടുണ്ടോ, ലും മാറ്റങ്ങൾ	ഉണ്ട്	ഇല്ല		യ മാറ്റങ്ങൾ ണടായി			ാറ്റങ്ങൾ ഉണ്ടായില്ല	

ന്നിങ്ങളുടെ കുട്ടികൾ അഭിമുഖീകരിക്കുന്ന ബുദ്ധിമുട്ട് ഓരോ വാക്കുകളായിട്ടെഴുത്തുക (കുട്ടിയുടെ ബുദ്ധിമുട്ട് , സ്മൂളിലെ പ്രശ്തം , വീട്ടിലെ പ്രശ്തം)

കഴിവുകളെയും ബുദ്ധിമുട്ടുകളെയും കുറിച്ചുള്ള ചോദ്വാവലി (SDQ)

ഓരോ ചോദ്യത്തിനും നേർക്ക് മൂന്ന് ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. ശരിയല്ല, ഏകദേശം ശരിയാണ്, തീർച്ചയാ	യും ശരിയ	ാണ് - എറ	വും ഉചിത
മായ ഉത്തരത്തിന് നേർക്ക് ശരിയടയാളം 📝 രേഖപ്പെടുത്തുക			
ചില ചോദ്യങ്ങൾക്ക് കൃത്വമായി ഉത്തരം പറയാൻ ബുദ്ധിമുട്ടുണ്ടാകാം. എങ്കിലും ആവുന്നത്ര കൃത്വത ദയവായി ഉത്തരം എഴുതുക കുട്ടിയുടെ കഴിഞ്ഞ ആറുമാസക്കാലത്തെയോ ഈ സ്കൂൾ വർഷത്തെയോ വേണം ഉത്തരഞ്ഞൾ നൽകേണ്ടത്.			
കുട്ടിയുടെ പേര്	ആൺ/െ	เดาติ	
ജനനത്തിയതി			
	ശരിയല്ല	എകദേശം ശരിയാണ്	പ്രദ്യമാണ് വൃദ്യമാകാം
മറ്റുള്ളവരുടെ വികാരങ്ങളെ മാനിക്കുന്നയാളാണ്			
ചിക്കപ്പോഴും തലവേദന, വയറുവേദന, ഓക്കാനം എന്നിങ്ങനെ എന്തെങ്കിലും അസുഖമുണ്ടെന്ന് പരാതിപ്പെടും			
മറ്റ് കുട്ടികളുമായി എളുപ്പം പങ്കുവയ്ക്കുന്ന പ്രകൃതമാണ് (മധുര പലഹാരങ്ങൾ, കളിപ്പാട്ടം, പെൻസിൽ മുതലായവ)			
മിക്കപോഴും ദുഃശ്ലാവ്വം കാണിക്കും പെട്ടെന്ന് കലികയറും			
പൊതുവേ ഏകനാണ് പലപ്പോഴും റ്റെക്കാണ് കളി			
പൊതുവെ അനുസരണയുള്ളവൻ/ൾ മുതിർന്നവർ ആവശ്വപ്പെടുന്നത് മിക്കപ്പോഴും ചെയ്യാറുണ്ട്			
ഒത്തിരി ആധികൾ. മിക്കപ്പോഴും വേണ്ടതിനേയും വേണ്ടാത്തതിനേയും കുറിച്ച് വിഷമിച്ചുകൊണ്ടേയിരിക്കും			
ആർക്കെങ്കിലും മുറിവേല്ക്കുമ്പോഴോ വിഷമിക്കുമ്പോഴോ, അസുഖം ബാധിക്കുമ്പോഴോ സഹായിക്കുന്ന കൂട്ടത്തിലാണ്.			
അടങ്ങിയിരിക്കാൻ പ്രയാസം. ഇരിക്കുമ്പോൾപോലും കൈകാലുകളോ, ശരീരദാകെയോ ചലിച്ചുകൊങ്ങേ യിരിക്കും.			
ഒരാളെങ്കിലും നല്ല സുഹൃത്തായി ഉണ്ട്.			
മറ്റ് കുട്ടികളുമായി മിക്കപ്പോഴും വഴക്കിടുകയും അവരെ ഉപന്ദ്രവിക്കുകയും ചെയ്യും			
പൊതുവെ ദുഃഖിത/ൻ, മനസ്സ് തകർന്നവൻ/വൾ, മിക്കപ്പോഴും കണ്ണീരൊഴുക്കും.			
പൊതുവേ മറ്റ് കുട്ടികൾ ഇഷ്ടപ്പെടുന്ന കൂട്ടത്തിലാണ്			
എളുപ്പം ശ്രദ്ധ പതനും, എകാഗ്രത കിട്ടാൻ പ്രയാസം			
പുതിയ സാഹചര്യങ്ങളിൽ മനസ്സുപതനും, ആശങ്കപുണ്ട് വേണ്ടപ്പെട്ടവരോട് ഒട്ടിഷിടിച്ചു നിൽക്കാൻ ശ്രമിക്കും. എളുപ്പം ആത്മവിശ്വാസം നഷ്ടപ്പെടുന്ന പ്രകൃതം			
തന്നെക്കാൻ ചെറിയ കുട്ടികളോട് ദയാവായ്പുള്ളവൻ/വൾ			
മിക്കപ്പോഴും കുള്ളം പറയുകയോ ചതിക്കുകയോ ചെയ്യും			
മിക്കപ്പോഴും മറ്റ് കുട്ടികളാൽ കളിയാക്കപ്പെടുകയോ പീഡിപ്പിക്കപ്പെടുകയോ ചെയ്യും			
മറ്റുള്ളവരെ (അച്ഛനമ്മനാർ, അദ്ധ്വാപകർ, മറ്റ് കുട്ടികൾ) സഹായിക്കുവാൻ എപ്പോഴും തല്പരൻ			
നന്നായി ആലോചിച്ചതിനുശേഷം മാത്രം പ്രവർത്തിക്കുന്നവൻ/വൾ			
വീട്ടിൽ നിന്നും, സ്കൂളിൽ നിന്നും മറ്റ് സ്ഥലങ്ങളിൽ നിന്നുമൊക്കെ മോഷ്ടിക്കും			
മറ്റ് കുട്ടികളോട് ഇടപെടുന്നതിനേക്കാൾ നന്നായി മുതിർന്നവരോട് ഇടപഴകും			
നിഭവധി ഭയപ്പാടുകൾ, എളുപ്പം വിരണ്ടുപോകുന്ന പ്രകൃതം			
ഒരു കാര്വം ചെയ്യാൻ തുടങ്ങിയാൽ അത് ചെയ്തുതീർക്കും. നല്ല ഏകാഗ്രനയുണ്ട്			
നിങ്ങൾക്ക് മറ്റ് അഭിപ്രായങ്ങളോ, ആകാംക്ഷകളോ ഉങ്ങോ? മറുപുറത്തെ ചോദ്യാവലി കൂടി യേവായി ശ്രദ്ധിക്കുക			
		N _a	

APPENDIX VIII

Questionnaire for Class Teachers

How long you are working as a teacher		ıted	
Do you have a permanent social worker/counsellor	r in your school	? Yes, No)
Counselling will be an extra burden on you, if dele	gated. Yes, No		
Have you attended any counselling program or tratudents? Yes, No	raining prograi	ns for the	e welfa
Are you able to handle all issues or difficulties of st	tudents Yes, No	9	
Strengths and Difficulties Que	estionnaire		T ⁴⁻¹⁷
For each item, please mark the box for Not True, Somewhat True or Certainly 'best you can even if you are not absolutely certain or the item seems daft! Pleabehaviour over the last six months or this school year.			
Child's Name			Male/Fema
Date of Birth			
	Not	Somewhat	
Considerate of other people's feelings	True	True	True
Restless, overactive, cannot stay still for long		<u> </u>	
Often complains of headaches, stomach-aches or sickness		-H	ᅮ
Shares readily with other children (treats, toys, pencils etc.)			
Often has temper tantrums or hot tempers			$\overline{}$
Rather solitary, tends to play alone			一一
Generally obedient, usually does what adults request		П	
Many worries, often seems worried			
TT 1 C 1 1 C			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
9000 0000 # 000 900 000 00 000 000 000 0	8		
Constantly fidgeting or squirming			r - 1
Constantly fidgeting or squirming Has at least one good friend			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children Easily distracted, concentration wanders			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children Easily distracted, concentration wanders Nervous or clingy in new situations, easily loses confidence			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children Easily distracted, concentration wanders Nervous or clingy in new situations, easily loses confidence Kind to younger children			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children Easily distracted, concentration wanders Nervous or clingy in new situations, easily loses confidence Kind to younger children Often lies or cheats			
Constantly fidgeting or squirming Has at least one good friend Often fights with other children or bullies them Often unhappy, down-hearted or tearful Generally liked by other children Easily distracted, concentration wanders Nervous or clingy in new situations, easily loses confidence Kind to younger children Often lies or cheats Picked on or bullied by other children			

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

SDQ Questionnaire for Class teachers (Malayalam Version)

T4-16

കഴിവുകളെയും ബുദ്ധിമുട്ടുകളെയും കുറിച്ചുള്ള ചോദ്യാവലി (SDQ)

ഓരോ ചോദ്യത്തിനും നേർക്ക് മുന്ന് ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. ശരിയല്ല, എകദേശം ശരിയാണ്, തീർച്ചയ	ായും ശരിയ	മാണ് - ഏറ്റ	വും ഉചിത
മായ ഉത്തരത്തിന് നേർക്ക് ശരിയടയാളം 🧹 രേഖപ്പെടുത്തുക			
ചില ചോദ്യങ്ങൾക്ക് കൃത്വമായി ഉത്തരം പറയാൻ ബുദ്ധിമുട്ടുണ്ടാകാം എങ്കിലും ആവുന്നത്ര കൃത്യത ദയവായി ഉത്തരം എഴുതുക. കുട്ടിയുടെ കഴിഞ്ഞ ആറുമാസക്കാലത്തെയോ ഈ സ്കൂൾ വർഷത്തെയോ വേണം ഉത്തരങ്ങൾ നൽകേണ്ടത്.		15.7	
കൂട്ടിയുടെ പേര്	ആൺ/പെ	പൺ	
or an amalau wi			
ജനനത്തിയതി			
	രംഗിയല്ല	എകദേശം ശരിയാണ്	തീർച്ചയായും ശരിയാണ്
മറ്റുള്ളവരുടെ വികാരങ്ങളെ മാനിക്കുന്നയാളാണ്			
ഒരു നേരം അടങ്ങിയിരിക്കില്ല. അമിതമായ ചുറുചുറുക്കാണെപ്പോഴും ഏറെ നേരം സ്വസ്ഥമായി ഇരിക്കാനാവില്ല			
മിക്കപ്പോഴും തലവേദന, വയറുവേദന, ഓക്കാനം എന്നിങ്ങനെ എന്തെങ്കിലും അസുഖമുണ്ടെന്ന് പരാതിപ്പെടും			
മറ്റ് കുട്ടികളുമായി എളുപ്പം പങ്കുവയ്ക്കുന്ന പ്രകൃതമാണ് (മധുര പലഹാരങ്ങൾ, കളിപ്പാട്ടം, പെൻസിൽ മുതലായവ)			
മിക്കപ്പോഴും ദുഃശ്ശാഠ്വം കാണിക്കും. പെട്ടെന്ന് കലികയറും			
പൊതുവേ ഏകനാണ്. പലപ്പോഴും ഒറ്റക്കാണ് കളി			
പൊതുവെ അനുസരണയുള്ളവൻ/ൾ മൂതിർന്നവർ ആവശ്യപ്പെടുന്നത് മിക്കപ്പോഴും ചെയ്യാറുണ്ട്			
തെതിരി ആധികൾ മിക്കപ്പോഴും വേണ്ടതിനേയും വേണ്ടാത്തതിനേയും കുറിച്ച് വിഷമിച്ചുകൊണ്ടേയിരിക്കും			
ആർക്കെങ്കിലും മുറിവേല്ക്കുമ്പോഴോ വിഷമിക്കുമ്പോഴോ, അസുഖം ബാധിക്കുമ്പോഴോ സഹായിക്കുന്ന കൂട്ടത്തിലാണ്.			
അടങ്ങിയിരിക്കാൻ പ്രയാസം ഇരിക്കുമ്പോൾപോലും കൈകാലുകളോ, ശരീരമാകെയോ ചലിച്ചുകൊണ്ടേ യീരിക്കും			
ഒരാളെങ്കിലും നല്ല സുഹ്യത്തായി ഉണ്ട്			
മറ്റ് കുട്ടികളുമായി മിക്കുപ്പോഴും വഴക്കിടുകയും അവരെ ഉപദ്രവിക്കുകയും ചെയ്യും			
പൊതുവെ ദുഃബിത/ൻ, മനസ്സ് തകർന്നവൻ/വൾ, മിക്കപ്പോഴും കണ്ണീരൊഴുക്കും.			
പൊതുവേ മറ്റ് കുട്ടികൾ ഇഷ്ടപ്പെടുന്ന കൂട്ടത്തിലാണ്			
എളുപ്പം ശ്രദ്ധ പതറും, ഏകാഗ്രത കിട്ടാൻ പ്രയാസം			
പുതിയ സാഹചര്യത്തളിൽ മനസ്സുപതറും, ആശങ്കപൂണ്ട് വേങ്ങപ്പെട്ടവരോട് ട്രിെഷിടിച്ചു നിൽക്കാൻ ശ്രമിക്കും. എളുപ്പം ആത്മവിശ്വാസം നഷ്ടപ്പെടുന്ന പ്രകൃതം		П	(30-20-5)
തമന്നക്കാൾ ചെറിയ കുട്ടികളോട് ദയാവായ്പുള്ളവൻ/വൾ			
മിക്കപ്പോഴും കുള്ളം പറയുകയോ ചതിക്കുകയോ ചെയ്യും			
മിക്കപ്പോഴും മറ്റ് കുട്ടികളാൽ കളിയാക്കപ്പെടുകയോ പീഡിപ്പിക്കപ്പെടുകയോ ചെയ്യും			
മറ്റുള്ളവരെ (അച്ഛനമനാർ, അദ്ധ്യാപകർ, മറ്റ് കുട്ടികൾ) സഹായിക്കുവാൻ എപ്പോഴും തല്പരൻ			
നന്നായി ആലോചിച്ചതിനുശേഷം മാത്രം പ്രവർത്തിക്കുന്നവൻ/വൾ			No.
വീട്ടിൽ നിന്നും, സ്കൂളിൽ നിന്നും മറ്റ് സ്ഥലങ്ങളിൽ നിന്നുമൊക്കെ മോഷ്ടിക്കും			
മറ്റ് കുട്ടികളോട് ഇടപെടുന്നതിനേക്കാൾ നന്നായി മുതിർന്നവരോട് ഇടപഴകും	П		
നിരവധി ഭയപ്പാടുകൾ, എളുപ്പം വിരങ്ങുപോകുന്ന പ്രകൃതം			
ഒരു കുമ്മം ചെയ്യാൻ തുടങ്ങിയാൽ അത് ചെയ്താതീർക്കാം. നല കലാഗത്താണ്	П	П	П

നിങ്ങൾക്ക് മറ്റ് അഭിപ്രായങ്ങളോ, ആകാംക്ഷകളോ ഉണ്ടോ?

2റുപുറത്തെ ചോദ്വാവലി കൂടി ദയവായി ശ്രദ്ധിക്കുക

APPENDIX IX

Socio-Demographic Profile & Interview Guide

Parents

1. Age.....

2. Gender : Male, Female

3. Marital Status: Staying together, Separated or divorce

4. Education : Higher Secondary, Under Graduate, Post Graduate and above
5. Occupation : Government Sector, Private Sector, Self Employed, Home Maker

Teachers

1. Age.....

2. Gender : Male, Female

3. Marital Status: Staying together, Separated or divorce

4. Education.....

5. Teaching Experience.....

Interview Guide for Qualitative Information

- 1. How would you describe the home environment of school-going adolescents?
- 2. Describe school-going adolescent's activities at home?
- **3.** Describe what type of problems is faced by school-going adolescents in the community?
- **4.** Can you describe the peer influences or pressure of school-going adolescents?
- **5.** Describe the relationship of school-going adolescents at home and school?
- **6.** Describe the sleeping pattern of school-going adolescents?
- 7. Tell me what you think about the nutritional status of school-going adolescents?
- **8.** What are the daily physical activities that school-going adolescents are performed?
- **9.** Describe the hygiene practice of school-going adolescents?
- **10.** What do you think about the medical condition of school-going adolescents?
- 11. Describe substance use among school-going adolescents and its influences?
- 12. Tell me about the awareness programmes or classes for school-going adolescents?
- **13.** What emotional and behavioural problems found among school-going adolescents most? Describe it?
- **14.** Describe the need and importance of counselling service for school-going adolescents?

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LIST OF PUBLICATION

Published articles during Ph.D

- **1. Harikrishnan** U & Grace Lalhlupuii Sailo. (2019). A literature review on health among school going adolescents in India, *Research Journal of Family, Community and Consumer Sciences*, Vol. 7, Issue. 2, Page no: 13-15.
- 2. Harikrishnan U & Grace Lalhlupuii Sailo. (2019). Desirability of a comprehensive model for school social work practice in India. *International Research Journal of Social Sciences*, Vol. 8, Issue. 3, Page no: 28-33.
- **3.** Harikrishnan U & Grace Lalhlupuii Sailo. (2020). A review on socio demographic details of school going adolescents in India. *Research Journal of family, community and consumer sciences*, Vol. 8, Issue. 1, Page no: 7-9.
- **4. Harikrishnan** U & Grace Lalhlupuii Sailo. (2020). Environment of school going adolescents in India: A review of Literature. *Research Journal of Recent Sciences*, Vol. 9, Issue. 2, Page no: 44-46.
- 5. Harikrishnan U & Grace Lalhlupuii Sailo. (2020). Assessment on social support among school going adolescents: A school based survey. *International Journal of Multidisciplinary Educational Research*, Vol. 9, Issue. 5(8), Page no: 130-135.
- 6. Harikrishnan U & Grace Lalhlupuii Sailo. (2020). Social Work Practice in Schools: Handholding Perspective. *International Journal for Innovative Research in Multidisciplinary field*, Vol.6, Issue.2, Page no: 124-128.
- **7. Harikrishnan U** & Grace Lalhlupuii Sailo. (2020). Challenges of School going Adolescents: Perception of Parents and Teachers. *International Journal of Scientific Research in Multidisciplinary Studies*, Vol.6, Issue.11, Page no: 12-15.

Publication under process

- **8.** Harikrishnan U & Grace Lalhlupuii Sailo. Prevalence of emotional and behavioural problems among school going adolescents: A Cross-sectional study.
- **9.** Harikrishnan U & Grace Lalhlupuii Sailo. Using free listing to understand the difficulties of school going adolescents.
- **10. Harikrishnan** U & Grace Lalhlupuii Sailo. Parents' and teachers' perceptions of emotional and behavioural problems in school going adolescents.

LIST OF SEMINARS/WORKSHOPS/CONFERENCES

Seminars attended by scholar during Ph.D

- **1.** One day on "**Human Rights**" in Department of Social Work, School of Social Sciences, and Mizoram University on 30th November, 2018.
- **2.** Webinar on "Socio-Psycho Impact of COVID-19" organized by the Department of History and Sociology, Auxilium College, Vellore, Tamil Nadu on 18th May 2020.
- **3.** Webinar on "Role of Management during COVID-19" organized by IQAC and Department of Management Studies, MES College, Erumely, Kerala, India on 10th June, 2020.
- **4.** Online webinar on "Skill of Research Paper Writing" organized by RKDF University, Madhya Pradesh, India on 23rd June 2020.
- 5. One day national webinar organized by the Department of Home Science, Mahila Shilp Kala Bhawan College, Bihar, India under the Aegis of IQAC, titled "Food Technology for Nutritional and Financial Security during Pandemic COVID-19" held on 8th July, 2020.
- **6.** Webinar on "Suicide Prevention and Promotion of Mental Health" on 11th July 2020, organized by The Indian Society of Professional Social Work in association with Department of Psychiatric Social Work, Maharashtra Institute of Mental Health, Pune, India.
- **7.** National webinar on "COVID-19 Pandemic Explosion in India" organized by IQAC and Unnat Bharat Abhiyan MES College, Erumely, Kerala, India on 15th July 2020.
- **8.** National webinar on "COVID-19 Impact on Agriculture Problems and Opportunities" organized by IQAC and Unnat Bharat Abhiyan, MES College, Erumely, Kerala, India on 16th July 2020.
- **9.** National webinar on "The Art of Reviewing the Literature by Integrating Technology" organized by IQAC and Research Forum, MES College, Erumely, Kerala, India on 17th July 2020.
- **10.** National webinar on "**Digital Transformation**" conducted by the Department of Computer Engineering, Mizoram University, Mizoram, India on 21st July 2020.
- 11. Webinar on "International Business Culture with Special Emphasis on European Union" held on 22nd July 2020 organized by Department of Management, Mizoram University, Mizoram, India.

12. International webinar on "Cyber Bulling: Relationship between Perpetration & Victimization and COVID Stress & Coping: Towards Resilience" organized by Department of Psychology, Mizoram University, Mizoram, India on 30th July 2020.

Total no of M.Phil/Ph.D pre-submission/Public Viva attended: 10

Workshops attended by scholar during Ph.D

- **1. National Workshop on Research Methodology** in Mizoram University on 7th to 11th August, 2018.
- **2.** Workshop on Civil Services and Allied Job Presentation in Mizoram University on 24th September, 2018.
- **3. Workshop on Research Methodology** at Amrita Viswa Vidhyapeetham, Amritapuri Campus, Kollam on 02 to 04 August-2019
- **4.** Two days **Online Workshop on Basic Research, Writing Papers** organized by Research Cell, Sankara College of Science and Commerce from 9th and 10th April 2020.
- **5. National Online Workshop on Social Work Research Skills I**: Formulation and Design of Qualitative, Quantitative and Mixed Methods Research Proposals, organized by the Department of Social Work, Mizoram University from 18th to 24th November, 2020.
- **6. Online Workshop on Qualitative Research for Psychiatric Social Work Professionals**, held from 12th December 2020 to 6th January, 2021 by jointly organised by organized by Department of Psychiatric Social Work, LGB Regional Institute of Mental Health (LGBRIMH), Tezpur, Assam (India) in collaboration with Centre for Equity and Justice for Children and Families, TISS Mumbai and Centre for Health and Mental Health, School of Social Work, TISS Mumbai.

Scholar presented paper in Conferences during Ph.D

- Presented a paper on "A literature review on health among school going adolescents in India" on 16th Samanwaya International Conference held on 8th and 9th February, 2019 at BCM College, Kottayam, Kerala.
- 2. Presented a paper on "Assessment on health of school going adolescents in a government and private schools of Kollam District, Kerala" in the National Conference and Social Work Students' Meet, BERCH UMANITARIO, held on 15th & 16th February, 2019 at St. Berchmans College, Changanassery, Kerala.

- 3. Presented a paper on "A study on the environment of school going adolescents in India: A literature review" in the National Conference or Workshop ASSUMPTA REFICIO, held on 28th February, 2019 at Assumption College Autonomous, Changanassery, Kerala.
- **4.** Presented a paper on "A study on mental health among school going adolescents exposed to flood in Kerala, India" in the 5th International Young Scientist Congress (IYSC-2019) on 8th & 9th May 2019 held at Mid-Western University, Surkhet, Nepal.
- 5. A paper on Mental and spiritual challenges among youth during lockdown in Mizoram presented in the International Web Conference "Pandemic Effect and Global Economy: Unseen Challenges & Opportunities-POST COVID-19 Diagnosis held on 31st July & 1st August, 2020 at Amity School of Business, Amity University, Patna, Bihar.
- **6.** A paper titled "Using free listing to understand the difficulties of school going adolescents" in the **7th International Virtual Conference** organized by International Science Community Association at Indore, Madhya Pradesh, India from 5th to 10th august 2020.
- 7. Presented a paper on "Assessment of prosocial behaviour of school going adolescents: A cross sectional survey" during the AMRITA International Public Health e-Conference, held on 4th and 5th December 2020 at Amrita Institute of Medical Sciences and Research Center, Kochi, Kerala.

BIO-DATA OF CANDIDATE

Harikrishnan U

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EDUCATIONAL DETAILS

Course	Board/University	Year	Results
Fellowship in Psychosocial	NIMHANS, Bengaluru	2017-18	completed
Support in Disaster			
Management			
M. Phil in Psychiatric Social	Gauhati University	2014-16	59.45%
Work			
Master of Social Work	Amrita Viswa Vidhyapeetham,	2010-12	72.2%
	Ettimadai, Tamil Nadu		
B A Sociology	Kerala University	2007-10	63%
Class XII	Board of Higher Secondary,	2005-07	67%
	Kerala		
Class X	Kerala State Syllabus	2005	58%

AREA OF INTERESTS

- Social Work Practice
- Psychiatric Social Work
- Child & Adolescent Development
- School Social Work Practice
- Social Work Practice in Disaster

PROFESSIONAL EXPERIENCES

- Participated total **53 Seminars/Workshops/Conferences** since 2010.
- Total number of **Publications: 34**
- Total number of **Scientific Paper Presentations** in various conferences: **13**

Facilitator

- Resource person in the two-training programme (6th to 11th Nov and 9th to 14th Oct,
 2017) on TOT workshop on *Psychosocial Care for Children in Conflict with Law*,
 Dept. of PSW in association with Department of Social Justice, Government of Kerala, India.
- Facilitated two days' workshop on Disaster Management and Risk Reduction organised by Department of Social Work, Assumption College Autonomous, Changanassery, Kerala, India on 26th & 27th April 2018.
- Facilitator in six days (18th to 23rd June, 2018) *TOT workshop on Enriching Family Life for Children in Conflict with Law* at Dept. of PSW in association with Department of Social Justice, Government of Kerala, India.

Dissertations

- Dissertation entitled "A Study on the role of Handicrafts in promoting Sustainable Livelihood among Tribal Community at Wayanad" submitted to Amrita Vishwa Vidhyapeetham University Amritapuri Campus, Kollam, Kerala, India in partial fulfillment of the requirement for the award of Master of Social Work in 2010-12.
- "A study on Health-Risk Behaviour and Protective Factors among the School going Adolescents in Tezpur" did for the partial fulfillment of M. Phil Degree (2014-16) at LGBRIMH, Tezpur, affiliated to Gauhati University, Assam, India.

Project Works

- K Sekar, Harikrishnan U, Sr. Marykutty EP & Kavitha P. Training Program for Children in Difficult Circumstances. March to November 2018. NIMHANS, Bengaluru has provided technical support to Jyothis Charitable Society, Kottayam, Kerala, India.
- Harikrishnan U. Rapid assessment on post-flood scenario at Aranmula Heritage
 Zone, Kerala, India. September 2018. Aranmula Heritage Trust, Aranmula,
 Pathanamthitta, Kerala, India.

Work Experiences

- Worked as a *counsellor* in Gandhibhavan International Trust, Pathanapuram, Kollam, and Kerala from 8th October to 31st January, 2017.
- Worked as an Assistant Professor on contract in the Department of Social Work at MES College Erumely, Kottayam, Kerala, India from 16th January 2020 to 31st March 2020 and 1st June 2020 to 27th November 2020.
- Currently Working as an Assistant Professor in the Department of Social Work, School of Social Sciences, The Assam Kaziranga University, Jorhat, Assam from 27th September 2021.

Membership

- Life member (LM no: 998) at Indian Society of Professional Social Work (ISPSW)
- Life member of Association of Psychiatric Social Work Professionals (APSWP)

Research Network - Details or link

- Scopus: https://www.scopus.com/authid/detail.uri?authorId=57214553308
- o Researchgate:https://www.researchgate.net/profile/Harikrishnan_Unnikrishnan_Nair
- o Google Scholar: https://scholar.google.com/citations?user=v_P8oecAAAAJ
- o **ORCID:** https://orcid.org/0000-0003-4348-0959
- o Mendeley: https://www.mendeley.com/profiles/harikrishnan-u3/

I hereby declare that the above information is true to the best of my knowledge and belief.

(Harikrishnan U)

PARTICULARS OF THE CANDIDATE

Name of the Scholar : Harikrishnan U

Degree : **Ph. D**

Department : Social Work

Title of the Thesis : Environment and Health of School going

Adolescents in Kollam District, Kerala.

Date of Admission : 25th July 2018

Approval of Research Proposal:

1) DRC : **24**th **September 2018**

2) BOS : **27**th **September 2018**

3) School Board : 3rd October 2018

MZU Registration No. : 1801168

Ph.D Registration No. & Date : MZU/Ph.D./1156 of 03.10.2018

Extension : Nil

Head of the Department

ABSTRACT

ENVIRONMENT AND HEALTH OF SCHOOL GOING ADOLESCENTS IN KOLLAM DISTRICT, KERALA

AN ABSTRACT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

HARIKRISHNAN U

MZU REGISTRATION NO.: 1801168

PH.D REGISTRATION NO.:MZU/Ph.D./1156 of 03.10.2018



DEPARTMENT OF SOCIAL WORK
SCHOOL OF SOCIAL SCIENCES

SEPTEMBER 2022

ENVIRONMENT AND HEALTH OF SCHOOL GOING ADOLESCENTS IN KOLLAM DISTRICT, KERALA

\mathbf{BY}

Harikrishnan U

Department of Social Work

Name of Supervisor: Dr. Grace Lalhlupuii Sailo

Submitted

In partial fulfilment of the requirement of the Degree of Doctor of Philosophy in Social Work of Mizoram University, Aizawl.

ABSTRACT

Introduction

Adolescence is a period between the age of 10 to 19 years and of critical transitions in the lifespan of an individual (WHO, 2017). The word adolescence is derived from the Latin word 'adolescere' which means 'to grow, to mature'. In India, the National Youth Policy defines the adolescent age as 13 to 19 years whereas Integrated Child Development Services (ICDS) describes it as 11 to 18 years. Meanwhile, reproductive and child health programme demarcates the ages from 10 to 19 years as the adolescent age (Kalyanwala, Sharma, & Sarna, 2013).

According to world statistics, there are 1.2 billion adolescents between the age of 10 to 19 years and they account for 16 per cent of the entire human population. Asia has the biggest adolescent population in the world and nearly 350 million adolescents are from South Asia (UNICEF, 2019). India is the home of 243 million adolescents (UNICEF, 2011).

The school-going adolescent's environment is focused on home/family, school and support from the society. Family is one of the basic social institutions that help to preserve bloodlines, provide love and security. Children learn socialisation process from family and family influences the child's psychosocial development (Upali, 2015). Children spend most of their time in school. Therefore, the school has a major role in the development of every child. Social Support is a linkage and close connection between individuals, families and communities (Lin, Dean, & Ensel, 1986). School-going adolescents need support from family, peers and significant others.

Health is one of the most important factors in every individual's life especially during adolescence as they undergo tremendous biological and psychological changes. The health of adolescents needs much attention as they are prone to several risks. The major health-risk behaviours of adolescents are physical health, physical activity, nutrition, hygiene, medical care and medical history, HIV/AIDS, tobacco, alcohol and drugs, violence, domestic violence and unintentional injury and mental health.

School social workers seek to ensure equitable educational opportunities; ensure that students are mentally, physically, and emotionally present in the classroom; and promote respect and dignity for all students. School social work is a complex and specialized field of practice that is affected by changes in education policy, research, and practice models that continue to evolve (NASW, 2012).

Statement of the problem

Adolescents face multiple risk factors at individual, family and school level. There is a complex inter-relationship among biological, psychological and social factors during adolescence, as well as the influence of these developmental changes on adolescent behaviour and health. The focus of many recommendations was on understanding how these aspects of development influence and interact with one other. There is a need for a bio-psychosocial perspective on adolescence, grounded in an understanding that substantive influences on young people emanate from the complex interplay of biological, psychological, social and structural factors.

In this study, home environment focuses on the support of parents for studying and also on the use of social networking sites. The relationship with teachers and peers; and attending school regularly are components under the school environment. Lack of supportive environment from school and home has a huge impact among school-going adolescents whereby the role of school social worker is necessary to reduce the vulnerability of school-going adolescents.

Since school-going adolescents are subject to multiple health risk behaviours and environmental problems and problems are interconnected with each other, there is a need for a holistic approach for the growth and development of school-going adolescents. In India, school social work is a slowly emerging trend and its feasibility is yet to be tested.

Kerala's achievements in social development and quality of life are, no doubt, inspiring and encouraging. The state has achieved a human development index comparable to the developed countries of the World. The society attaches so much importance to education that the school is the nucleus of the social microcosm in Kerala. Better education kindles the aspirations of the people and the main concern is on how to improve the quality of education. Majority of the schools in Kerala have

contractual based school social workers and their impact on the academic performance and well-being of adolescents is uncertain. With this background, the current study is an attempt to understand the Environment and Health among school-going adolescents in Kollam district, Kerala.

Objectives

- 1. To identify the socio-demographic details of school-going adolescents.
- **2.** To assess the environment, social support and health of school-going adolescents.
- **3.** To understand the parents' and teachers' perception of environment, social support and health of school-going adolescents.
- **4.** To determine the scope of social work practice in schools.

Hypothesis

- **1.** There is a significant difference in the environment, social support and health of school-going adolescents between gender.
- **2.** There is a significant difference in the environment, social support and health of school-going adolescents between public and private schools.
- **3.** There is a significant difference in the environment, social support and health of school-going adolescents between rural and urban areas.

Methodology

The methodological aspects of the present study encompassing research design, sampling, tools of data collection, data processing and analysis of the present study.

1. Study Settings

The present study location is at Kollam District, Kerala. After independence, Kerala became a unique state in the southern part of India, it has 14 districts and Thiruvananthapuram is the capital city. Kollam district earlier known as Quilon came into existence on 1st July 1949 and is situated in the southern part of Kerala. This district is bordered by the Pathanamthitta & Alappuzha districts on the north, Thiruvananthapuram district & the Tamil Nadu state in the south, the Western Ghats on the east, and the Arabian Sea on the west. The geographical area of Kollam district is 2491 sq. km, 81,438 hectares of land is forest area and has 37.3 km are coastal line. There were 5 Taluks, 1 Corporation, 3 Municipalities and 70 Grama Panchayat in

Kollam district. The district has a population of 2,635,375 of 2,483 square kilometres and 1113 females for every 1000 males recorded in 2011 census.

Kollam is one of the topmost educational hubs in Kerala and there are a lot of educational institutes such as medical colleges, engineering colleges, liberal arts colleges, schools and coaching centres. The total number of schools with class VIII to Class XII is 520 and a total student is 250556 in the Kollam district.

2. Research Design

The study design is cross-sectional and descriptive in nature which means that the condition and related factors are measured at a particular period of time and in a defined population. Data is obtained from both primary and secondary sources. The research followed a mixed method (quantitative and qualitative) in the collection of primary data. Quantitative method was used for measuring the socio-demographic profile, self-reported questionnaire for studying environment & health, parents & class teachers' version for mental health and school social work related questionnaire. The study also comprised the qualitative aspect like face to face interview with parents and class teachers of school-going adolescents in Kollam district. Secondary data consists of various scientific articles, websites, books or chapters and unpublished thesis.

Sampling

Multistage cluster sampling method was used for the selection of sample in Kollam district. School-going adolescents were divided into two stratas- strata I (Class VIII to X) and strata II (Class XI to XII). The classes were randomly selected and 10 school-going adolescents were taken from each class (cluster size).

Quantitative sample size was 600 school-going adolescents, 600 parents and 60 class teachers. Qualitative sample size was twenty four teachers and twenty four parents from the 19 schools.

Inclusion and Exclusion Criteria

Inclusion Criteria

- School-going adolescents of both genders, and their teachers and parents/caregivers.
- School going adolescents' aged 13 to 17 years old, from Class VIII to XII.
- Staying with their parents/caregivers.
- Those who were given consent by the parents for the study.

 Participants who have been residing in Kollam district for more than one year before the data collection.

Exclusion Criteria

• School-going adolescents who are intellectually/physically impaired.

Tools for Data Collection

The socio-demographic details of school going adolescents comprises age, gender, sex, class, school type, settings, family type and socio-economic status (SES). The present study fixed the age range between 13 to 17 years, both genders, class between class VIII to XII, government & private schools, urban & rural settings, both nuclear & joint family.

The parent's socio-demographic performa includes age, gender, education, occupation, marital status and socio-economic Status (SES). The SES was taken from modified Kuppuswamy scale updated for 2018 and it was administered among the parents of school-going adolescents.

The socio-demographic details of class teachers comprise of age, gender, marital status and teaching experience.

The IAHQ is a tool for assessing the health of adolescents in Indian settings. It allows approximately 30 minutes for respondents to answer 111 questions within the following 12 modules: demographic information; physical health; physical activity; nutrition; hygiene; medical care and medical history; HIV/AIDS; tobacco, alcohol and drugs; violence, domestic violence and unintentional injury; emotional and behavioural problems; family and home environment and school environment (Long et al., 2013).

The SDQ is a 25 item, brief behavioural screening questionnaires for children and adolescents between 4 to 17 years of age. The questionnaire was developed by Goodman, (1997).

Multidimensional scale for perceived social support (MSPSS) is a seven-point likert tool for understanding social support for individuals in society (G.D Zimet, Dahlem, Zimet, & Farley, 1988). The subscales in this scale are significant others, family and friends.

Semi-structured questions were prepared by researchers for understanding the school social work practice in school-going adolescents, parents and their class teachers.

The interview guide focused on broader topics such as home and school environment, community and support group, health aspects such as physical health, nutrition, physical activity, hygiene practice, medical condition, substance use, emotional and behaviour problems of school-going adolescents and scope of social work practice in schools. The KII was conducted among teachers and parents in the above-mentioned topic in the interview guide.

Ethical Considerations

For the Pilot Study, written permission was obtained from the school authority. The main study data collection was started during the month of June 2019 for which written permission was obtained from the Regional Officer, Central Board of Secondary Education (CBSE), Thiruvananthapuram, Kerala, District Education Officer, Kollam and District Educational Officer, Punalur for collection of data in different government and private schools in Kollam District, Kerala. Written permission was acquired from the principals of 19 schools (government and private) in the Kollam District, Kerala using the authorization from the District Educational Officer/Regional Officer. The data collection was ended on the last week of October 2020 with the audio recorded KII conducted in the school premise or home.

Data Processing and Analysis

Quantitative data entry was done through IBM SPSS 20 version. Coding was done according to the scoring manual of each scale. Data cleansing was done after data entry and coding. For qualitative data, the audio recorded interview data was transcript into the English language in MS office. ATLAS ti software was used for coded the qualitative data and coded data was analysed with through frequency distribution.

Operational Definitions

School-going Adolescents: School-going adolescents are those who have permanent residence in Kollam and who are attending high schools and higher secondary schools in Kollam District, Kerala.

High School: Students studying from class eighth to tenth in the school level at Kollam District, Kerala.

Higher Secondary School: Students studying from class eleven to twelfth in the school level at Kollam District, Kerala.

Government School: The state/central government schools which are directly run by the government and aided schools at Kollam District, Kerala.

Private School: The schools which run by private parties or societies and following CBSE syllabus at Kollam District, Kerala.

Urban Area: The schools which are located in the Corporation or Municipalities at Kollam District, Kerala.

Rural Area: The schools which are located in the Grama Panchayat at Kollam District, Kerala.

Health: The Health of school adolescents refer to physical health, physical activity, nutrition, hygiene, medical care and medical history, and risk factors like HIV/AIDS, tobacco, alcohol and drugs, violence, domestic violence and unintentional injury and mental health.

Environment: It refers to both family and school environments such as academic performance, and protective factors from the school and home.

Social Support: It refers to the support from friends, family and significant others to school-going adolescents.

Limitations of the Study

The current study administered only self-reported IAHQ and MSPSS questionnaire. The absence of a longitudinal design will not make a better in-depth understanding of the environment and health of school-going adolescents. Focus group discussion was nonappearance in the study as well as the absence of assessment on the strength and weakness of previous interventional programmes conducted in schools.

Findings

The major findings are indicated in the current study down below;

1. Socio-demographic details – Quantitative

The socio-demographic details of six hundred school-going adolescents indicate that the mean age was 14.98 among 13 to 17-year-old school-going adolescents and the standard deviation was 1.41. Little more than half of the school-going adolescents were females (52.8%), 68% of them believed in Hinduism, 20.8% belonged to the unreserved category and more than one-eighth of them belonged to a nuclear family (83.3%).

There were six hundred parents whose socio-demographic details found that the mean age was 42.85 and SD is 5.89. The majority of the respondents (63%) were females and most of them (41.5%) educated up to graduation. Most of the respondents were homemakers and more than one-ninth of them (94.8%) are staying

with their spouses. The socio-economic status revealed that the majority of the families belonged to the upper-middle-class (38.3%).

The socio-demographic details of sixty class teachers revealed that the mean age of class teachers was 42.30 (SD 1.75). More than two-thirds of the participants were female class teachers (75%) and studied up to Post Graduation (PG) with B. Ed or M. Ed (83.4%). More than nine-tenths of class teachers were married (96.7%) and the mean age on the teaching experience of class teachers was 13.33 (SD 6.46).

2. Socio-demographic details – Qualitative

The socio-demographic details of twenty-four parents found that the mean age was 41.63 (SD 3.48). The majority of them were female (87.5%) and most of them had a postgraduate degree or above (41.7%). Less than half of the respondents were employed in the private sector (45.8%).

There were twenty-four teachers and it was found that the mean age of teachers is 44.17 (SD 4.93). The majority of the teachers were female (70.8%) and most of them had education up to postgraduate level (87.5%). The teaching experience of teachers found that the mean age was 15 years (SD 4.85).

3. Environment, social support and health of school-going adolescents.

Home Environment

The results found that less than half (45.3%) of the school-going adolescents had a home computer, 32.7% had internet access at home and 40.5% of them were using social networking sites. The protective factors revealed that less than half (47.4%) of parents of school-going adolescents *never-rarely* checked their child's homework, 15.8% of parents *never-rarely* understood the problems of their child and 15.8% of parents (*never-rarely*) did not know what their child's activities were during the leisure time.

School Environment

More than half of the school-going adolescents had an average performance marks-wise (54%). Less than one-tenth of school-going adolescents (7.3%) missed their classes or school without permission for more than three days in the past month. Protective factors of school-going adolescents in school found that less than one-tenth (7.2%) of them *most of the times-always* got negative pressure from their peers in the past month. One-tenth (10.3%) of school-going adolescents *never-rarely* got kindness and help from other students.

Social Support

Less than half (48.9%) of the school-going adolescents had *low-moderate* social support from significant others. One third (29.9%) of them had *low-moderate* social support from family. Little less than a quarter (24.2%) of them were getting *low-moderate* social support from friends. One third (30.9%) of them had *low-moderate* overall social support.

4. Health

Physical Health

The BMI found that 22.5% of school-going adolescents were in the category of underweight, severely underweight, overweight, severely obese and moderately obese. The results revealed that 17% of school-going adolescents had a lack of sleep or excessive sleeping practice.

Physical Activity

The results found that more than half (51.5%) of school-going adolescents were physically active for less than two days a week and that too a total of at least 30 minutes or less. A quarter (24.9%) of school-going adolescents spend more than three hours during a typical day sitting & watching television, playing on the computer, or doing other sedentary activities outside of school.

Nutrition

As far as nutrition is concerned, 71.5% of school-going adolescents prefer non-vegetarian food. Little less than one third (29.3%) of school-going adolescents *most* of times-always are vegetables cooked or fried in oil. Less than half (44%) of school-going adolescents did not eat-less than one time fruits per day in the past week. A quarter (25.5%) of school-going adolescents had fish or meat two or more times per day in the past week. Also, 25.1% of school-going adolescents are fast food one and more times per day in the past week.

Hygiene

There were 2% of school-going adolescents who brushed their teeth *less than* one time or never per day in the past month. Little more than one-tenth (12%) of school-going adolescents *sometimes-never* washed their hands before eating food in the past month. One-tenth (9.9%) of school-going adolescents *sometimes-never* washed their hands after using the toilet. More than one-tenth (13%) of school-going adolescents *sometimes-never* used soap before washing their hands in the past month.

Medical Care and Medical History

Little less than a quarter (24.4%) of school-going adolescents were *sometimes-never* able to go to the clinic when they were sick. More than half (50.5%) of school-going adolescents did not take treatment for their illness from the clinic/hospital due to various reasons. More than one-tenth (14.3%) of school-going adolescents were diagnosed with some major illness. Less than half (6.2%) of the school-going adolescents missed their class due to toothache in the past year.

HIV/AIDS

One-fifth (19.8%) of school-going adolescents did not hear about HIV infection or AIDS. More than half (53.7%) of them stated that their school never taught about HIV/AIDS. The majority of school-going adolescents (65.3%) never discussed HIV/AIDS with their parents.

Substance use

Regarding substance use, 4% of school-going adolescents have tried tobacco or cigarette. More than one-tenth (13.8%) of school-going adolescents' male parents or guardians did smoke. Little less than one-tenth (9.5%) of school-going adolescents said that smoking is not harmful to health.

Less than one-tenth (8.8%) of school-going adolescents tried alcohol. There were 8.7% of school-going adolescents who had tried alcohol at home/other places/street/bar/someone else's home. Little less than one-fifth (19.7%) of school-going adolescents' close friends had tried alcohol. There were 2.8% of school-going adolescents who tried illegal drugs and 1.6% of them used more than one times in the past year.

Violence, Domestic Violence, Abuse and Unintentional Injury

More than one-tenth (14.6%) of school-going adolescents had been injured seriously three or more times in the past year. There were 36.1% of school-going adolescents who *sometimes-never* wore a helmet while riding on a motorbike. More than half (61%) of school-going adolescents *sometimes-never* wore a seat belt when they rode in a car. Less than one-tenth (6.5%) of school-going adolescents *most of the times-always* got insulted by others. More than one-tenth (11.1%) of school-going adolescents felt unsafe at home and 10.7% of them felt unsafe at school.

Emotional and behavioural problems

Self-reported emotional and behavioural problems of school-going adolescents revealed that one-fifth (20%) of them had *borderline-abnormal* in emotional

problems, 18% of them had *borderline-abnormal* in conduct problems, 17.3% had *borderline-abnormal* in hyperactivity, 19% had *borderline-abnormal* in peer problems. There were 24.5% of school-going adolescents who were detected *borderline-abnormal* in overall emotional and behavioural problems. 17.4% of school-going adolescents had poor *(borderline-abnormal)* prosocial behaviour.

Parents' report of emotional and behavioural problems of school-going adolescents found that there were 22.7% of them had *borderline-abnormal* in emotional problems, 20.7% had *borderline-abnormal* in conduct problems, 18.2% had *borderline-abnormal* in hyperactivity, 26.2% had *borderline-abnormal* in peer problems and overall 25.8% had *borderline-abnormal* in emotional and behavioural problems. There were 16.9% of the school-going adolescents had poor (*borderline-abnormal*) prosocial behaviour.

According to teachers' report of emotional and behavioural problems of school-going adolescents, emotional problems rated as *borderline-abnormal* was observed at 16%, 19.7% *borderline-abnormal* in conduct problems, 12% *borderline-abnormal* in hyperactivity, 19.7% *borderline-abnormal* in peer problems and 26.6% of school-going adolescents had *borderline-abnormal* in overall emotional and behavioural problems. There were 20.8% of the school-going adolescents who had poor (*borderline-abnormal*) prosocial behaviour.

The gender difference found that male school-going adolescents had a high risk in the home environment, school environment, social support and overall environment. School-going adolescents in government schools had a highly significant difference in high risk in the home environment than private schools. Rural school-going adolescents had more prevalence of risk in the home environment and school environment domains. Urban school-going adolescents had a high prevalence of social support and overall environment domains.

A significant difference found between male prone to high risk in nutrition, hygiene practice, substance use, violence and overall health domains than female school-going adolescents. Government schools had a significant difference found in emotional and behavioural problems domain than private schools. Rural school-going adolescents had a highly significant difference in emotional and behavioural problems than urban. Rural school-going adolescents had a significant difference in

nutrition than urban, but urban school-going adolescents had a significant difference in hygiene practice.

Physical activity had a significant positive correlation with the home environment. There was a significant positive correlation with home, school and overall environment. The hygiene practice, substance use, violence, emotional and behavioural problems had a highly significant positive correlation with home, school, social support and overall environment. Overall health had a highly significant positive correlation with home, school, social support and overall environment.

The binary logistic regression model found that male school-going adolescents are more likely to exhibit environment-related problems than female. There was no association found in other independent variables such as age, school type, settings and socio-economic status.

Gender and socioeconomic status were significantly associated with the healthrelated problems in the binary logistic regression model. There was no association found in the age, school type and settings with health-related problems.

5. Parents' and teachers' perception of the environment, social support and health of school-going adolescents.

Environment

Parents' perception of the environment of school-going adolescents found that excessive mobile and internet use, peer influence or pressure, unsafe on the way from home to school and return was the most stated subthemes. Parents from private schools informed that school-going adolescents' overall environment are more prone to risks compared to the responses of the parents from government schools. Parents from urban areas stated that the overall environment of school-going adolescents was unsafe than their rural counterparts.

Teachers' perception of the environment of school-going adolescents revealed that excessive mobile and internet use, lack of home environment, poor performance in studies, peer influence or pressure was the most reported subthemes. Most of the government school teachers mentioned that the environment of school-going adolescents is unsafe than private school teachers. Teachers from rural areas reported

that school-going adolescents had an unsafe overall environment than teachers from urban areas.

Health

Parents' perception of the health of school-going adolescents exposed that irregular physical activity, lack of awareness, gateway substance, alcohol & drugs, unhealthy diet practice, skipping breakfast and hyperactivity or aggressive behaviour was most reported subthemes. Parents from government schools stated that school-going adolescents' overall health is more prone to risks than parents from private schools. Parents from urban areas reported that the overall health of school-going adolescents was unhealthier than in rural areas.

Teachers' perception of the health of school-going adolescents found that gateway substance, alcohol & drugs, hyperactivity or aggressive behaviour, unhealthy diet practice, skipping breakfast, attraction to junk food, medical history was the most stated subthemes. Each theme and sub-themes under the health of school-going adolescents found numerous associations with health-related problems. Teachers from government schools stated that school-going adolescents' overall health is more prone to risks than parents from private schools. Teachers from urban areas reported that the overall health of school-going adolescents was unhealthier than in rural areas.

6. Scope of social work practice in schools.

The school-going adolescents' opinion on social work practice in schools found that a fifth (19.8%) is not aware of professional counselling. A quarter of school-going adolescents had received help from a school social worker or counsellor and more than one-tenth (11.3%) of them had availed the services of a private counsellor.

Parents' opinion on social work practice in schools revealed that 38.8% had not heard about school social worker or counsellor. The majority of parents (62.8%) did not attend any kind of training programs for the welfare of their child.

A third (33.3%) of the class teachers when asked for an opinion on social work practice in schools stated that there is a permanent social worker or counsellor is in their schools. More than half of the class teachers (55%) did not attend any kind of training programs for the welfare of their students. A fifth (20%) of class teachers was not able to handle their students.

Conclusion

The current study titled environment and health of school-going adolescents in urban-rural settings and government-private schools in Kollam District, Kerala. The study design is in cross-sectional descriptive design with the mixed method. There were 600 school-going adolescents, 600 parents, 60 class teachers who were taken for quantitative data collection and in-depth interview conducted among 24 parents and 24 teachers.

Quantitative findings are based on the IAHQ, SDQ parents and teacher version, school social work-related questions. Male school-going adolescents had more environment and health-related problems. School-going adolescents in government schools had a poor home environment. Rural school-going adolescents had a poor home and school environment. School-going adolescents in rural settings had nutritional problems, emotional and behavioural problems. Gender had an association with health and environment-related problems. This found that school-going adolescents had some level of environmental and health-related problems. School social work practice in schools found the lack of school social workers or counsellors, poor strategies in counselling services and the problems of school-going adolescents are increasing day by day.

Qualitative results are based on the KII with parents and teachers of school-going adolescents. Parents from private schools and urban settings responded more to the unsafe environment of school-going adolescents. Government and rural teachers stated more about the unsafe environment of school-going adolescents. Government and urban parents reported health risk problems. Government and urban teachers stated the health risk problems.

To conclude, the quantitative findings found that school-going adolescents had some level of environmental and health-related problems. The qualitative findings were strongly supporting the quantitative findings. The current study strongly revealed that the school-going adolescents had environment and health-related problems in gender (male-female), settings (rural-urban), types of school (government-private) and socio-economic status.

Suggestions

Social work implications

1. The current study has revealed that social work practice in schools is necessary along with a multidisciplinary team.

- 2. Strengthening the professional skills of school social worker/counsellor may play a major role in reducing the difficulties among school-going adolescents and their close ones.
- 3. School health and mental health programmes need to be more effective and have to do extensive activities for the benefit of school-going adolescents.
- 4. For example, the study has observed that a lot of programmes are going on in schools. But the majority of the programmes are not going on properly or have no follow-ups. Therefore, there is a need to do long-term interventions and follow-up programmes among school-going adolescents.
- 5. The study also suggested that counselling services and programmes need to be extended in and around every school. More outreach programmes are required.
- 6. The study also recommended that counselling services or awareness programmes should be focused more on school-going adolescents (high and higher secondary schools).
- 7. Social work interventions should be more focused on rural settings and government schools. The awareness programmes, health and mental health programmes should be conducted in schools periodically.
- 8. Periodical environment and health assessment, long-term intervention and follow-up plans need to be implemented in schools by a systematic approach.
- 9. Parents and teachers training and programmes need to be more strengthened in schools.
- 10. Mental health programmes and psychosocial care and support need to be implemented in every high and higher secondary school with the support of psychiatric social worker and mental health professionals.

Research implications

- 1. The research implication from the study highlights the need for evidence-based targeted interventions by school social workers.
- 2. Longitudinal studies based on the environment and health of school-going adolescents needs to be planned in rural and urban settings.
- 3. Intervention studies based on each domain of environment and health need to be planned to test out the efficacy of school social work interventions in rural and urban settings.

- 4. A study can be carried out on the school counsellors' opinion on school social work and the scope of school social work practice in schools.
- 5. An intervention study can be carried out on the effectiveness of counselling services in schools.

Policy implications

- 1. Policy advocacy and programmes need to be specifically focused on school-going adolescents.
- 2. A Permanent school social worker or counsellor needs to be in every high and higher secondary school.
- 3. School health and mental health policy programmes need to be strengthened in the school and community settings.