MENTAL HEALTH PROBLEMS AMONG SCHOOL-GOING CHILDREN IN BANGLADESH

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I dedicate this thesis to my mother's soul. I am also grateful for the love, support, and other blessings that I have received from my husband, daughter, and son.

Certificate

Certified that the thesis entitled **"MENTAL HEALTH PROBLEMS AMONG SCHOOL-GOING CHILDREN IN BANGLADESH"** submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work carried out under the supervision of Prof. Muktipada Sinha, Professor, Department of Education, Jadavpur University and that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere / elsewhere.

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Help rendered by her parents, Muzibur Rahman, Fazila Rahman, Monzurul husband Bashir and her children Benita Bashir and Monzurul Bashir was a major source of inspiration for the successful accomplishment of this task. She wishes to express her gratitude to all of them for their silent but patient co-operation.

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Dated: Momotaz Begum

Place: Kolkata

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CP	Conduct Problem
DSM	Diagnostic and Statistical Manual of Mental Disorders
EP	Emotional Problem
GDP	Gross Domestic Product
HP	Hyperactive Problem
ICD	International Classification of Diseases
LSE	Life Skills Education
MGMH	Movement for Global Mental Health
MH	Mental Health
NCMH	National Commission on Macroeconomics and Health
NMHP	National Mental Health Programme
PP	Peer Problem
PrS	Pro-social Problem
SDQ	Strengths and Difficulties Questionnaire
SOWC	The State of World Children
SPSS	Statistical Package for Social Sciences
TD	Total Difficulty
UNFPA	United Nations Population Fund-India
UNICEF	United Nations Children's Fund
WBBSE	West Bengal Board of Secondary Education
WHO	World Health Organization
m	Mean Value
sd	Standard Deviation Value
F	ANOVA Test Value
p-Value	Probability Value
t-Value	t-Test Value
H0	Null Hypothesis
WSIF	Women Support Initiative Forum
BAP	Bangladesh Association of Psychologists
BSMMU	Bangabandhu Sheikh Mujib Medical University
ACEs	Adverse Childhood Experiences

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Abstract

The study aims to analyze the current mental health issues among school-going children in Bangladesh and evaluate the prevalence rate of these issues. The study utilized a cross-sectional design with purposive sampling, involving 13 districts of school-going children in Bangladesh. The research study aimed to investigate the mental health issues of school-going children in Bangladesh. Sample included a total sum of 2121 students enrolled in 24 schools, including English and Bengali medium schools, were randomly selected from rural, semi-urban, and urban areas. The study was conducted with the consent of the school authorities and a schedule was prepared for data collection. Questionnaires were distributed during regular classes, and students were instructed on how to complete them. The researcher was available in the classroom for 15 minutes per class, answering questions and clarifying queries. Students were also asked to fill out an information sheet about their family type, ensuring their responses were free and spontaneous, while maintaining their privacy. Survey was conducted with the help of Bengali version of Strength and Difficulty Questionnaire, originally developed by R. Goodman in 1997. Findings: The study reveals a high prevalence of mental health issues among adolescent school-going children, with 31.59% having a Very High or Abnormal SDQ score. This indicates that these children have definite and several mental health problems and require immediate interventions. The remaining 19.47% were on the borderline, indicating a need for attention and preventive measures. The study also found that 31.59% scored very high in total difficulty, indicating significant problems in daily life. The prevalence of mental health problems varies based on demographic factors, with approximately 34.15% of students experiencing these issues. Urban schools have a higher prevalence (59.01%) than rural ones (40.99%), while nuclear families have higher rates (63.43%). Fathers with higher education contribute to 40.75%, while mothers with secondary education have 34.18%. Urban schools have a higher prevalence (58.81%) than non-urban schools (41.19%), and Bengali medium schools have a higher prevalence (89.55%). These findings highlight the need for immediate attention and preventive measures to address the mental health problems faced by school-going children. Conclusion: The study underscores the urgent need for targeted interventions and

preventive measures to address the high prevalence of mental health issues among adolescent school-going children in Bangladesh, particularly among those with very high or abnormal SDQ scores. Suggestion: Implement comprehensive mental health support programs in schools, involving parents and community stakeholders, to effectively address the diverse needs of students.

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1.1   Introduction

Mental health involves one's emotional, psychological, and social welfare, impacting their thoughts, emotions, and behaviors, which in turn influence their ability to manage stress, interact with others, and make decisions. Emphasizing mental health promotes resilience, satisfaction, and overall well-being. Adolescent mental health emerges as a significant worldwide issue, affecting millions across the globe. Whether it's academic stress or societal demands, teenagers encounter a multitude of pressures. Tackling this challenge demands holistic support structures, encompassing education, readily available mental health services, and initiatives to reduce stigma. These measures are essential to enable adolescents to flourish emotionally and socially. For teenagers, mental health plays a vital role in shaping their growth, relationships, and academic performance. Early intervention in mental health issues can avert enduring difficulties and equip adolescents to confront life's challenges with resilience and assurance. Giving importance to mental wellness cultivates robust self-esteem, effective emotional management, and constructive social bonds during this critical phase of development.

In today's world, an unprecedented demographic phenomenon is unfolding, with a vast cohort of 1.2 billion adolescents aged between 10 and 19. This demographic surge not only marks a significant population increase but also signifies a wealth of untapped potential. These adolescent minds hold the key to shaping the future of our societies for generations to come.

The transition from adolescence to adulthood has the potential to reshape our world, influenced by a complex mix of internal and external factors that require urgent attention and action. It's increasingly evident that the well-being and opportunities of these adolescents are closely tied to the well-being and opportunities of our global society. Mental health is a critical public health concern in developing nations, representing 13%

of the global disease burden. Yet, in many countries, mental health receives inadequate attention. For instance, in Bangladesh, only 0.5% of the health budget is allocated to mental health, disproportionately affecting the impoverished and marginalized. With over 65% of health spending being out-of-pocket, there's a pressing need for enhanced mental health systems (Islam & Biswas, 2015).

Teenagers have embraced digital technology early and with enthusiasm. In the US, 95% of teenagers own at least one mobile device, with 89% of them being smartphone owners (Rideout & Robb, 2018). According to Maskeroni and Ólafsson's (2014) study, which involved young people aged 9 to 16 residing in seven European nations, 80% of them had a smartphone or mobile device. The prevalence of Internet and mobile phone use varies significantly between high- and low-income countries worldwide; however, overall, one in three Internet users are under the age of 18 (Keeley & Little, 2017), and in both advanced and emerging economies, younger people (under the age of 35) are more likely than older people (Taylor & Silver, 2018). Moreover, the scourges of modernity have assumed new forms, as unhealthy diets, sedentary lifestyles, mental health challenges, substance abuse, and environmental hazards like air pollution conspire to erode the well-being of these adolescents. For adolescent girls, the onset of puberty heralds' additional obstacles in the form of poverty and discriminatory gender norms that unjustly limit their life choices, casting shadows over their educational, social, and economic opportunities. Tragically, millions of them experience early pregnancies, often linked to the societal blight of child marriage, resulting in maternal mortality becoming a leading cause of death among girls aged 11 to 17.

The World Health Organization (WHO) 2021, reports that one in six people aged 10-19 years are vulnerable to mental health problems due to physical, emotional, and social changes. Approximately 14% of 10-19-year-olds globally experience mental health conditions, yet these are largely unrecognized and untreated. Adolescents with mental health conditions are at higher risk for social exclusion, discrimination, stigma, educational difficulties, risk-taking behaviours, physical ill-health, and human rights violations. Adolescence and Emerging Adulthood are crucial life stages marked by autonomy and independence development. Individuals strive to establish their sense of self and separate from their biological families. This introspective analysis highlights the importance of this component, as the individual's familial background significantly

influenced their growth and progress during this transition (Hafeez et al., 2020). Common mental health changes among school going children (age 11years – 17 years) in Bangladesh are primarily depression, anxiety, frustration, anger, emotional disorders, risk-taking behaviour, psychosis, and suicide or self-harm. Mental health is crucial for a healthy life, yet mental disorders are often under researched and not addressed as a serious public health issue in countries like Bangladesh. The research highlights the high prevalence of mental disorders in Bangladesh, highlighting the lack of public facilities, skilled professionals, financial resources, and stigma. Mental health expenditure is only 0.44% of the total health budget, and less than 0.11% of the population has access to free essential psychotropic medications (Hasan et al.,2021) and Adolescents face significant mental health challenges, impacting personal and academic life. 50% of mental health problems occur before 14, accounting for 13% of global illness burden. 16-18% of Bangladesh's children and teenagers suffer from mental illnesses, often untreated (Bonhi & Deb, 2022). Bangladesh's country-wide programmes improve academic achievement and suggest schools address mental health through behavioral policies, curriculum design, and support systems. However, lack of research makes policy recommendations difficult to formulate. Bangladesh is increasing its awareness about mental health among school going children, with some actively participating. Parents, teachers, and adolescents alike should learn about school going children's; fundamental mental health changes to help others or self-help. This article provides an in-depth understanding of school going children ' mental health changes in Bangladesh, urging everyone to stay connected for more information.

School going children in Bangladesh is characterized by significant physical and behavioural changes, with adolescents often facing difficulties in accepting these changes. Despite this, both girls and boys experience significant changes during this period, which is often overlooked in the country's cultural and societal context. Adolescent mental changes are closely linked to behavioural changes, making it crucial to understand the behavioural changes among adolescents before learning about mental changes. Adolescents' knowledge on puberty is positively influenced by age, schooling, and teachers' concerns, while controlling behaviours negatively impact understanding. Effective planning is needed for informed pubertal periods (Methun et al., 2022). Adolescence is a crucial period for personal and sexual identity formation, requiring a

positive, respectful approach to sexuality and relationships, free from coercion, discrimination, and violence. Adolescence is marked by risk-taking, emotion-seeking, and misconceptions of invulnerability, leading to increased assertiveness in high-risk behaviours, including sexually transmitted diseases, affecting growth and health. Vulnerable adolescents face risks to sexual and reproductive health, including drug use, harassment, and unsafe abortions, leading to global issues like HIV infection and unintended pregnancies (Janighorban et al., 2022). Research (Gruber & Fandakova, 2021) indicates that curiosity and surprise enhance memory in the hippocampus, prefrontal cortex, and dopaminergic areas, with differential effects during childhood and adolescence. Adolescence is a period of self-discovery and exploration, leading to increased curiosity and anxiety. Adolescents form their identity by speaking up about their thoughts, and both boys and girls believe their opinions are valuable. They often struggle with their thoughts, leading to a preference for solitude and less communication. Hormonal changes in adolescents lead to increased risk-taking, indicating responsibility but requiring moderation. As adolescents mature, their thoughts shift, leading to potential conflicts with parents and a desire for freedom, sometimes resulting in severe conflicts. This study examines the mediating roles of self-esteem and psychological inflexibility in the relationship between parenting style and adolescent mental health. Results show that parental emotional warmth positively impacts mental health, while rejection and over-protection negatively affect it. These findings offer guidance for preventing and intervening in adolescent mental health problems (Peng et al., 2021). Anxiety is a restless feeling or unease that can occur at any age, but it peaks in adolescence. It lies beneath the surface of an adolescent's mind and can arise when triggered by trivial issues, such as neglect of opinions or strict rules by parents. In adulthood, anxiety may not always be present, but it remains a significant part of adolescent life. Depression, a common mental health issue among adolescents in Bangladesh, is often overlooked due to a lack of knowledge about its effects. Untreated depression can lead to adulthood, causing a person to become increasingly sick and resulting in a devastating mental condition. Addressing this issue is crucial for adolescent mental health. Eating disorders may be a symptom of depression, but they are hazardous on their own. Overeating can lead to obesity and physical issues, while starvation can weaken and cause weakness. Eating disorders can be harmful to both individuals and society. Trust issues are rapid development in adolescents, often resulting from broken

trust or lack of understanding. In Bangladeshi society, parents often misunderstand their children and do the wrong things, leading to trust issues. This issue can be exacerbated by past negative experiences with sharing and open communication. Anger is a prevalent mental health issue among adolescents in Bangladesh, particularly between 10-14/17 years old. It increases naturally but can escalate if not managed correctly, with boys experiencing more anger issues than girls. Adolescents experiencing unstable mental health may experience frustration, but struggle to express it, leading to unsuitable results. Adolescents can develop psychosis, a severe mental health condition, which can significantly harm them. Suicide or self-harm is a common mental health issue among adolescents, where severe issues lead to the thought of ending one's life. Hyperkinetic disorder, which is characterized by motor hyperactivity, attention deficits, and impulsive behaviour, has a prevalence rate ranging from 1% to 6%. Learning disorders like dyscalculia and dyslexia affect approximately 4% to 6% of children each, while depression impacts around 4% to 5% of children and adolescents. Notably, depression is twice as common in girls compared to boys. Mental health issues in children can lead to adverse outcomes such as grade repetition, truancy, and school dropout. However, modifying the school environment and implementing evidence-based school programs can help reduce the risk of developing internalizing or externalizing mental health problems. (Schulte-Körne G, 2016.)

1.2 Historical background of school going children in Bangladesh

Historically, child mental health problems in Bangladesh have been intertwined with the broader development of mental healthcare services in the region. In the early years following the partition of India in 1947, the newly formed East Pakistan, which later became Bangladesh, faced significant challenges in providing adequate mental health facilities. The establishment of the Pabna Mental Hospital in 1957 marked a crucial step in addressing mental health concerns, but specialized care for children was limited. It was not until 1974 when Dhaka Medical College introduced a mental health service that a more focused approach to child mental health began to emerge. This initiative eventually extended to other medical colleges and the Institute of Mental Health and Research, gradually expanding the availability of child psychiatric services across the country. Today, with all 13 government medical colleges and hospitals, as well as some non-

government medical college hospitals, offering psychiatric services for children, Bangladesh has made significant progress in recognizing and addressing the mental health needs of its young population.

The historical background of school-going children in Bangladesh reveals a complex and evolving landscape marked by both progress and challenges. Over the years, education has emerged as a critical component of the nation's development agenda, but it has also been influenced by socio-economic and political factors that have shaped the educational experiences of Bangladeshi children. Historically, Bangladesh, formerly known as East Pakistan before gaining independence in 1971, faced significant educational disparities and challenges. Educational opportunities were limited, and access to schooling was often constrained by factors such as poverty, gender discrimination, and geographical disparities. During the pre-independence period, the region struggled to establish an inclusive and accessible educational system, resulting in a substantial portion of the population, including many school-going children, being left without access to formal education.

Following Bangladesh's independence in 1971, there was a renewed commitment to improving the educational landscape. Efforts were made to expand access to education, with a focus on primary and secondary education. Initiatives like the National Education Policy aimed to address historical disparities and ensure that school-going children from all backgrounds had an opportunity to receive quality education. Despite these efforts, challenges persisted. Economic limitations continued to impact many families, making it difficult for school-going children to access education due to the costs associated with schooling. Gender disparities also remained a concern, with girls often facing barriers to education, although progress has been made in recent years to promote gender equality in education. In recent times, Bangladesh has made significant strides in improving access to education, increasing literacy rates, and enhancing the quality of schooling. Government programs, international partnerships, and the development of a more robust education infrastructure have contributed to these positive changes. School-going children in Bangladesh today have more opportunities for education than in the past, and there is a growing recognition of the importance of education in shaping the nation's future. However, challenges such as the quality of education, equitable access, and the need to adapt to changing global demands continue to shape the educational landscape

for school-going children in Bangladesh. This historical background underscores the ongoing efforts to provide quality education to all children in the country and the importance of addressing the unique needs and circumstances of school-going children in the context of Bangladesh's evolving socio-economic and political landscape.

Psychiatric disorders are a significant concern in Bangladesh, mirroring global trends. Currently, psychiatric services primarily revolve around institutions like Pabna Mental Hospital, the Institute of Mental Health, BSMMU, and medical college hospitals, as noted by Islam et al. in 1993. While the results of a recent national survey on psychiatric morbidity are pending, smaller-scale surveys suggest that psychiatric disorders are prevalent in both urban and rural areas. For example, in a survey conducted in Dasherkandi, a rural area near Dhaka, 29 out of every 1000 individuals were found to have psychiatric disorders, with an additional 36 out of every 1000 experiencing both psychiatric and physical disorders, according to Chowdhury et al. in 1981. In another study, it was found that 29% of individuals seeking medical care at a general practice over a year presented solely with psychological or emotional disorders, as documented by Alam in 1978. Similarly, at the medical outpatient department of the Institute of Postgraduate Medical Research, 31% of patients had exclusively psychological conditions, while an additional 15% had conditions characterized by both organic and psychogenic elements, according to Chowdhury et al. in 1975. Additionally, a study involving 600 patients at a psychiatric clinic in Chittagong City revealed that schizophrenia and affective disorders were diagnosed in 30% and 25% of cases, respectively. A combination of neurosis and personality disorders affected 30% of patients, with organic disorders and learning disabilities impacting 7% and 3% of the patient population, respectively, as outlined in Ahmed's 1978 study.A report published by Dhaka Tribune shows that "45 students committed suicide per month in 2022" and an astounding situational assessment conducted by World Health Organization (WHO) for Bangladesh presents that Bangladesh has an estimated 260 psychiatrists and 565 psychologists per 100,000 people.

1.3   Mental health issues in Bangladesh

Mental health issues are a major contributor to global disease and disability, with over 1 billion people suffering from mental illnesses globally. In low- and middle-income

countries like Bangladesh, 18.7% of adults and 12.6% of children suffer from mental health disorders, particularly depression, anxiety, and stress. Women are more likely to suffer from these disorders, influenced by biological, hormonal, social, and cultural factors.

Mental health issues among women are influenced by factors such as financial dependency, reduced autonomy in decision-making, interpersonal violence, and the social role of women as child-bearers and caregivers. In Bangladesh, women are twice as likely to experience common mental health issues, but only half as likely to access treatment. The main problems affecting men's and women's access to treatment are the scarcity of mental health professionals, the mal-distribution of facilities to urban areas, and the improper implementation of national mental health policy. Social and cultural stigma and low mental health illiteracy have negatively influenced mental healthcare-seeking behaviours among people in Bangladesh.

Historically, women have had a lower tendency to seek mental health services worldwide due to factors such as poverty, low educational status, lack of employment opportunities, low decision-making capacity, inadequate knowledge about mental health conditions, fear of being labelled, perceived impact on marriage, and lower access to healthcare services. The COVID-19 pandemic indirectly impacted mental health inequalities among women, increasing economic uncertainty, reduced employment, and increased exposure to interpersonal violence.

Understanding the challenges of women with mental health problems is crucial for improving the nature, quality, and reach of services. The Women Support Initiative Forum (WSIF) is an online women-led initiative that offers a wide range of online psychosocial services through its website, LinkedIn, and Facebook group. The World Women's Initiative (WSIF) is a Facebook group in Bangladesh that provides online psychotherapy and counselling to women aged 20 to 28. The group promotes psychosocial wellness and mental healthcare-seeking behaviours among women through the dissemination of mental health-related educational content. The group also features an anonymous post feature, allowing women to share their challenges anonymously and receive support. The anonymous posts provide unique insights into women's mental health concerns and treatment-seeking behaviour outside of a formal healthcare setting.

The study aims to explore the pattern of mental healthcare-seeking behaviour among women in Bangladesh through social media content analysis of anonymous posts shared on the WSIF platform. The findings could help generate evidence on the care-seeking behaviour and barriers faced by women and potentially guide better approaches to service delivery.

Mental health services in Bangladesh:

Due to a shortage of psychiatrists, psychiatric patients are managed by psychiatrists, psychiatry-trained doctors, specialties, and general practitioners. There is no formal referral system, but patients are referred by other health professionals for proper management.

Many patients seek psychiatrists after referral from local community members, traditional healers, faith healers, and village doctors. Government hospitals have around 800 psychiatric beds, with most occupied by drug misusers. In the non-government sector, 1000 beds are occupied by psychosis patients. In Dhaka, there is one government drug addiction treatment centre with 75 beds. Doctors trained in psychiatry typically work in primary care centres, providing care for psychiatric patients. However, there are no statistics on patient care and no refresher courses for these trained doctors, resulting in a lack of up-to-date knowledge on recent psychiatric advancements.

Mental health legislation and policy:

Bangladesh lacks a mental health act, instead relying on the Indian Lunacy Act 1912, which has been amended in 1957 and 1973. A draft mental health policy, formulated by the Ministry of Health, World Health Organization, and Bangladesh Association of Psychiatrists, is currently awaiting finalization.

Human rights:

Many psychiatric patients receive treatment from traditional healers, local religious leaders, and indigenous medicine practitioners due to their belief in supernatural influences. Many patients are reluctant to consult modern allopathic medicine practitioners, as they are less concerned about patient rights. Human rights activists often help these patients when they are the focus of news media stories. Practising psychiatrists and the Association of Psychiatrists have little influence in maintaining the

human rights of psychiatric patients in the community, but in hospital settings, they are treated as general patients.

Overview: Bangladesh's psychiatry education and services are increasing, but psychiatrists and services are mainly in big cities. Most psychotropic medications are available, but psychotherapy is not widely available. The country lacks a mental health act, and the Bangladesh Association of Psychologists (BAP) is working to expand services in remote areas.

resources and a shortage of trained professionals. The presence of a child psychiatry wing at the Bangabandhu Sheikh Mujib Medical University (BSMMU) and another department at the Institute of Mental Health and Research indicates some recognition of the importance of child mental health. However, the fact that there are only three psychiatrists trained abroad in child psychiatry highlights the scarcity of specialized expertise in this area.

The development of child psychiatry in any country is crucial for addressing the mental health needs of children and adolescents. Children can experience a wide range of mental health issues, and having specialized professionals who can diagnose and treat these conditions is essential for their well-being. It's possible that efforts are being made to expand child psychiatry services in Bangladesh, but progress may be slow due to various factors such as resource constraints and a need for more training opportunities for professionals in this field.

Continued investment in the development of child psychiatry services, including training more psychiatrists in child psychiatry, establishing specialized clinics, and raising awareness about child mental health, could significantly improve the mental well-being of children and adolescents in Bangladesh. Additionally, collaboration with international organizations and experts in child psychiatry may help accelerate the growth of this field in the country.

1.4   Definition of Mental Health

Mentally healthy children experience a positive quality of life, thriving in their everyday environments, including home, school, and their communities. They exhibit the ability to

learn, behave, and manage their emotions in a typical and age-appropriate manner. On the contrary, mental disorders in children are characterized by significant deviations from expected patterns of behaviours, learning, or emotional regulation. These deviations often lead to distressing experiences for the child and can hinder their ability to navigate daily life successfully. Identifying and addressing mental health concerns in children are crucial to ensure their well-being and enable them to lead fulfilling lives.

The World Health Organization (WHO) conceptualizes mental health as a "state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community"

Mental disorders and psychoactive substance-related disorders pose a significant global health challenge, with a widespread impact on morbidity, disability, and premature mortality. Unfortunately, many countries are grappling with a critical issue – the inadequate allocation of resources to address this burden. Moreover, these resources are often distributed unevenly and, at times, not optimally utilized. Consequently, a substantial treatment gap persists in numerous countries, surpassing 70% in some cases. Adding to this complex problem, individuals with mental disorders often face stigma, social exclusion, and discrimination, which further exacerbate their difficulties in accessing appropriate care and support. Addressing these multifaceted challenges is imperative to promote mental health equity and improve the well-being of individuals affected by these conditions.

Mental health is crucial for everyone, enabling them to reach their full potential, show resilience, be productive, form meaningful relationships, and contribute to their communities. It is interconnected with physical, psychological, social, cultural, and spiritual factors. Promoting and protecting mental health is essential for a well-functioning society, fostering social capital and solidarity, which are crucial during times of crisis. There are inseparable links between mental and physical health.

The World Health Organization recognizes that it is entirely normal for school-going children and adolescents to encounter a range of emotional challenges as they grow and develop. Such experiences may include school-related anxiety or transient periods of depression. However, when these symptoms persist, seeking professional assistance

becomes crucial. It is worth noting that the majority of youth are generally healthy both physically and emotionally. Nevertheless, statistics show that approximately one in every four to five young individuals may meet the criteria for a lifetime mental health disorder, a circumstance that can lead to discrimination and negative attitudes. WHO emphasizes that mental health is not just the absence of a disorder but encompasses emotional, psychological, and social well-being. It involves the ability to navigate life's complexities, build meaningful relationships, adapt to change, employ effective coping strategies, fulfil one's potential, have their needs met, and develop skills that enable them to thrive in various environments. The presence or absence of protective and risk factors significantly influences youth mental health, and concerted efforts should be made to promote positive mental health and prevent or mitigate mental health challenges. For those youth grappling with mental health disorders, it is important to recognize that with appropriate treatment, peer and professional support, and a robust network of family and social support, they can successfully overcome the challenges and lead fulfilling lives.

1.4.1 Schools are a Natural Setting to Support Mental Health

The World Health Organization recognizes the critical importance of school-based mental health programs in nurturing the well-being of students. Schools serve as an ideal environment for promoting mental health, given that students spend a significant portion of their formative years within these institutions. A substantial proportion of young people, approximately 12 to 22 percent, may grapple with diagnosable mental health disorders during their school years. To address this pressing issue, school-based initiatives become a vital instrument in early identification, intervention, and treatment. Such programs not only bolster the mental health of students but also contribute to fostering a conducive learning atmosphere. Mentally healthy students exhibit enhanced readiness to learn, active engagement in school activities, and nurturing relationships with peers and adults. Moreover, these programs destigmatize mental health concerns, offering a safe and supportive haven for students and families to access a comprehensive range of services. The World Health Organization acknowledges that schools, as natural and trusted settings, are pivotal in the endeavour to provide essential support and care, aligning with global efforts to prioritize mental health and well-being among our youth.

1.4.2 Meaning of Child Mental Health

child mental health, the complete well-being and optimal development of a child in the emotional, behavioural, social, and cognitive domains. Children's mental health is often defined as different from adult mental health and more multifaceted because of the unique developmental milestones that children experience. The mental well-being of school-going children is a topic of paramount importance in our society today. As researchers delve into the intricate web of factors that influence a child's mental health, it becomes evident that their overall well-being is not solely determined by innate characteristics such as gender or genetics. Rather, it is a multifaceted interplay of various elements, encompassing the family environment, the surrounding community, and the broader societal context. Mental health in children is not confined to abstract concepts; it manifests itself in the tangible realms of psychological and emotional development, the quality of social relationships, and the behavioural patterns they exhibit.

In some instances, the challenges school-going children face can be transient, representing typical developmental milestones. However, when these difficulties persist, intensify, and hinder a child's ability to function effectively, they transcend mere challenges and are defined as mental health disorders. It is in recognizing and addressing these disorders that researchers begin to appreciate the profound impact they can have on a child's life.

Fortunately, there is a silver lining in the cloud of child mental health, for well-designed mental health promotion and prevention programs and interventions have the power to make a substantial difference. By nurturing and enhancing the mental well-being of school-going children, people not only improve their quality of life but also mitigate the potential escalation of problems that could otherwise persist into adulthood. This holistic approach to child mental health, encompassing individual, familial, communal, and societal aspects, is essential in fostering a generation of emotionally resilient and mentally healthy individuals who can thrive in an ever-changing world. In this exploration of school-going children's mental health, researcher embark on a journey to understand, address, and promote the well-being of our youngest members of society.

1.5 Protective and Risk Factors for School going Children's Mental Health

1.5.1 Protective Factors

Strong Social Support: Children who have a supportive network of family and friends are more resilient in the face of stress and adversity. A strong social support system can provide emotional and practical assistance.

Healthy Family Environment: A stable and nurturing family environment, characterized by consistent routines, open communication, and loving relationships, can significantly enhance a child's mental health.

Access to Quality Education: Being in a stimulating and supportive educational environment with caring teachers can foster cognitive development and self-esteem.

Positive Parenting: Parents who employ nurturing and positive discipline methods, and who are emotionally available, help create a secure attachment, which is crucial for a child's emotional well-being.

Community Resources: Communities with access to mental health services, recreational activities, and safe environments contribute to children's overall well-being.

Physical Health: Good physical health, including proper nutrition, regular exercise, and adequate sleep, can positively impact mental health.

Resilience: Teaching children coping skills and problem-solving abilities can enhance their resilience in the face of challenges.

High Self-Esteem: Children with a healthy sense of self-worth and self-confidence are less likely to be negatively affected by stressors.

1.5.2 Risk Factors

Adverse Childhood Experiences (ACEs): Children who experience traumatic events such as abuse, neglect, or household dysfunction are at higher risk for mental health problems.

Family Dysfunction: Dysfunctional family dynamics, including conflict, domestic violence, substance abuse, and parental mental health issues, can contribute to poor mental health outcomes.

Peer Pressure: Negative peer relationships, including bullying or peer pressure to engage in risky behaviours, can negatively impact a child's mental health.

Economic Hardship: Low socioeconomic status, including poverty and lack of access to basic necessities, can create stressors that affect a child's mental well-being.

Learning Disabilities: Children with learning difficulties may experience frustration, low self-esteem, and anxiety, increasing their risk of developing mental health issues.

Cultural and Minority Stress: Children who face discrimination, racism, or cultural isolation may be at higher risk for mental health problems.

Parental Substance Abuse: Parents who misuse drugs or alcohol can create an unstable and neglectful environment for their children, increasing their risk of mental health issues.

Traumatic Events: Exposure to traumatic events, such as natural disasters or community violence, can have a lasting impact on a child's mental health.

Lack of Access to Mental Health Services: Limited access to mental health care and support services can hinder early intervention and treatment for children facing mental health challenges.

It's important to note that the presence of protective factors can help mitigate the impact of risk factors on a child's mental health. Early identification and intervention, as well as a supportive and nurturing environment, can promote positive mental health outcomes in school going children.

Preventing and addressing mental health issues among school-going children in Bangladesh is of paramount importance to ensure their overall well-being and future success. Here are some appropriate prevention and impact strategies tailored to the context of Bangladesh:

Mental Health Education in Schools: Integrate mental health education into the national school curriculum, emphasizing the importance of emotional well-being. Develop age-appropriate materials and resources for teachers to facilitate discussions on mental health topics in the classroom.

Teacher Training and Support: Provide teachers with regular training on recognizing signs of mental health issues in students and how to provide initial support. Establish teacher support networks where educators can share experiences and seek guidance on handling mental health concerns.

School-Based Counselling Services: Set up counselling centres within schools, staffed with trained mental health professionals, to provide confidential support and intervention. Promote open communication channels between students and counsellors to encourage early reporting of mental health issues.

Parental Engagement: Conduct regular workshops and awareness sessions for parents to educate them about common mental health challenges in children and adolescents. Encourage parents to actively participate in their child's school life and seek professional help when needed.

Community Partnerships: Collaborate with local community organizations, non-governmental organizations (NGOs), and healthcare providers to organize mental health awareness campaigns and workshops.

Establish referral systems to connect children in need of specialized care with appropriate services.

Telemedicine and Helplines: Develop telemedicine platforms and helplines staffed with mental health professionals to provide remote support and guidance.

Ensure that these services are accessible to children and their families, especially in remote areas.

Peer Support Programs: Implement peer mentorship programs within schools, where older students are trained to provide emotional support to their peers.

Create safe spaces for students to share their feelings and experiences with trusted peers.

Early Intervention and Screening: Conduct regular mental health screenings in schools to identify at-risk children and provide early intervention.

Train teachers and counsellors to recognize early signs of mental health issues and act promptly.

Cultural Sensitivity: Develop mental health programs that are culturally sensitive and consider local beliefs, traditions, and practices.

Collaborate with community leaders to promote understanding and acceptance of mental health issues.

Research and Data Collection: Continuously gather data on the mental health status of school-going children in Bangladesh to monitor trends and evaluate the impact of interventions.

Use research findings to adapt and improve mental health programs.

Government Support: Advocate for increased government funding and policies that prioritize mental health initiatives in schools.

Collaborate with relevant government agencies to ensure a coordinated approach to mental health promotion.

Holistic Well-being: Promote a holistic approach to well-being, including physical health, nutrition, and stress management, as part of the school curriculum.

Encourage regular physical activity and mindfulness practices in schools.

Anti-Stigma Campaigns: Launch anti-stigma campaigns in schools and communities to challenge negative attitudes toward mental health and reduce discrimination.

Share success stories and testimonials to inspire hope and destigmatize seeking help.

Crisis Response Plan: Develop and regularly update a crisis response plan for schools to address emergencies or severe mental health crises effectively.

Ensure that teachers and staff are trained in crisis intervention protocols.

Sustainability and Capacity Building: Invest in the training and development of local mental health professionals to ensure the sustainability of mental health programs.

Integrate mental health services into the broader healthcare system to provide seamless support.

By implementing these comprehensive strategies, Bangladesh can work toward creating a nurturing and supportive environment for its school-going children, promoting mental well-being, and reducing the impact of mental health issues on their lives. Collaboration between various stakeholders, including government, schools, communities, and healthcare providers, is essential for the successful implementation of these initiatives.

1.5.3 Students' Mental Health: Depression, Anxiety and Stress

In the realm of higher education, students navigate a complex landscape filled with various stressors and challenges, making their mental health a critical aspect of their overall well-being. As they transition from adolescence to adulthood, they grapple with a multitude of demanding factors, ranging from rigorous academic requirements and challenging assignments to new living arrangements in hostels or away from family.

These students encounter significant life transitions that shape their mental health, and this aspect is integral to their social health. It is worth noting that students at all levels of higher education, including colleges and universities, confront distinct challenges and pressures. This pressure stems from factors such as adjusting to a new environment,

academic demands, peer group expectations, forming new friendships, delving into unfamiliar subjects, the fear of meeting high expectations, concerns about future career prospects, financial stress, and feelings of loneliness. Consequently, various stressors and triggers affect students differently, depending on their educational level and institution.

The impact of these stressors extends beyond academic performance, significantly influencing the mental health and well-being of students. This is particularly concerning for vulnerable students who already face difficulties related to family support and social connections. Their mental health is even more at risk due to the added burden of academic stressors and the challenges of higher education.

In a global context, students in various institutions of higher learning grapple with different mental health issues. According to the World Health Organization (WHO), it is a common experience among psychologists and professionals in the field that at least 10% of students in any learning institution face emotional difficulties at some point during their higher education journey. These emotional difficulties often manifest as anxiety, stress, and depression, which are prevalent mental health problems among students. The mental well-being of students during this critical period is heavily influenced by their levels of anxiety, stress, and depression, with some individuals contending with one specific issue and others facing multiple challenges simultaneously.

In summary, the mental health of students in higher education is a multifaceted issue shaped by various stressors and challenges they encounter. Anxiety, stress, and depression are common mental health problems that impact their well-being, with the severity and combination of these issues varying from student to student. Recognizing and addressing these mental health challenges is crucial to supporting the overall success and health of students in higher education.

1.6   Problems of Child mental health

Bangladesh, a poor country, faces daily life struggles due to infant mortality. Programmes promoting mother and child health have reduced infant mortality from 100 per 1000 live births in 1990 to 56 in 2004. The focus now is on ensuring children's well-being and

quality of life. The UN millennium development goals include reducing child mortality and achieving universal primary education. The Bangladesh Government has piloted an early child development programme since 2003, training community workers to support and inform parents.

The prevalence of all grades of disability in children in Bangladesh is increasing due to improvements in child survival. Since 1992, a network of child development centres has been established across the country. In the first decade, most children attended had serious physical, sensory, and intellectual disabilities. Malnutrition and low-grade infections often exacerbated their poor functioning. However, behaviour problems are now forming an increasing proportion of complaints. This pattern may mirror the experience in western countries where mental health problems are common. Previous studies suggest rates at least as high as UK estimates, with 20% boys and 10% girls in primary schools in Dhaka.

Urban children may experience higher rates of mental health disorders due to family disturbance and housing factors. However, a study in the UK found no significant difference between urban and rural areas, except for overcrowded housing. The behaviour checklist (BCL) suggests that 10%-14% of 3-year-old children in the UK have significant behaviour problems.

After finishing high school, students entering university often confront a range of potential challenges in their new academic and social environment. This transitional phase requires students to adapt to the academic and social demands of university life, which ultimately prepare them for their future careers by equipping them with professional knowledge, transferable skills, and evidence-based attitudes (Bayram and Bilgel, 2008; Kulsoom and Afsar, 2015; ul Haq et al., 2018). Some students may find the university setting overwhelming, especially if it involves living away from family and friends for the first time, and they may lack the psychological resilience to handle such situations (Saeed et al., 2018; Taneja et al., 2018). The university experience often leads most undergraduates to undergo various psychosocial and psychological changes as they develop into autonomous individuals (Alim et al. 2017a,b). Consequently, common mental health issues like depression, anxiety, and stress are prevalent among today's university students, and these disorders seem to be on the rise in terms of both frequency and severity due to the stressors and transitional events associated with university life

(Bayram and Bilgel, 2008; Beiter et al., 2015; Hunt and Eisenberg, 2010; Kulsoom and Afsar, 2015; Nadeem et al., 2017; Saeed et al., 2018; Shamsuddin et al., 2013; Taneja et al., 2018; ul Haq et al., 2018). Recent studies have indicated that approximately 33% of first-year undergraduate students have reported experiencing some form of mental health problems within the past year (Bruffaerts et al., 2018). These mental health issues contribute significantly to the global burden of non-fatal diseases, accounting for 30% (World Health Organization, 2016). The worldwide prevalence of moderate to extremely severe levels of depression stand at 60.8%, anxiety at 73%, and stress at 62.4% (Bayram and Bilgel, 2008; Beiter et al., 2015; Kulsoom and Afsar, 2015; Nadeem et al,. 2017; Saeed et al., 2018; Shamsuddin et al., 2013; Taneja et al., 2018; ul Haq et al., 2018). In Bangladesh, the rates of depression, anxiety, and stress have been reported to be alarmingly high, with figures as high as 54.3%, 64.8%, and 59.0%, respectively (Alim et al., 2017a, b; Hossain et al., 2014; Mamun and Griffiths, 2019; Mamun et al., 2019). Recent research has highlighted various factors contributing to an increase in stress, anxiety, and depression among students. Notably, gender appears to play a role, with some studies suggesting higher susceptibility among males (ul Haq et al., 2018) and others among females (Mayer et al., 2016; Wahed and Hassan, 2017). Additionally, factors such as academic dissatisfaction, strained relationships, family and peer pressure, the transition to the first year of university, high parental expectations, financial difficulties, sleep deprivation, worries about the future, loneliness, excessive internet use, a toxic psychological environment, academic pressure, heavy workloads, the size of the academic curriculum, and frequent testing have all been identified as stressors (Mamun and Griffiths, 2019; Mayer et al., 2016; Saeed et al., 2018; Silva and Figueiredo-Braga, 2018; ul Haq et al., 2018).

In Bangladesh, specifically at Jahangirnagar University, there is a prevalent issue of "ragging," which involves teasing or mistreatment of first-year students by senior students. This practice is common in South Asian countries like Bangladesh and India and can lead to psychological distress, hospitalization, and even suicidal thoughts due to the mental trauma it inflicts (Garg, 2009; Prothom Alo, 2018). Therefore, it is imperative to conduct further research to safeguard the well-being of students and prevent mental health problems that may lead to suicidal thoughts.

It's important to note that mental health problems don't just affect students psychologically; they also have negative consequences on their physical health, educational performance (e.g., academic grades and overall percentage), quality of life, and can impact their families, educational institutions, and society as a whole (Bayram and Bilgel, 2008; Bruffaerts et al., 2018). Furthermore, mental health problems are significant predictors of suicide, with approximately 90% of suicide victims having at least one mental disorder. This presents a pressing public health crisis in Asian countries like Bangladesh (Arafat, 2017; 2019; Shah et al., 2017) that needs to be addressed.

In Bangladesh, there is a notable absence of research on common mental health problems (MHPs), creating a knowledge gap in this area. Moreover, there is a lack of specific programs and interventions designed to support this vulnerable population, which has implications for both education and public health policymaking globally. Recent incidents of student suicides in Bangladesh have further highlighted the need to investigate mental health issues, as these can contribute to suicidal tendencies. As a response to these concerns, this study aimed to examine the prevalence of depression, anxiety, and stress among undergraduate students in Bangladesh. Additionally, it sought to identify the factors associated with these mental health challenges, including socio-demographic factors such as gender, family socioeconomic status, permanent residency, and field of study, as well as behavioural factors like smoking, physical activity, and internet use.

Bangladesh, situated in Southern Asia, shares its borders with India to the west, north, and east, as well as Myanmar to the southeast. It's a densely populated country, with more than 162 million people residing in an area of 147,570 square miles. The majority of the population lives in the delta regions of three major rivers that flow into the Bay of Bengal to the south. About half of the workforce is engaged in agriculture, primarily focused on rice production. The industrial sector heavily relies on garment manufacturing, accounting for over 80% of total exports.

The climate in Bangladesh is characterized by consistently high temperatures and humidity. However, recent changes in climate patterns have led to more frequent monsoon rains and cyclones, resulting in floods that displace an increasing portion of the population and make farming in flood-prone areas challenging. Additionally, there are approximately 1 million Forcibly Displaced Myanmar Nationals (FDMN), including many

children, who have fled extreme violence and persecution in Myanmar and now reside in settlements in Southeastern Bangladesh.

Bangladesh has been an independent nation since 1971, and its government follows a parliamentary republic system. The country is divided into eight administrative divisions: Barisal, Chittagong, Dhaka, Khulna, Mymensingh, Rajshahi, Rangpur, and Sylhet. These divisions are further subdivided into 64 districts and 545 upazilas/thanas (subdistricts). Dhaka, with a population of over 11 million, serves as the political, cultural, and economic hub of Bangladesh.

The Bangladesh Constitution outlines healthcare as a basic necessity, with the state responsible for accessibility. The public health system extends healthcare providers, hospitals, and clinics to all administrative levels and unions. Public campaigns have been successful in increasing family planning awareness, vaccination rates, and sanitation, and reducing maternal and neonatal mortality rates. In 2018, the Bangladesh Parliament approved a new Mental Health Act, and in 2019, the Ministry of Health approved a new Mental Health Policy, focusing on decentralization and community-based services for persons with mental illness.

1.7   Mental Health Stressors

Mental health in Bangladesh can deteriorate due to a combination of domestic and foreign pressures. For instance, ongoing natural disasters, the current refugee crisis, and issues related to overpopulation all impact the mental well-being of the Bangladeshi population.

The country grapples with recurrent floods, tornadoes, and cyclones, which can have profound psychological effects. An infamous tornado in 1996 left a staggering 66.6% of its victims in need of urgent psychological support, highlighting the severe impact of natural disasters and the urgent requirement for increased mental health resources.

Since 2007, Bangladesh has welcomed nearly 1 million refugees from Myanmar, driven by a military crackdown on Rohingya citizens. This sudden influx of people has strained the nation's already limited capacity to address regional disasters and mental health crises effectively. Many of these refugees have experienced acute stress and post-

traumatic stress disorder, necessitating immediate mental health assistance. This surge in overpopulation further stretches resources, aggravating the mental health situation in the country.

Stigma: In Bangladesh, mental health stigma is a pervasive issue that prevents open discussions and support for individuals facing mental health challenges. It is estimated that around 10,000 people in Bangladesh lose their lives to suicide each year, yet there is a prevailing reluctance within households and society as a whole to address mental health problems due to the fear of social judgment. This stigma is deeply rooted in superstitions and misconceptions, with some attributing mental health issues to the influence of evil spirits.

Unfortunately, individuals suffering from mental health conditions often face ostracization from their communities, which compels them to conceal their struggles and endure their difficulties in silence without seeking help. Some individuals turn to traditional healers as a means of finding relief, particularly in rural areas where access to trained mental health specialists is limited. It's worth noting that in rural regions, a significant portion of healthcare (approximately 65%) is provided by "village doctors" who lack formal medical training.

These traditional healing practices can sometimes lead to human rights abuses and even have fatal consequences. Overall, the prevalence of mental health stigma in Bangladesh hinders proper mental health care and support, especially in rural areas where alternative healing methods are more common due to the scarcity of trained professionals.

1.8   Rationale of the study

In Bangladesh, there is a significant shortage of mental health professionals, with just 270 psychiatrists and approximately 500 psychologists available to cater to a population exceeding 166 million. This translates to a ratio of 216,000 people per specialist. The majority of mental health professionals are concentrated in urban areas, leaving those in rural regions with limited access to mental health services. Additionally, the country's sole government-run mental hospital has a mere 500 beds. Furthermore, mental health

receives limited financial support, as only 0.44% of the government's health budget is directed towards the mental health sector.

The significant shortage of mental health professionals and resources in Bangladesh has serious implications for the mental health of school-going children in the country. Here are some of the key significance and challenges associated with mental health problems among this demographic:

High Prevalence: Mental health problems among school-going children are not uncommon in Bangladesh. The lack of access to mental health services means that many children may go undiagnosed and untreated, potentially leading to long-term mental health issues.

Educational Impact: Mental health problems can significantly impact a child's ability to learn and perform well in school. Untreated conditions like anxiety, depression, or attention disorders can lead to poor academic performance, absenteeism, and even dropouts.

Social Stigma: In many cultures, including Bangladesh, there is a stigma associated with mental health issues. This stigma can prevent children and their families from seeking help, exacerbating the problem and leading to more severe mental health issues over time.

Limited Access to Services: The shortage of mental health professionals and facilities, especially in rural areas, means that many children do not have access to the necessary care and support they need. They often have to travel long distances to receive treatment, which can be a significant barrier.

Parental Stress: Economic and social challenges in Bangladesh can lead to high levels of stress among parents, which can, in turn, affect children's mental health. Children may internalize their parents' stress and anxiety, leading to their own mental health problems.

Lack of Awareness: There is often limited awareness about mental health issues and their early signs among parents, teachers, and children themselves. This lack of awareness can delay diagnosis and intervention.

Long-Term Consequences: Untreated mental health problems in childhood can have long-term consequences, affecting a person's mental well-being throughout their life. It can lead to a cycle of mental health issues that persist into adulthood.

Economic Impact: Mental health problems among school-going children can have economic implications for the country. Decreased productivity and an increased burden on the healthcare system can result from untreated mental health issues.

Educational Disparities: The shortage of mental health resources can exacerbate educational disparities. Children from lower-income backgrounds may face additional challenges in accessing care, further perpetuating social inequalities.

Future Well-Being: Children are the future of any nation. Neglecting their mental health needs can have a profound impact on the overall well-being and development of the country.

In conclusion, addressing the significant shortage of mental health professionals and resources in Bangladesh is crucial to mitigate the impact of mental health problems among school-going children. By improving access to mental health services, raising awareness, and reducing stigma, the country can better support the mental well-being of its younger generation, ultimately contributing to a healthier and more productive society.

1.9   Operational Definitions

An operational definition in research is a precise explanation of how a concept or variable will be measured, observed, or manipulated within a study. It outlines the specific steps or procedures used to assess or control the particular aspect of interest. In current study,

the researcher has outlined some of the operational definitions which were observed and measured during the study as –

    i)   **Mental health problems –** The evaluation of mental health problems involved analyzing the combined scores from the Strengths and Difficulties Questionnaire, devised by Robert Goodman in 1997. The whole questionnaire was the combination of five different dimensions namely – Emotional problems, Conduct problems, Hyperactivity problems, Peer problems and Pro-social problems. Higher scores indicated more significant problems, while lower scores indicated fewer problems.

    ii)   **Adolescents –** Only students between the ages of 11 and 17 were categorized as adolescent participants in the study.

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CHAPTER – II
PROBLEM OF THE STUDY

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2.1   Emergence of the Problem

Child mental health problem is a global public health and alarming issue. Child mental health problem as proportion of total mental disorders have serious negative effect on survival and reduce life expectancy and it generally not perceived as a health problem and are not priority in the health care delivery. For this reason, day by day child mental health problem is increasing. In word wide, mental health problems affect about 1 in 10 children and young people (Mental Health Foundation, 2019). In Bangladesh, children under 16 years of age constitute over 28 percent of total population. Evidence showed that overall, 18.4 % of children are suffering from some form of mental health problem. A large number of children suffer from mental health problem during their development period. Many of these problems are transient and may not even be noticed. At times, however, the extent of these problems and their overall effects on a child's development can be serious.

In general, mental health problems that commonly occur in children are depression, self-harm, generalized anxiety disorder (GAD), post – traumatic stress disorder (PTSD), attention deficit hyperactive disorder (ADHD), and eating disorders (Mental Health Foundation, 2019). In relation to school going children, student are suffering from attention deficits, cognitive disturbances, lack of motivation, and negative mood all adversely affect scholastic development (DtschArzteblint, 2016).According to DtschArzteblint (2016), addressed that the reason that trigger mental health problem among school going children's includes (1) specialist health care is not sufficiently accessible, (2) fear of having a mental disorder and being stigmatized, (3) uncertainty among children and parents about whether the behavioral or mood changes actually require treatment, (4) little or no awareness of available health care services, and (5) language barriers or cultural obstacles in families from a migration background. Evidence shows that the prevalence rate of mental health in adult population was 12.2% (Karim et al, 2006), 16.5% (Hosain et al, 2007), and 6.1% (NIMH,

B and WHO, 2007). On the other hand, showed similar study showed that the prevalence rate of mental health problem in children was 15.2% (Mullick, 2005), 14.6% (Khan et al, 2008), and 18.4% (Rabbani et al, 2009).

In the ear of globalization, the education system of many developing countries including Bangladesh has become a business sector in the hands of industrialists and private agencies. Educational institutions pressurized students to get high marks as to set their benchmark in the educational market. As a result, students experience tremendous unhealthy competition, severe examination stress and carving for high achievement in their academics are common factors which eventually affects the students overall mental health. Hence, in this juncture it is important and imperative to explore the various factors related to the causes of mental health problems among the school going children in Bangladesh.

2.2   Review of Related Literature

This review of literature provides a comprehensive overview of the current state of evidence regarding a research problem (Polit and Beck 2008). This review of literature was done to get a better understanding of the problem of mental health problems among school-going children. It looked at the existing studies in this area, from source-books and journals to reports and articles. It also looked at current reviews, periodicals and the internet to figure out what the problem was and why a study was needed. Mental health conditions among children and adolescents have become a significant public health concern, with 10-20% experiencing problems globally. The World Health Organization highlights the importance of childhood and adolescence for acquiring socio-emotional capabilities and preventing mental health problems. Schools play a unique role in helping children improve their mental health, as they teach beyond traditional subjects and enhance students' social-emotional competence, character, health, and civic engagement. Universal mental health promotion in school settings is recognized as effective in improving students' emotional well-being. Research evidence over the last two decades has shown that schools can make a difference to students' mental health. However, reviews covering different school-related factors or

interventions are still lacking. This scoping review provides a comprehensive overview of available evidence on the potential impacts of multiple school-related factors or interventions on student mental health and identifies school-related risk/protective factors involved in the development of mental health problems among Play-12 students. The review aims to help develop a holistic model of Play-12 education and address the alarming rate of mental disorders among children and adolescents.

2.2.1 Bangladeshi Studies

A recent a cross-sectional study in Bangladesh done by **Faruk & Rosenbaum (2023)** they studied on *"Mental illness stigma among indigenous communities in Bangladesh: a cross-sectional study"* to look into the risk factors and current stigma among various indigenous communities in Bangladesh's Chattogram Hill Tracts (CHT). A cross-sectional survey was conducted in Rangamati, Bangladesh, with participants from the Chakma, Marma, Rakhine, Tripura, and Pangkhua indigenous communities. The Mental Illnesses Stigma Scale was used, and multiple regression, ANOVA, and t-tests were employed. The study reveals a gender difference in reporting stigma among indigenous people, with age, gender, socioeconomic status, and monthly income being significant factors. These findings can inform anti-stigma interventions targeting indigenous communities in Bangladesh, highlighting the need for gender-specific strategies.

According to **Hasan et al. (2019***) "Level of Stress, Predisposing Factors and Status of Mental Health among Pharmacy Students of a Private University of Dhaka, Bangladesh A Cross Sectional Study"* to look into the socio-demographics of students, the degree of stress they feel, the state of their mental health, and the correlation between various factors related to the level of stress feelings. A study of 504 UAP Department of Pharmacy students found that severe stress was common for both genders, with female students (N=253, F=78.33% &) experiencing more stress. Factors contributing to stress included future career thoughts, academic achievements, unrealistic expectations, family relationships, socioeconomic conditions, and being too busy. Overall, female students were more stressed than males. Stress levels among students aged 21-25 are

highest, with socio-economic conditions contributing to higher stress levels. Psychological counseling is crucial for detecting and preventing mental distress.

According to **Sultana & Tareque (2019)** *"Bangladesh National Adolescent Health Strategy, a Step to Achieve Sustainable Development Goals by 2030: A Policy Analysis and Legal Basis"* to evaluate critically Bangladesh's recent policies and plans that have a focus on adolescents & the latest National Adolescent Health Strategy (NAHS) is being compared to the global strategy in this article as well as ways to use the policy analysis triangle framework to achieve the Sustainable Development Goals by 2030. Data Source and Search Strategy for Documents Published Between 1998 and 2018 were identified through searches of the websites of the Government of Bangladesh. The policy analysis reveals Bangladesh's adolescent health program has evolved over the past 20 years, but lacks an appropriate implementation plan and monitoring mechanism. A tentative PoA with performance indicators and a specific timeline is proposed for successful implementation. The plan emphasizes preventive interventions, family engagement, and reducing violence against unmarried female adolescents, aligning with the country's 5-year health plans and focusing on nutrition, mental health, and violence-free social life.

Akter et al. (2023) conducted a study on *"Proficiency and implementation associated with non-communicable diseases among secondary school students in Bangladesh."* A cross-sectional study was conducted on secondary students to assess the knowledge and practices related to NCDs and their associated factors among Bangladeshi secondary school-going students. The study involved 1,744 students and found gaps in knowledge and insufficient healthy practices. Factors such as school type, residence, parental education, and income influenced knowledge about NCDs, while gender, school type, and income were independent predictors of healthy lifestyle practices. Incorporate health educational programs on NCD risk factors and healthy lifestyles into Bangladeshi schools' core curriculum, targeting economically disadvantaged populations and ethnic minorities to address social inequalities.

Anjum et al. (2021) conducted a study on *"Depressive Symptom and Associated Factors Among School Adolescents of Urban, Semi-Urban and Rural Areas in Bangladesh: A Scenario Prior to COVID-19"* to explore the prevalence and factors linked to depressive

symptoms among adolescents in urban, semi-urban, and rural areas of Bangladesh. A study found that 30.1% of adolescents suffer from moderate to severe depressive symptoms, with females (60.8%) experiencing more than males (39.2%). Sociodemographic factors like residential settings and family size were associated with depressive symptoms. Physical inactivity, screen time, sleep dissatisfaction, and underweight body image perception were also found to be significant contributors. Depressive symptoms are prevalent among urban, semi-urban, and rural school adolescents in Dhaka, Bangladesh, and urgent steps are needed to reduce their spread.

Arafat (2016) performed investigation into *"Suicide in Bangladesh: A Mini Review"* to provide a comprehensive understanding of suicide rates and other suicide metrics in Bangladesh based on existing literature. The search was conducted using PubMed, PubMed Central, and Google Scholar. The suicide rate in Bangladesh is 39.6 per 100,000 population per year, with hanging and poisoning being the most common methods. The most common age group is under 40, and it's more prevalent in females, low-income individuals, married couples, and housewives. There's no nationwide survey or suicide surveillance strategy. Suicide is a neglected public health issue in Bangladesh, with limited research and literature. National surveys and surveillance are urgently needed.

At Faridpur in Bangladesh, **Billah & Khan (2014)** decided to acquire knowledge on *"A cross-sectional study of Depression among Urban Adolescent Students of Some Selected Schools"* to identify the factors contributing to depression in adolescent students. The study interviewed 165 urban adolescent male students aged 15-19 from two schools from January-June 2012 using a pre-tested semi-structured questionnaire and depression scale. The study found that 49% of respondents were depressed, with 66% being smokers. Most started smoking at 14.3 years, with 54.1%) influenced by friends. Among smokers, 82.7% were depressed, while 17.3% were nonsmokers. Factors such as domestic violence, familial disharmony, stressful events, and love failure also contributed to depression. Longitudinal studies are needed to determine the causative factors of smoking, stressful life events, and familial disharmony on depression, as cross-sectional studies cannot solely determine its role.

Billah et al. (2023) conducted a study on *"Exploring mental health challenges and coping strategies in university students during the COVID-19 pandemic: A case study in*

Dhaka city, Bangladesh" to examine the typical mental health issues that university students face and how they manage them with the help of social support during the first round of lockdowns in Dhaka city in 2020. COVID-19 pandemic has exacerbated mental health issues among students, with financial constraints, academic pressure, and traumatic experiences affecting mental health. Social support mechanisms and financial subsidies help mitigate these impacts. Bangladesh needs strong social support, increased financial subsidies, and a national intervention plan to address mental health issues, including establishing mental healthcare support centers at universities.

Gaffar & Deeba (2017) conducted a study on *"Mental health conditions among adolescents of substance dependent parents"* to identify substance-dependent individuals with children and implement family-focused interventions. Bangladesh has 5,000,000 substance-dependent individuals, 80% youth, with over 50% in Dhaka. Many are married, married, and have children, leading to relapse and recovery cycles. Substance dependent individuals face family conflicts, poor communication, financial stress, and mental health issues. Their children are more vulnerable, and social learning theory suggests parental approval influences substance abuse in children. Research on vulnerable adolescents' psychological areas is recommended for creating a supportive socio-cultural context. Preventive measures, educational settings, funding, media, and psycho-social services can help them recover from existing problems and become resilient to future vulnerabilities.

Hasan et al. (2019) performed studies on *"Level of Stress, Predisposing Factors and Status of Mental Health among Pharmacy Students of a Private University of Dhaka, Bangladesh: A Cross Sectional Study"* to explore students' socio-demographic characteristics, stress levels, and mental health status, and identify the correlation between various factors and stress levels. Severe stress is common among both sexes, but female students experience more stress. Future career thoughts and academic achievements are major reasons for stress. Factors like unrealistic expectations, family relationships, socioeconomic conditions, and busyness also contribute to stress in young minds. Stress levels among students aged 21-25 are highest, with socio-economic conditions contributing to higher stress levels. Psychological counseling is crucial for detecting and preventing mental distress.

Hossain et al. (2014) conducted *"A systematic review on mental disorders in Bangladesh"* which they considered it as a public health problem globally with higher burden in low- and middle-income countries. They reviewed 32 articles on mental disorders within Bangladesh between 1975 and 3013 with predefined selection criteria for searching papers. The study found that the prevalence of mental disorders varies among adults and children, with a range of 6.5-31% and 13.4-22.9% respectively. Community awareness is limited, and treatment is often negative and not prioritized in healthcare. Mental health services are primarily concentrated in tertiary care hospitals in big cities, lacking in primary care. Bangladesh faces high mental disorder burden, yet under-researched. Further epidemiological and clinical research is needed to improve mental health services in the country.

Hossain et al. (2014) conducted a study on *"Mental disorders in Bangladesh: A systematic review"* to provide a comprehensive overview of the available data and identify any evidence gaps related to mental health disorders in Bangladesh. The study found a prevalence of mental disorders ranging from 6.5 to 31.0% in adults and 13.4 to 22.9% in children, with community awareness but a negative attitude towards treatment. Mental health services are concentrated in tertiary care hospitals in big cities, lacking in primary care. Bangladesh faces high mental disorder burden, yet under-researched. Further epidemiological and clinical research is needed to improve mental health services in the country.

Hossain et al. (2020) performed a study on *"Socio-Psychological Impact on Bangladeshi Students during Covid-19"* to investigate the psychological impact on university students. The survey was conducted in Bangladesh using a random sampling technique and an online semi-structured questionnaire, established using a Google form. The study reported numerous psychological issues, which may affect its generalizability due to its limitation to university students. The study indicates a need to raise awareness about the mental health implications of the pandemic for university students.

Hossain et al. (2022) conducted a study on *"Status of psychological health of students following the extended university closure in Bangladesh: Results from a web-based cross-sectional study"* The study investigates the prevalence of depression and anxiety among

university students in Bangladesh following the prolonged closure of educational institutions. A study analyzing 465 responses found that over 50% of Bangladeshi university students suffer from depression and anxiety. Private university students were two and 2.7 times more depressed and anxious than public university students. Incomeless students also had significantly more anxiety than those without income loss during the COVID-19 lockdown. The survey revealed that over half of Bangladeshi university students still suffer from mental health issues like MDD and GAD due to COVID-19, necessitating urgent measures for financial stability and improved educational environment.

Hossain et al. (2022) was undertaken a study on *"Global burden of mental health problems among children and adolescents during COVID-19 pandemic: A systematic umbrella review"* to analyze the global epidemiological burden and correlates of child and adolescent mental health (CAMH) issues during the COVID-19 pandemic using existing systematic reviews and meta-analyses. Result showed that high prevalence of anxiety, depression, sleep disorders, suicidal behavior, stress-related disorders, and other mental health problems, associated with factors like age, gender, education, and COVID-19. COVID-19 pandemic has led to a surge in mental health issues in children and adolescents, necessitating evidence-based measures and transdisciplinary research to ensure optimal health.

Hossain et al. (2023) conducted a study on *"Addictive Behavior and Mental Health of Adolescents in Bangladesh: Evidence from Global School-Based Health Survey"* to assess the factors linked to addictive behavior and the mental health of adolescents aged 11-17. Adolescent substance addiction and mental health conditions are significantly associated with sex, bullying, tobacco use, parental understanding, and food affordability, with bullied males and bullied females being more vulnerable. The identification of vulnerable youths and the development of interventional policies, combined with collaborative efforts, can significantly improve their health and well-being in Bangladesh.

In Bangladesh, **Mammun et al. (2021)** conducted a study on *"Mental Disorders of Bangladeshi Students During; the COVID-19 Pandemic: A Systematic Review"* to

investigate the prevalence and risk factors of mental health issues among Bangladeshi students (such as stress, anxiety, and depression) are systematically reviewed here for the first time. This review was conducted using the PRISMA guideline, utilizing multiple databases like PubMed, from April 1 to 5, 2021, and included a total of seven articles. Depression, anxiety, and stress prevalence was 52.2%, 58.1%, and 24.9%, with no gender differences. Risk factors for depression included lower-class background, smoking, and less exercise. The study reveals a higher prevalence of depression, anxiety, and stress among university students in Bangladesh, suggesting potential for implementing mental health support programs and longitudinal research.

Islam & Biswas (2015) intended to find out the *"Mental Health and the Health System in Bangladesh: Situation Analysis of a Neglected Domain".* The study aims to investigate the prevalence of Mental Health and the Health System in Bangladesh. There is no comprehensive mental health policy to strengthen the entire health system in Bangladesh. Mental illness prevalence in Bangladesh declined between 1974 and 2005, with 16.1% of adults having a disorder. Women are more vulnerable, and stigmatization and misconceptions contribute to neglect and delayed care. Bangladesh has 536 public hospitals and 413 Upazila Health Complexes providing inpatient care services to a 160 million population. However, there is only one 500-bed mental hospital and few psychotropic drugs are widely available. Mental health expenditure is insignificant, with 67% devoted to mental hospitals. Few patients visit government facilities with psychotropic medicines. Bangladesh needs to address social stigma surrounding mental illness and improve accessibility to mental health services. Despite efforts, the healthcare system lacks trained resources. A Mental Health Act is needed to uphold equity and human rights.

Islam et al. (2020) conducted a study on *"Prevalence and factors associated with depression and anxiety among first-year university students in Bangladesh: a cross-sectional study"* to evaluate the frequency of depression and anxiety, as well as any potential causes. A cross-sectional questionnaire was conducted with 400 first-year university pupils aged between 18 and 23 years residing at Jahangirnagar University in Bangladesh. There were no discernible gender differences in the prevalence rates of moderate to severe depression and anxiety, which were 69.5% and 61%, respectively.

Unsatisfactory sleep and a lack of exercise were the main risk factors for depression. Use of the internet excessively was the main risk factor for anxiety. The majority of respondents, primarily from lower-class families (40.3%) and rural areas(59.9%) reported not engaging in regular physical exercise(55.5%, being less than normal sleepers(71%), and being satisfied with their sleep(56.5%). The study identifies a knowledge gap regarding mental illness among first-year university students in Bangladesh and emphasizes the high prevalence and risk factors for these problems.

Islam et al. (2022) had studied on *"Across-sectional study of Problematic internet use and depressive symptoms among the school-going adolescents in Bangladesh during the COVID-19 pandemic"* to evaluate the relationship between PIU and depressed symptoms in adolescent pupils and the COVID-19 pandemic. A cross-sectional study was conducted among 491 school-going teenagers between the ages of 10 and 16 in order to fulfill the study's objectives. The study found that school-going teenagers are at a higher risk for PIU and depressive symptoms (80.04% & 77.80%), with significant correlations between age, education level, medium of education, financial status, internet connection, device used, and living situation. The study reveals a link between PIU and depressive symptoms, suggesting potential practical implications for clinical psychology, psychiatry, and psychotherapy, enabling healthcare professionals to develop tailored interventions.

Islam et al. (2022) was undertaken a study on *"Problematic internet use and depressive symptoms among the school-going adolescents in Bangladesh during the COVID-19 pandemic: a cross-sectional study finding"* to evaluate the relationship between PIU and depressive symptoms in adolescent students and the COVID-19 pandemic. According to estimates, 80.04% and 77.80% of school-age adolescents were at risk for PIU and depressive symptoms, respectively. The results of the study showed that school-going adolescents are more likely to experience Post-Interventional Use Disorder (PID) and depressive symptoms, and that PIU and symptoms of depression are significantly influenced by factors such as age, education level, medium of education, financial status, internet connection, device use, and living situation. The study reveals a link between PIU and depressive symptoms, suggesting potential practical implications for clinical

psychology, psychiatry, and psychotherapy, enabling tailored intervention plans for children and adolescents.

Izutsu et al. (2006) performed studies on *"Mental health, quality of life, and nutritional status of adolescents in Dhaka, Bangladesh: Comparison between an urban slum and a non-slum area"* to assess the quality of life, mental health, and nutritional status of adolescents in Dhaka, Bangladesh, by comparing non-slum areas and identifying associated mental health issues. The study reveals that slum conditions are worse than non-slum areas, with gender differences in SRQ and YSR, and mental health difficulties linked to school enrollment and working status. It also reveals differences in living status, QOL, mental health, and nutritional status between slum and non-slum adolescents. The study indicates that there is a need for gender-specific measures and area-sensitive countermeasures.

Jahan et al. (2019) carried out studies on *"Prevalence of Mental Health Problems and Its associated Factors among School Going Children in Urban Population, Dhaka, Bangladesh"* to determine the prevalence of mental health issues and the contributing factors among school-going children in Bangladesh's capital city between the ages of 5 and 11 years. A cross-sectional study involving 196 students enrolled in Dhaka city schools between the ages of 5 and 11 years was carried out during the months of January 2010 and December 2010. The study analyzed the prevalence of mental health problems in school-aged children aged 5-11 in Bangladesh's capital city. It found that emotional and behavioral disorders were prevalent in 20.9% of children, with 41.8% having borderline difficulty and 37.1% having normal difficulty. The study found no significant predictors of these disorders, but mother's occupational status was a significant factor.

Kabir (2017) performed studies on *"A Study on Common Psychological Problems in Intermediate College Students in the Perspective of Bangladesh"* to investigate an empirical investigation on the hunt for psychological issues among Bangladeshi students. The study utilized a psychological problems checklist (Kabir 2017) with 40 items selected through open-ended questionnaires for data collection. The study found that rural students experienced higher anxiety, depression, and obsessive-compulsive disorder, while females and humanities students had no such issues. Overnutrition and

malnutrition led to eating disorders. Students cope with academic stress through prayer, yoga, and sleep, while addressing social injustice, racial discrimination, and unequal resources through counseling, education, and basic science awareness.

Kamruzzaman et al. (2022) conducted a study on *"A cross-sectional study of Prevalence of depression, anxiety, stress, and their associated factors among university students in Bangladesh"* to look into the incidence of depression, anxiety, and stress among students in a private and public institution in Bangladesh. A cross-sectional study involving 738 students from two Rajshahi universities measured depression, anxiety, and stress levels using the DASS-42, and analyzed using bivariate and multivariate techniques. Private university students are more likely to experience depression, anxiety, and stress compared to public university students, with female students experiencing severe anxiety more frequently. Private university students in Bangladesh face higher rates of depression, anxiety, and stress compared to public university students, necessitating effective support systems and the establishment of counseling centers, increased awareness of seeking help, and measures to reduce campuses stigma.

Karim et al. (2006) conducted a study on *"A cross sectional-descriptive study of prevalence rate of Mental illness in the community"* to investigate the prevalence of mental illness within the community. One urban Mohalla and two rural mauza of Dhaka district with the help of cross-sectional descriptive research study. 327 adults were selected as the sample size for the study the researcher used Self-Reporting Questionnaire (SRQ) and structural clinical interview was applied to collect the responses from the concerned samples. The study found a prevalence of neurotic disorders, major depressive disorder, and psychotic disorders in the population, with higher rates in females (13.9%) and middle and lower socio-economic classes. The study suggested that the findings of this study would help in future survey and in formulating National mental health program.

Khan et al. (2008) conducted a study on *"Behavior problems in young children in rural Bangladesh"* to assess the prevalence of child behavior issues reported by parents in rural Bangladesh. A population-based survey identified 4003 children aged 2-9 years, with 499 selected for examination, cognitive testing, and parent reports. 90.8%

underwent structured examinations. Behavior impairments were prevalent in 14.6% of patients, mainly involving somatic complaints like nocturnal enuresis and pica, and were significantly associated with malnutrition and cognitive, motor, or seizure disabilities. The study examines the prevalence and nature of reported behavior impairments in rural Bangladesh, which has implications for public health planning and health service delivery.

Khan et al. (2020) carried out investigation into *"Prevalence and correlates of depressive symptoms in secondary school children in Dhaka city, Bangladesh"* to evaluate the occurrence and sociodemographic factors associated with depressive symptoms in Dhaka, Bangladesh, secondary school students. A self-completed questionnaire was administered to 898 students from eight Dhaka secondary schools, with 755 respondents completing the 10-item Center for Epidemiological Studies. A study found 25% of adolescents reported depressive symptoms, with females being more common. Factors associated with depression included female age, weight perception, school safety, sleep disturbance, low life satisfaction, sugary drink intake, and skipping breakfast. Urban Bangladesh's secondary school children are experiencing depressive symptoms, necessitating interventions focusing on lifestyle practices like weight management, personal safety, sleep hygiene, and healthy eating.

Khan et al. (2020) conducted a study *"Suicidal behavior among school-going adolescents in Bangladesh: findings of the global school-based student health survey".* The largest cause of injury and mortality among teenagers worldwide is suicidal conduct, which is defined as non-fatal suicidal thoughts and activities, including having suicide ideation, a plan, and attempts. This study intended to investigate the frequency of and risk factors for suicide conduct among Bangladeshi school-aged adolescents. Teenage suicide conduct has been found to be positively correlated with health-risk behaviors including having ever engaged in sexual activity, alcohol and drug misuse, and social-environmental variables like infrequent parental homework checks and lack of peer support. Suicidal conduct and the presence of several negative psychosocial variables are also linked in a dose-response manner.

Khulna University, Khulna, Bangladesh, **Islam & Rakib (2023)** conducted a study on *"Awareness of Students About Mental Health: A Study on the Students of Universities"* to evaluate the university students' knowledge of and conditions with regard to their mental health. According to the survey method, it happened at Khulna University. A survey of 6,965 students revealed that 87.1% consider mental disorders a disease, 84.3% are aware, but 45.7% don't seek advice, 90% never consult psychiatrists, and 35.7% feel ashamed. Mental health issues require help from adults, friends, or psychiatrists, and university authorities should raise awareness among students to address these issues.

Koly et al. (2023) conducted a study on *"Psychosocial health of school-going adolescents during the COVID-19 pandemic: Findings from a nationwide survey in Bangladesh"* to evaluate lifestyle and behavioral factors associated with PHPs (depression and anxiety) among school-going adolescents in Bangladesh during the COVID-19 pandemic. The prevalence of moderate to severe depression and anxiety was 37.3% and 21.7%, respectively. For depression, it ranged from 24.7% to 47.5% in the Rajshahi Division and for anxiety, from 13.4% to 30.3% in the Sylhet Division. Depression and anxiety are linked to older age, poor teacher cooperation, academic delays, parental comparison, quarantine challenges, changes in eating habits, weight gain, physical inactivity, and cyberbullying. Adolescent psychosocial problems in Bangladesh require improved school-based support programs, environmental and policy changes, and lifestyle changes to ensure their well-being and promote active living.

Liza et al. (2023) was undertaken a study on *"Gadget addiction among school-going children and its association to cognitive function: a cross-sectional survey from Bangladesh"* to evaluate the correlation between media usage and cognitive function in school-going children. A study of 769 participants found a significant relationship between gadget addiction and cognitive function, with 46.9% experiencing high addiction and 46.5% experiencing poor cognitive function. Additionally, the duration of breastfeeding was found to be a predictor of cognitive function. The study reveals that regular digital media use in children predicts decreased cognitive performance, a finding that warrants further longitudinal research.

Mallik & Radwan (2020) conducted a study on *a two-staged, "Cross-sectional study of Psychiatric Disorders among 14-17 Years School Going Bangladeshi Adolescents"* to identify the general and gender distribution of psychiatric illnesses and their subtypes, as well as the relationship between socio-demographic factors and psychiatric disorders in a sample of schools in Dhaka city. A study of 315 adolescents aged 14-17 years used a structured questionnaire and validated self-version of the Bangla Strengths and Difficulties Questionnaire. The majority were secondary-level educated and from middle-income families. 18.7% (17.46% in boys and 20.63% in girls) had psychiatric disorders, with Major Depressive Disorder, Specific Phobia, Social Anxiety Disorder, and obsessive-compulsive disorder being the most prevalent. The study found that girls have more emotional and behavioral disorders, while boys have more behavioral disorders. Socio-demographic variables did not significantly affect psychiatric disorders, suggesting special attention is needed.

Mamun et at. (2022) conducted a study on *"A cross-sectional study of Mental Health Problems and Associated Predictors Among Bangladeshi Students"* to investigate the prevalence of depression, anxiety, and stress among Bangladeshi university students in order to close this knowledge gap. A study of 590 undergraduates from Jahangirnagar University in Bangladesh found that moderate to severe depression, anxiety, and stress were prevalent (52.2%, 58.1%, and 24.9%, respectively) among them. Factors such as smoking, lower-class background, and low exercise were associated with depression. Relationship involvement was also a risk factor for anxiety and stress. The study found that 87.8% of students were from middle-class families, with 80% being single, 14.6% smoking, and 44.6% exercising daily. Most were normal sleepers, and 47.6% used the internet. Depression, anxiety, and stress levels were moderate to severe. The study provides baseline data on depression, anxiety, and stress among university students in Bangladesh, revealing a higher prevalence of these issues than globally, while stress prevalence is similar. These findings could aid in implementing mental health support programs.

Moonajilin et al. (2020) a study on *"Relationship between overweight/obesity and mental health disorders among Bangladeshi adolescents: A cross-sectional survey"* to find out the prevalence of Mental illness during the period of adolescence. The prevalence of

common mental health problems, including depression, anxiety, etc., in adolescents, is increasing worldwide. Globally, teenage obesity and overweight are becoming more common, and both have a detrimental effect on health. In order to better understand, the prevalence of normal weight, underweight, overweight, and obesity, the prevalence of mental health disorders (i.e., depression and anxiety), and the link between overweight/obesity and mental health disorders, researchers conducted a survey of the country's adolescence student. A total of 622 adolescent students, ages 13 to 18, from chosen secondary and upper secondary schools in Dhaka City, Bangladesh, participated in this cross-sectional study. Along with filling out a survey form, the participants' height and weight were assessed. Prevalence rates of being normal weight, underweight, overweight, and obese were 74.8%, 12.2%, 8.0%, and 5.0%, respectively. As a result, prevalence rates of moderate to severe depression, and anxiety were 30.5%, and 16.4%, respectively. There was no significant association between overweight/obesity and depression The Statistical Package for Social Science (SPSS) was used for data analysis. Normal weight, underweight, overweight, and obese prevalence rates.

Mridha et al. (2021) conducted a study on *"Prevalence and associated factors of depression among adolescent boys and girls in Bangladesh: findings from a nationwide survey"* to evaluate the incidence of depression and the risk factors for it in adolescent boys and girls. They carried out a cross-sectional study at the federal level & the study was conducted in 82 randomly chosen clusters from eight different divisions of Bangladesh, including 57 rural, 15 non-slum, and 10 slum areas. A study interviewed 4907 adolescent boys and 4949 adolescent girls, focusing on depression types and their primary and secondary outcome measures. Depression prevalence is high, particularly among adolescent girls, and is linked to factors such as age, education, and household habits, as well as increased television viewing. Adolescent depression in Bangladesh is prevalent, particularly among girls, and is linked to sociodemographic and lifestyle factors. The government should integrate mental health programs to address this issue.

Nahar et al. (2022) conducted a study on *"Prevalence and associated risk factors for mental health problems among female university students during COVID-19 pandemic: A cross-sectional study findings from Dhaka, Bangladesh"* to assess the prevalence and risk

factors for mental health issues among Bangladeshi female university students who live in urban areas. The study was conducted online among 451 female university students. The study reveals that female university students in Bangladesh experience high rates of loneliness, anxiety, and depressive symptoms, with factors such as marital status, financial condition, education, and family structure contributing to these issues, particularly during the COVID-19 pandemic. The COVID-19 pandemic has significantly impacted female university students in Bangladesh, highlighting the need for increased attention to their mental health and emotional support.

Nayan et al. (2022) conducted a study on *"Comparison of the performance of machine learning-based algorithms for predicting depression and anxiety among University Students in Bangladesh: A result of the first wave of the COVID-19 pandemic"* to use a variety of machine learning (ML) algorithms to predict mental illness in university students. A survey online was done with 2121 university students (both private and public A study of 2121 eligible respondents found that 45% were male and 55% were female, with 76.9% aged 21-25. Severe depression and anxiety were more prevalent in women. RF outperformed other models for depression prediction (89% accuracy), while SVM provided the best prediction for anxiety (91.49% accuracy). The study recommends using RF and SVM algorithms for predicting mental health status in Bangladeshi university students, highlighting their moderate performance compared to other ML algorithms.

Nuri et al. (2018) conducted a study on *"Pathways to care of patients with mental health problems in Bangladesh"* This study aimed to identify an equitable health system and plan interventions to enhance access to care by enhancing understanding of mental health care-seeking behavior and care pathways. The National Institute of Mental Health (NIMH) in Bangladesh used a mixed-methods design to carry out a facility-based cross-sectional study. Purposive sampling was used to choose 40 patients (or their guests) who were NIMH outpatient department visitors. The study found that 27.5% of patients consulted a psychiatric care provider, 30% went to non-medical providers, and 42.5% went to non-psychiatric medical care providers. Private psychiatrists were the most frequent caregivers, followed by traditional healers. 70% of patients chose a provider within 20 km, and the median delay in contact was 6 months. Common reasons

for delay include lack of knowledge about mental health problems, information about appropriate care, and not considering the problem serious enough. Bangladeshi mental health patients often access multiple providers before reaching psychiatric care, leading to delays or missed care. Interventions to improve access and referral policies are needed.

O'Raw (2020) conducted study about *"The tale of two schools: Investigating the understanding of mental health by students, parents and teachers in rural and city Bangladesh".* The study explores students, parents, and teachers' mental health attitudes using SDQ scores and qualitative responses, highlighting the importance of understanding and addressing stigmatization. The study assessed students' mental health needs through the SDQ, interviews, and written narratives, analyzing results using the Mann Whitney-U and thematic analysis. Rural students have higher mental health needs than city students, but parents and teachers in rural areas lack understanding of mental health, ignoring its importance. Rural parents and teachers in Bangladesh lack understanding of mental health, despite high SDQ scores in both rural and city areas, highlighting the need for future mental health advocacy.

Rahman et al. (2022) accomplished investigation into *"Mental Health Condition among University Students of Bangladesh during the Critical COVID-19 Period"* to investigate the mental health conditions and determinants that contribute to adverse mental health conditions among university students in Bangladesh. A survey was conducted online among university students in Bangladesh. University students reported normal depression (30.41%), anxiety (43.29%) and stress levels (47.40%) but a significant number were extremely depressed, anxious, and stressed. Female students were more anxious and stressed, and Dhaka city students were more depressed. This research suggests that financial and psychological support for students can mitigate their psychological impact, aiding organizations, healthcare providers, and social workers in pandemic preparedness.

Resent a pilot study in Bangladesh, **Anjuma et al. (2019)** had studied on *"Investigating the prevalence of and factors associated with depressive symptoms among urban and semi-urban school adolescents in Bangladesh: a pilot study"* to investigate the prevalence

of depression and risk factors for this mental health hazard among adolescents in the Dhaka region of Bangladesh who live in urban and semiurban areas. A 2018 pilot study involving 311 adolescents in Dhaka city and Savar Upazilas collected data on sociodemographic, lifestyle information, screen-based sedentary behavior, and mental health. The prevalence of depressive symptoms was reported by 36.6% of adolescents overall, with females having a higher prevalence (42.9%) than males (25.7%). Depression is significantly linked to women's sociodemographic characteristics, with excessive screen time and social media use having a higher odds ratio for sleep disturbance and depressive symptoms. Urgent initiatives are needed to address the prevalent depressive symptoms among urban and semi-urban Bangladeshi adolescents.

Resent in Bangladesh, **Shohel et al. (2022)** conducted a very confidential a semi-structured in-depth interview guide was used for data collection on *'He was a brilliant student but became mad like his grandfather'*: an exploratory investigation on the social perception and stigma against individuals living with mental health problems in Bangladesh. To fulfill the purpose of the study a confidential data collection process in November and December 2021 utilized a semi-structured in-depth interview guide, with each interview lasting 40-50 minutes on average. This paper explores the social perception and stigmatization of individuals with mental health issues in Khulna, Bangladesh, highlighting the delay in seeking professional help due to traditional healers. The study found that individuals with mental health problems seek medical and spiritual support, but negative social perception and stigma hinder their recovery, making it difficult to discuss their issues. Bangladesh needs nationwide awareness-building programs and counseling to promote positive perceptions of mental health disorders, discourage non-scientific remedies, and improve early detection and medical assistance.

Rezvi et al. (2022) accomplished investigation into *"Prevalence of depression and anxiety among university students during COVID-19 in Bangladesh: A cross sectional study"* to explore factors influencing the mental health of students during quarantine in Bangladesh, which has not been explored in previous studies on the pandemic. The study revealed that 37% of students experienced moderate to severe anxiety, while

54% experienced moderate to severe depression. Anxiety was linked to gender, university affiliation, TV time, while depression was linked to family contact with Covid-19, hobbies, and reading and writing. This study contributes to existing literature, enabling students, university authorities, and the government to take proactive measures to address mental health issues.

Ria et al. (2022) conducted a study on *"Depressive Symptoms Among Adolescents in Bangladesh"* to identify the prevalent symptoms of depression among school-going adolescents aged 10-19 years in Bangladesh. The analytical cross-sectional study was conducted in this article. The study found that sadness (45.3%), aggression (40.5%), confusion (27.7%), worthlessness (27.7%), fatigue, and insomnia (18.0) were the most common depressive symptoms among adolescents. Female adolescents were more affected than males. Adolescents aged 15-19 years experienced more worthlessness, sadness, and insomnia. Adolescents with inadequate sleep and screen time experienced more worthlessness. Factors such as sex, school grade, and sleep duration were significantly associated with depression. The growing adolescent mental health issue in Bangladesh requires urgent attention and recognition from the health system.

Salma et al. (2023) conducted a study on *"Exploring physical and phycological condition of Jahangirnagar University students residing near university area during COVID-19 pandemic"* to investigate the physical and mental issues that Jahangirnagar University students who live in the area around the university face. The study utilized a convenient sampling method to collect data from Jahangirnagar University students who reside nearby using an online questionnaire. The study revealed that 92.5% of students experienced depression and anxiety during the pandemic. Factors such as COVID-19 infection, sleep time, and physical activity were identified as risk factors for depression and anxiety. Additionally, 73.8% of respondents had long-term health-related complications, with 52.8% believing the pandemic affected their physical health. Overall, the study highlights the impact of the pandemic on students' mental health. The study reveals that a significant number of Jahangirnagar University students experienced physical and psychological health issues during COVID-19, urging for government and policymakers to enhance their mental and physical health.

Sifat et al. (2022) conducted *on "Motivations and barriers for clinical mental health help-seeking in Bangladeshi university students: A cross-sectional study"* to investigate the reasons for and obstacles to using clinical mental health services among Bangladeshi university pupils. A cross-sectional survey aimed to understand the relationship between autonomy, relatedness, and competency in clinical mental health practices among Bangladeshi university students, focusing on their perceived need and use of services. The study found that perceived mental health support and positive view of clinical services are significant predictors of clinical service use, despite the insignificant association when adjusting for mental health care needs. The study indicates that mental health knowledge leads to positive views of mental health services, and higher stress levels and mental health issues contribute to the perception of need for such services.

Sifat et al. (2022) performed a study on *"Impact of COVID-19 pandemic on the mental health of school-going adolescents: insights from Dhaka city, Bangladesh"* to identify the causes of mental dissonance among adolescents and the effects of infection prevention measures like lockdown on their mental health in Bangladesh's capital city. This research adopted qualitative research (interview method). The study reveals that lockdowns, prolonged school closures, disease fear, education disruptions, excessive digital device use, and a culture of neglecting adolescents' mental health negatively impacted their well-being. The issue of adolescents' psychological impacts of COVID-19 in Bangladesh needs to be addressed and further studies should be conducted in all other cities.

Sultana (2021) performed studies on *"Prevalence and Associated Behavioral Factors of Depression among"* to determine the prevalence of and the causes of depression in medical students & analysis with a cross-sectional study. A study with a response rate of 86.11% found that female students have a higher odd of developing depression than their male counterparts. The study also found a significant association between sleep and depression, with those sleeping less than 8 hours per day having higher odds of depression. The study also found that 34.84% of students reside in hostels and 65.16% live in their own homes. Other factors did not show a significant association after adjustment. Depression is prevalent among medical students in Bangladesh, with

factors like sex, academic year, age, and residence independently associated with the condition.

Sultana et al. (2023) conducted a study on *"Association between depressive symptoms of mothers and eating behaviors of school-going children in Urban Bangladesh: A cross-sectional study"* to inquire into the relationship between mothers' depressive symptoms and the eating habits of their school-aged kids in urban Bangladesh. The study found that 57.7% of school-going mothers experienced depressive symptoms, while 42.3% had no symptoms. Factors such as consuming fewer vegetables, fruits, and fast food less than four days per week were significantly associated with these symptoms. Dhaka city's mothers with depressive symptoms are a significant concern, and their children's eating behaviors are linked to their mothers' symptoms. To address this, health education and awareness programs are needed.

Syed et al. (2022) conducted a study on *"Emotional and Behavioral Changes in Children and Adolescents and Their Association with Parental Depression During COVID-19 Pandemic: A Pilot Study in Bangladesh"* to evaluate the emotional and behavioral changes in children and adolescents during the COVID-19 pandemic in Bangladesh and their correlation with parental depression and conducted with online survey method. A study of 512 participants found that 21.5% of children and adolescents had emotional and behavioral problems, with boys more affected by abnormal peer relationships. Parents had moderate to severe depression, with mothers experiencing more difficulties. Lockdown increased psychiatric disorder prevalence among children and adolescents, with parents' depression correlated with behavioral disturbances. Schools should open and virtual mental health assessments developed.

2.2.2 Indian Studies

A cross-sectional study, **Mangal et al. (2020)** perform a study on *"Screening for common mental health problems and their determinants among school-going adolescent girls in Gujarat, India"* to screen for mental health disorders under the school health program. Adolescent girls are at a high risk of developing chronic mental health conditions (CMDs), with alarming rates. Sociodemographic factors such as school type,

mother's education, father's education, and working mother significantly contribute to these cases. Psychosocial factors like abnormal sleep patterns and study disturbances also contribute to mental health issues. Adolescent school-going girls in Gujarat, India, are frequently experiencing Common Mental Disorders (CMDs) like anxiety, depression, and psychosocial distress, emphasizing the urgent need for improved mental health.

In India, **Kumari & Kumar (2022)** conducted a study on *"Mental Health of Secondary School Students: Issues and Challenges"* to improve secondary school pupils' mental health in India. The most crucial time of life is secondary school, where kids deal with a variety of issues including physical, social, mental, familial, academic, and personal issues. At this point, mental health is crucial and aids in dealing with these issues in a very efficient manner. As a result, the paper assumes importance as a sincere attempt to research the problems and difficulties with secondary school students' mental health. The current paper is a review that is based on several research findings that either directly or indirectly deal with mental health. The study's findings showed that India's mental health situation is not favorable due to a number of problems and difficulties, including misunderstandings regarding mental health and a lack of awareness. Thus, based on the above discussion, it may be concluded that secondary school students are facing various mental health related issues and challenges like lack of awareness, resources, facilities, services, social dilemmas, financial problems, personal & mental conflicts, environmental & technological complications, etc. which hamper their academic, social and personal life. Therefore, the present paper suggested some remedial measures for future improvement like the proper diagnosis of the mental health problems; proper orientation and awareness about mental health issues; adequate guidance services for mental hygiene, adequate policies & implementation; meditation and yoga programs, harmonious relations, collaboration, and coordination among all the stakeholders. The present paper has its educational implications for policymakers, school administration/functionaries, teachers, parents, and agencies related to Thus, based on the above discussion, it may be concluded that secondary school students are facing various mental health related issues and challenges like lack of awareness, resources, facilities, services, social dilemmas, financial problems, personal & mental conflicts, environmental & technological

complications, etc. which hamper their academic, social and personal life. Therefore, the present paper suggested some remedial measures for future improvement like the proper diagnosis of the mental health problems; proper orientation and awareness about mental health issues; adequate guidance services for mental hygiene, adequate policies & implementation; meditation and yoga programs, harmonious relations, collaboration, and coordination among all the stakeholders. The present paper has its educational implications for policymakers, school administration/functionaries, teachers, parents, and agencies related to Secondary school students face mental health challenges such as lack of awareness, resources, and facilities, which hinder their academic, social, and personal lives. Remediation measures include proper diagnosis, awareness, guidance services, policies, meditation, yoga programs, and harmonious relations among stakeholders. The educational implications for policymakers, school administration, teachers, parents, and education agencies.

Jain et al. (2014) performs a cross sectional study on *"Prevalence of psychosocial problems among adolescents in rural areas of District Muzaffarnagar, Uttar Pradesh. Indian"* to evaluate the prevalence of psychosocial issues among adolescents in a rural district of Muzaffarnagar. The study involved 210 adolescent girls and boys aged 10-19, selected through multistage random sampling, interviewed, and assessed using structured questionnaires and ICD-10 criteria. Adolescents face a high prevalence of psychosocial problems, with conduct disorder being the most common (40.51% males & 35.88% females) and depression being the most common (30.38% males & 26.72% females). Adolescents face significant psychosocial problems, requiring a holistic approach to understand the underlying causes and address these issues in adolescent health.

Jaiswal et al. (2029) conducted a study on *"A school based cross sectional study of Prevalence of psychiatric problems in school going adolescents (10-19 years)"* to investigate the prevalence, nature, and psychological correlates of psychiatric issues in school-aged youth in a specific geographic area. 289 students (28.2%) had CPMS scores below 10, which were more prevalent in mid-adolescence and lower socioeconomic strata, as well as among working mothers and single parents. According to ICD-10 criteria, there are 20.8% more adolescents than adults who experience psychiatric

problems. A startling number of our youth experience psychiatric issues. Public awareness about the prevalence of these frequently undetected psychopathy in Indian adolescents must be increased.

Kerala, India, **U & Sailo (2021)** an investigation project on *"Prevalence of Emotional and Behavioral Problems among School-Going Adolescents: A Cross-Sectional Study"* to evaluate the prevalence of emotional and behavioral issues based on gender and location. The study reveals that over 10% of school-going adolescents experience emotional and behavioral issues, with a significant correlation between school type, settings, and socioeconomic status. The study reveals a 24.5% prevalence of emotional and behavioral problems among school-going adolescents in Kerala, highlighting the need for gender-sensitive interventions and mental health programs.

Mizoram University, India, **Dkhar & Sailo (2021)** accomplished investigation into *"Mental Health Problems among School Going Adolescents in India: A Literature Review"* to ascertain how adolescent ambiguity, self-doubt, and disappointment are caused by internal stresses and social expectations. The reviews indicate a significant and increasing prevalence of mental health issues among school-going adolescents. Adolescent mental health issues in India require early detection and effective intervention. Collaborations among professionals, school authorities, and policy analysts are needed to prevent and address these issues.

Mumbai in India, **Rasote et al. (2015)** conducted a study on *"A Cross Sectional Study of Behavior Disorders In 6-15 Years Age Group in Rural Area"* to investigate the prevalence and pattern of behavior disorders among community children. A survey revealed that out of 600 children, 42% had behavior disorders, with 26% having at least one disorder. The most common were personality problems (44.84%), eating problems (33.73%), habit problems (23.11%), scholastic problems (17.46%), sleep problems (11.9%), antisocial problems (11.11%), psychosomatic problems (7.53%), and speech problems (2.77%). The study revealed a high prevalence of behavior disorders in children, yet informants were found to be largely unaware of these issues.

Nagpur, Maharashtra, India, **George et al. (2019)** performed study on *"Assessment of child's mental health problems using Strengths and Difficulties Questionnaire"* to evaluate

the emotional status of patients aged 3-14 years and their cooperative potential in children. The study was conducted on 168 children aged 3-14 years, who were instructed to fill out a cross-sectional survey. The study found that 53% of children were normal, with 33% and 14% falling into abnormal and borderline categories, with abnormality slightly higher in age groups 3.1-5 and 11.1-14. Males had higher mental health problems. Identifying a child's mental health issues during dental treatment helps dentists understand their emotional state and make necessary adjustments. Programs should be developed to educate teachers and parents on children's psychological, emotional, and behavioral issues, with a focus on common populations.

Nair et al. (2017) execute investigation into *"A cross-sectional study of Epidemiological survey of mental health in adolescent school children of Gujarat, India. BMJ Paediatr Open"* to evaluate the prevalence and correlations of mental health issues among 13-17-year-old school children in Anand District, Gujarat. A study found that 15% of participants had a high SDQ score, with girls experiencing more emotional issues and boys more affected by mental health issues. Factors such as eye problems, failures, and relationship difficulties were associated with high SDQ scores. The study found that one in eight adolescents was at risk of mental health issues, and the SDQ self-report questionnaire and TSQ survey could be used as screening tools.

Nayak & Lavania (2018) conducted a study on *"Psychiatric morbidity among school students"* to assess the prevalence of psychiatric morbidity among students in class 8 and 9. The study was a cross-sectional observational study. A study of 128 students, mainly male and female, found that 38 students scored above the cut-off marks for GHQ screening. Six children were diagnosed with generalized anxiety disorder, six with depression, one with elimination disorder, three with separation anxiety, four with OCD, and two with panic disorder, totaling 16.41% of the students. The study reveals that 16.41% of school students experience psychiatric morbidity.

Rahul & Bhihari (2023) conducted a study on *"Mental Health of School Going Boys and Girls Adolescents in Secondary Schools of Delhi Education"* to find out the mental health of adolescents on secondary schools' students in Delhi. The goal of the study was to assess the mental health of teenagers enrolled in secondary schools in East Delhi. In order to

direct the research, two research objectives were created. A descriptive survey approach, which includes a quantitative data gathering method, was employed for the study. Only 100 pupils (50 from each school) were randomly chosen by lottery out of the target demographic, which was intentionally limited to 2 schools and the 9th grade. Researchers employed the six-dimensional, standardized Mental Health Inventory created by Jagdish and Srivastava in 1986. The data were analyzed and explained using statistical approaches such as mean, S.D., and t-test. The study's main conclusions are: The mean scores of teenage males and girls do not significantly differ. Mental health is crucial for individuals' mental and intellectual well-being, especially in today's society where youth face difficulties leading to psycho-somatic problems like mental illness, anxiety, and emotional upset. Schools play a crucial role in providing comprehensive mental health services, as they provide opportunities for children and teenagers to improve their lives. Gender doesn't significantly influence mental health, but the impact on classroom behavior should be considered. This study aims to measure mental health in students and contribute to future research on adolescents' mental health in India and abroad.

Resent Maharashtra, India, a study was conducted by **Kamble & Ghorpade (2021)** *"A Study to Assess the Psychosocial Problems of Adolescents Residing at Selected Urban and Rural Areas of Sangli District."* to evaluate and compare the psychosocial issues faced by adolescents in urban and rural areas. This study utilized a cross-sectional comparative descriptive research design. The study revealed that 4.8% of urban adolescents and 5.4% of rural adolescents face academic issues, 14.4% face emotional problems, 13.4% have communication issues, 11.4% face interdependent problems, and 19.2% face social problems. These disparities exist across urban and rural areas, highlighting the need for targeted interventions. The study found that urban adolescents have slightly higher communication, interdependent, and social problems compared to rural adolescents, while rural adolescents have slightly higher scholastic and emotional problems. However, there was no significant difference in psychosocial problems average scores.

Sankar et al. (2017) conducted a study on *"Mental Health among Adolescents"* to evaluate the mental health of adolescents aged 13-19, focusing on both boys and girls.

The study involved 40 subjects divided into two groups (Boys and Girls) and two age groups (13-15 and 16-19 years), using Dr. Jagadish's standardized Mental Health Scale for assessment. The study reveals that boys have higher mental health levels than girls, with significant differences in scores, while there is no significant difference between 13-15- and 16–19-year-olds. The study's results suggest that gender and age play a significant role in mental health.

Srinath et al. (2005) perform a study on *"Epidemiological study of child & adolescent psychiatric disorders in urban & rural areas of Bangalore, India. Indian"* to ascertain the rates of childhood and adolescent psychiatric disorders. A study in Bangalore involved 2064 children aged 0-16 years, selected from urban, slum, and rural areas, using ICD-10 DCR criteria for a penta-axial diagnosis. The study found a 12.5% prevalence rate of psychiatric disorders among children aged 0-16 years, with no significant differences in urban, middle class, slum, or rural areas. Common diagnoses included breath holding spells, pica, NOS, expressive language disorder, and mental retardation. Only 37.5% of families perceived their children had problems, with physical abuse and parental mental disorder being significantly associated. The study reveals lower psychiatric morbidity rates in 0–16-year-old Indian children, with the highest rates in middle class urban areas and lowest in urban slum areas.

Subramani & Kadhiravan (2017) conducted a study on *"Academic Stress and Mental Health among High School Students"* to explore the correlation between academic stress and the mental health of high school students. 200 high school students from Salem city, Tamil Nadu, India were selected through stratified random sampling and data was collected using the Educational Stress Scale for Adolescents and Positive Mental Health Scale. The study found that private school students experience higher academic stress and have higher mental health status, with academic stress significantly influencing their mental health. The study highlights the need for periodic training programs for school students and parents to understand and manage academic stress effectively.

2.2.3 Studies Conducted Abroad

A cross-sectional study was conducted by **Kanada et al. (2023)** *on "Prevalence of Anxiety and Associated Factors among University Students: A Cross-Sectional Study in Japan"* to investigate the prevalence of anxiety among Japanese rehabilitation students & identify its predictors. The study found that 56% of students experienced state and trait anxiety symptoms, while 23% experienced mild depressive symptoms, with associations between gender, subject major, stress management, loneliness, and satisfaction. The study highlights the high prevalence of anxiety symptoms among first-year rehabilitation university students in Japan, emphasizing the need for early detection and support.

A longitudinal study performs in Sweden, **Brännlund et al. (2017)** in their study, they determined *"Mental-health and educational achievement: the link between poor mental-health and upper secondary school completion and grades"* to investigate the correlation between mental health during adolescence, upper secondary school completion, and grades, a topic that has received limited research attention. The study found a significant negative correlation between mental health issues and educational outcomes, with only minor differences observed between genders. Poor childhood mental health negatively impacts educational achievement, highlighting the need for increased resources to support children with mental health issues.

A recent global pandemic study in United state, **Rao & Rao (2021)** conducted a study on *"The Mental Health of High School Students During the COVID-19 Pandemic."* The study reveals that 81% of Gen Z teens have experienced more intense stress during the COVID-19 pandemic. A study in a Midwest high school found that online learning significantly impacts mental health degradation, with race-based differences. Exercise time helps reduce this degradation, while other factors like gender, homework time, pre-existing mental health issues, and therapy did not. Three recurring themes identified were increased stress due homework, social isolation, and lack of support for mental wellbeing. The study used a focus group approach to gather community input on the COVID-19 pandemic impact on mental health. The findings suggest that online schooling can provide opportunities for physical activity and electronic gaming

approaches like Wii exercise could encourage regular exercise. Further research is needed to understand the factors affecting mental health and provide support for those in need.

A recent longitudinal study in Korea, **Habib (2021)** study on *"Mental Illness Among Students"* the study also including anxiety, depression, eating disorders, and psychotics, have increased significantly over the past few decades. Research by the National Alliance on Mental Illness (NAMI) shows that one in four students has a diagnosable mental illness, affecting their energy levels, concentration, and performance. An ongoing longitudinal study by the Korea Institute for Health and Social Affairs has been conducted on a nationally representative sample of Korean citizens over the age of 15 years since 2006. 90% of the population was surveyed in the first survey, hence the survey sample may be considered representative of Korea's population's general health. In addition, the data were particularly suitable for low-income targeted programs and poverty studies since almost 50% of the overall sample was drawn from the low-income group (less than 60% of the national median income at the time of sampling).The study investigates the impact of mental illness on university students, highlighting its potential to destroy the upcoming generation. Mental health issues affect 20% of the population worldwide, leading to suicidal thoughts and affecting antenatal care.

A recent longitudinal study in Malaysia, Idris, **Gore & Dolan (2019)** had studied on *"A Longitudinal Study of Emotional and Behavioral Problems among Malaysian School Children"* to assess the prevalence and stability of EBD among children in Malaysia. Emotional and behavioral problems (EBD) are a significant public health concern, but there is no current evaluation of their extent in near-developed countries. The study found that emotional and behavioral problems (EBD) in Malaysian school children were prevalent at 9.3%, 8.5%, and 3.9%, with significant increases in teacher-reported EBD and decreases in child-report Total Difficulties and Emotional problems scores over six months.

A study in UK, **Campbell et al. (2022)** had studied *"An Observational Study of Factors that influence mental health of university and college students in the UK: a systematic review"* to determine the variables influencing the mental health of college students. 31

quantitative observational research studies were conducted, with 17,476 students participating. The studies varied in size, with 18 using one institution and 5 using seven or more universities. Some studies focused on first-year students, psychology students, and students majoring in specific fields. LGBTQ and hospital-attending students were also included. This review identifies various factors affecting students' mental health and wellbeing, highlighting the need for strategies to improve their ability to cope with higher education challenges. It emphasizes the importance of a sense of belonging and supportive networks, and the need for early intervention to provide targeted support.

According to international trends **Bains & Diallo (2016)** conducted a study on *"Mental Health Services in School-Based Health Centers: Systematic Review."* School-based health centers (SBHCs) offer mental health services to 20-25% of children and adolescents, despite limited access to these services. The study examined the accessibility and content of mental health services in Suburban Health Centers (SHCs), finding that while SBHCs offer access and eliminate barriers, there is a lack of high-quality research on the impact of these services on children and adolescents.

Addy et al. (2021) conducted a study on *"Mental health difficulties, coping mechanisms and support systems among school-going adolescents in Ghana: A mixed-methods study"* to explore the mental health challenges faced by adolescent students in four senior high schools in Ghana, their coping strategies, and support systems. Over half of students (58.5%) experienced peer, emotional, conduct, and hyperactivity problems, with females being more likely to experience these issues. Mental health disorders (MHDs) were linked to financial challenges, spiritual influences, intimate relationships, bullying, and domestic violence. Coping strategies included isolation, substance use, and spiritual help. The proposal suggests incorporating mental health education into school curricula and collecting data on adolescent mental health to create a more supportive environment for mental health interventions.

Aebi et al. (2014) conducted a study on *"Problem coping skills, psychosocial adversities and mental health problems in children and adolescents as predictors of criminal outcomes in young adulthood"* to examine the role of psychosocial and psychopathological risk factors in predicting adult criminal outcomes in a Swiss

community sample. The longitudinal study, conducted four times between 1994 and 2006, analyzed data from 1,086 students in the first wave of the ZAPPS. The study highlights that low socioeconomic status and insufficient problem-solving skills, particularly avoidant coping, are significant risk factors for young adult criminal outcomes.

Agnafors et al. (2020) a study on *"Mental health and academic performance: a study on selection and causation effects from childhood to early adulthood"* to study investigates the development of the inverse relationship between mental health and academic achievement in children during different developmental periods of childhood and adolescence, emphasizing the importance of early intervention. A longitudinal study of 1700 children assessed child mental health and academic performance using mother's and teacher reports. The association between mental health and academic performance was assessed using regression models. Social selection mechanisms are present in all three study periods, with behavioral and emotional problems at age 3 linked to below-grade performance at age 12, while academic performance at 15-19 doesn't increase mental health risk at age 20. Mental health issues in early childhood and adolescence heighten the likelihood of poor academic performance, necessitating awareness and treatment to ensure equal educational opportunities.

Al-Zawaadi (2021) conducted a study on *"Mental Health Among School-Going Adolescents in Greater London: A Cross-Sectional Study".* The study explores mental health issues and negative feelings among adolescents in Greater London, highlighting the global challenge of consistent epidemiological information on this issue. A survey of 1,920 adolescents across 18 secondary schools and two colleges revealed that over half were neutral (41.4%), sad (7.8%), or very sad (2.8%), while 48% were happy (35%). Stressors like relationships and schedules were identified as major factors.

Anagnostopoulos et al. (2017) conducted a study on *"The synergy of the refugee crisis and the financial crisis in Greece: Impact on mental health"* to explore the impact of economic and migrant crises on mental health risks, particularly among children, adolescents, and their families, focusing on Greece's recent experience. Critical analysis of the literature is performed on the outcomes of the confluent crises. Economic

recession and immigration crises negatively impact psychological well-being, particularly for vulnerable children, adolescents, and families, leading to depression, anxiety, insomnia, alcohol abuse, and suicidal behavior. The interplay between these two crises necessitates further exploration, requiring diverse psychological models and mental health professionals' culturally flexible, accommodating, and empathetic approaches for effective management.

Another study in China, **Xu et al. (2020)** explored *"Internet addiction among adolescents in Macau and mainland China: prevalence, demographics and quality of life"* to compare the prevalence of IA among adolescents in Macau and mainland China and investigate its correlation with quality of life. A study involving 2892 secondary school students utilized standardized instruments to assess IA, depressive symptoms, and quality of life. The prevalence of Insomnia (IA) among Chinese adolescents is 23.7%, with 32.5% in Macau and 19.8% in mainland China. Macau students are more likely to suffer from IA, with factors including higher school grades, poor academic performance, and severe depressive symptoms. The negative impact of Internet addiction on health and quality of life necessitates regular screening and effective interventions for young Internet users.

Another study in Nepal, **Sharma et al. (2019)** conducted investigations into *"A cross-sectional of Common Mental Disorders and Substance Use in School Children of Eastern Nepal"* to investigate the prevalence of typical mental health issues and drug use in adolescent students. A study found that 68.8% of students experienced psychological distress, with 22.9% experiencing anxiety and depression, and 23.3% using substances. Male students had higher substance use, but no significant difference in PHQ-4 scores. The study examines the current situation of school-going adolescents in Nepal and underscores the need for more comprehensive prevalence data.

Another study in UK, **Bell et al. (2019)** conducted a study on *"The relationship between physical activity, mental wellbeing and symptoms of mental health disorder in adolescents: a cohort study"* to discover that being physically active is associated with teenagers' mental health disorder symptoms becoming less prominent as well as better psychological well-being. A study of 928 12–13-year-olds from six secondary schools in

England followed up three years later to examine the association between physical activity and mental wellbeing and symptoms of mental health disorder using multivariable linear regression analyses. A study of 928 young people found no association between physical activity volume or intensity and mental wellbeing or symptoms of mental health disorder. However, higher physical activity volume at 12-13 years was associated with lower emotional problems scores at 15-16 years. The study found no strong evidence linking physical activity to improved mental wellbeing or reduced symptoms of mental health disorders in adolescents, but a protective association was found between physical activity and emotional problems.

Barican et al. (2022) accomplished study on *"Prevalence of childhood mental disorders in high-income countries: a systematic review and meta-analysis to inform policymaking"* to gather updated data on disorder prevalence in children's mental health in high-income countries. A study of 61,545 children aged 4-18 years from 11 countries found a 12.7% prevalence of childhood mental disorders. The most common disorders were anxiety, attention-deficit/hyperactivity, oppositional defiant, substance use, conduct, and depressive. Only 44.2% of children with mental disorders received any services, indicating significant heterogeneity in diagnosis and study location. One in eight children suffer from mental disorders, despite high-income countries. COVID-19 has increased childhood mental health issues, highlighting the need for increased public investments and policy urgency.

Basirnia et al. (2009) was undertaken a study on *"Prevalence of Mental Disorders among High-School Students in Iran: A Systematic Review"* to conduct a thorough analysis of studies that looked into the prevalence of any kind of mental disorders among Iranian high school students. A thorough search was done in three Iranian databases, including IranPsych, IranMedex, and Scientific Information Database (SID), as well as MEDLINE/PubMed, ISI Web of Science, PsychINFO, CINAHL, and EMBASE. Sixteen studies on high school students' mental disorders revealed significant heterogeneity, with two diagnostic studies reporting 16.6% and 4.34% prevalence rates, and a median of 34.4% in screening studies. Mental disorders prevalence in high school students in Iran is high, requiring more quality studies in this field.

Bergh et al. (2011) carried out studies regarding *"Social relations in school and psychosomatic health among Swedish adolescents—the role of academic orientation"* investigate the correlation between social relations in school (peers and teachers) and psychosomatic health complaints among Swedish compulsory school Year 9 adolescents. The study emphasizes the significance of students' academic orientation in influencing the correlation between social relations and psychosomatic health complaints. The data was gathered from around 10,000 Swedish adolescents aged 15-16 between 1995 and 2005 using a classroom-based questionnaire. Adolescent social relations in school, including peer and teacher interactions, significantly impact psychosomatic health, with academic orientation affecting health effects more strongly for theoretically oriented students. Students with higher social class orientation may be more sensitive to teacher relations, requiring efforts to improve teacher-student and peer relationships to promote social equity in health.

Bista et al. (2016) conducted a study on *"Psychosocial Problems among Adolescent Students: An Exploratory Study in the Central Region of Nepal"* to evaluate the prevalence of psychosocial dysfunction and its correlation with family-related factors among adolescent Nepali students. A cross-sectional study was conducted on 787 adolescent students from 13 schools in Hetauda municipality. Adolescent students, particularly males, are more affected by psychosocial dysfunction (17.03%), with the frequency of family disputes significantly affecting this proportion, increasing with age and grade. Starting interventions on psychosocial dysfunction requires targeting adolescents, caregivers, and community stakeholders, with a special focus on the school setting.

Buhagiar & Cassar (2012) conducted a study on *"Common mental health disorders in children and adolescents in primary care: A survey of knowledge, skills and attitudes among general practitioners in a newly developed European country"* to assess the level of confidence, knowledge, and expertise of General Practitioners (GPs) regarding common mental health issues in children. The response rate for GPs was 58%, with low confidence in diagnosing, managing, assessing child-caregiver relationships, and distinguishing between normal and pathological behavioral problems. However, they were more likely to conduct follow-up care after specialist services assessment. Few GPs considered psychosocial interventions for anxiety, hyperkinetic, depression, and

disruptive behavior disorders, mainly among younger ones. GPs often lack confidence in managing children with mental health issues, requiring substantial support from specialist services for training and clinical collaboration.

Cao et al. (2011) perform a study on *"Problematic Internet use in Chinese adolescents and its relation to psychosomatic symptoms and life satisfaction"* to explore the prevalence of Prefrontal Injuries (PIU) and its correlation with psychosomatic symptoms and life satisfaction among adolescents in mainland China. A cross-sectional survey of 17,599 Chinese students assessed PIU using the 20-item Young Internet Addiction Test (YIAT). Adolescents with Post-Internet Use Disorder (PIU) are more likely to suffer from psychosomatic symptoms, including lack of physical energy, physiological dysfunction, weakened immunity, emotional symptoms, behavioral symptoms, and social adaptation problems. They also have lower life satisfaction scores. Despite demographic and Internet-related factors, there is a positive relationship between PIU and psychosomatic symptoms. PIU, a prevalent issue among Chinese students is linked to psychosomatic symptoms and life satisfaction, necessitating prompt intervention to prevent its spread.

Cederquist (2006) was undertaken a study on *"Psychiatric and psychosomatic symptoms are increasing problems among Swedish schoolchildren".* Sweden's psychiatric and psychosomatic symptoms among children are increasing, with suicide attempts among 15–24-year-olds increasing by over 30% between 1998-2003. The 2004 guidelines for school healthcare highlight this issue, with economic stress potentially contributing to psychosomatic symptoms. Living conditions also play a role. Swedish schoolchildren's psychiatric health is deteriorating due to economic stress, modern society, and factors like impaired education, deficient working environment, lack of adult guidance, and excessive computer and TV use.

Chaulagain et al. (2019) conducted studies regarding *"Child and adolescent mental health problems in Nepal: a scoping review"* to review the available studies on issues with child and adolescent mental health in Nepal. A scoping review was conducted on studies on child and adolescent mental problems in Nepal, utilizing Medline and PubMed databases from inception to August 2018. Ten papers in Nepal found a high

prevalence of Post-traumatic Stress Symptoms (PTSS) in earthquake-affected children and adolescents, emotional and behavioral problems in school children, Autism Spectrum Disorder, anxiety disorders, and ADHD. Few Nepali studies have investigated child and adolescent mental health prevalence, highlighting the need for larger, more comprehensive studies to better plan public health services.

Cortina et al. (2012) conducted a study on *"Prevalence of Child Mental Health Problems in Sub-Saharan Africa: A Systematic Review"* to explore the prevalence of child mental health issues in community settings in sub-Saharan Africa. The study analyzed the prevalence rate of psychopathology in children, identifying it through questionnaires and clinical diagnostic instruments. Eleven studies, including 10 in a meta-analysis, analyzed data from 9713 children from six countries. Overall, 14.3% of children were identified as having psychopathology, with higher prevalence rates reported using screening questionnaires than clinical diagnostic instruments. Sub-Saharan Africa's children and adolescents face significant mental health issues, with one in seven experiencing significant difficulties and 9.5% having a specific psychiatric disorder, with sociodemographic correlates putting children in areas of greatest deprivation at greatest risk.

Delaruelle et al. (2021) performed studies on *"Mental health in adolescents with a migration background in 29 European countries: The buffering role of Social Capital"* to utilize an integrative resilience framework to explore the link between immigration background and adolescent mental health, emphasizing the moderating role of social capital. The study utilizes data from 63,425 adolescents aged 11, 13, and 15 from 29 countries participating in the 2017/18 Health Behavior in School-aged Children (HBSC) study. First- and second-generation immigrants experience higher life dissatisfaction and psychosomatic symptoms compared to native peers, with social capital moderated by individual-level social support and national-level trust, while teacher support is opposite. Native adolescents benefit more from supportive teacher-student relationships, emphasizing the need for ecological interventions to mitigate the negative impact of immigration on adolescent mental health.

Emami et al. (2007) conducted a study on *"Mental Health of Adolescents in Tehran, Iran"* to investigate into the mental health of Iranian teenagers, especially urban high school students & to use a stratified cluster random sampling method. 1270 students (19.5%) out of the total got GHQ-12 scores that were above the cutoff. GHQ-12 scores indicating some psychiatric morbidities were significantly higher in girls (34.1%) than in boys (23.7%). In comparison to 17-year-old adolescents in the same academic year, adolescents aged 18 reported an average of more mental health issues. Adolescent high school students, particularly girls, frequently experience mental disorders. Regular mental health surveys aim to identify students needing counseling or treatment to enhance coping skills and problem-solving abilities.

Fan et al. (2011) conducted a study *on "Symptoms of posttraumatic stress disorder, depression, and anxiety among adolescents following the 2008 Wenchuan earthquake in China"* The study analyzed the symptoms of PTSD, anxiety, and depression among 2,250 adolescents six months after the 2008 Wenchuan earthquake in China. Results showed that 15.8%, 40.5%, and 24.5% of participants reported these symptoms, with high comorbidity. Risk factors for these disorders included female gender, older age, and earthquake disaster exposure. The study also examined the effects of residence and number of siblings on these symptoms. The study discusses the implications of findings on intervention and prevention of mental health problems among adolescents following earthquake disasters.

Golberstein & Christoph (2022) made an attempt to study the *"Mental health economics—Social determinants and care-use"* to examine the level of mental health economics research addresses key questions for economics, addressing the prevalence of mental health problems and understanding how policies, social factors, and interventions affect mental health. This special issue focuses on critical topics of mental health causes and services provided to people with mental illness across different international settings, aiming to provide a better understanding of mental health. Kruse et al. (2022) found that cost-sharing affects mental health service utilization in Denmark, leading to a doubled utilization of psychological treatment for depression and anxiety. This change is larger for poorer families and leads to fewer suicide attempts. Supported housing, while beneficial, is expensive and may increase total expenditure.

Gutmann et al. (2019) executed studies on Mental health problems of children and adolescents, with and without migration background, living in Vienna, Austria. to compare the psychological disorders of children and adolescents from Turkish migration backgrounds with their native Austrian peers. The study analyzed 302 children and adolescents aged 7-18 years, including 100 Austrian and 100 Turkish outpatients with mental health issues and 102 healthy controls from Viennese local centers. Native patients experienced more externalizing problems (42.1%) compared to Turkish-speaking (28%), while Turkish-speaking children and adolescents had higher internalizing, depressive, and anxiety symptoms. The study reveals significant psychological differences between children and adolescents with and without migration backgrounds, attributed to migration-related stress factors and less frequent seeking psychological help.

Hoover & Bostic (2021) conducted a study on *"Schools As a Vital Component of the Child and Adolescent Mental Health System"* in their research study ascertained this review explores school mental health, highlighting its importance in child and adolescent care. It highlights collaboration between education and mental health systems, highlighting the benefits of multitiered mental health support in schools, reducing mental illness risk. Schools are crucial partners in the mental health system, investing 15,000 hours per child by age 18. They cultivate social-emotional health and stress coping skills, providing access to comprehensive mental health supports. Federal, state, and local investments in school mental health acknowledge this potential. A streamlined partnership between schools and communities can lead to better mental health, increased access to care, earlier identification, and better outcomes for students with mental health challenges.

Ibbad et al. (2022) conducted a study on *"Prevalence of anxiety and depression in high school students of Karachi, Pakistan"* to ascertain the prevalence, risk factors, and relationship of depression and anxiety with various variables among Karachi high school students. Cross-sectional study, conducted between October and November 2020, involved 400 students from government and private high schools in four Karachi districts, using two-stage cluster sampling. The study found that 53.2% of participants experienced anxiety and depression, with females (78.8%) being more likely to

experience these issues. The study reveals a high prevalence of anxiety and depression among high school students, particularly females and those with a family history, necessitating early detection and management.

In Australia, A study was performed out by **Kemel et al. (2022)** on *"Improving youth physical, mental and social health through physical activity: A Systematic literature review"* to compile and synthesize the most recent research on physical activity's impact on younger populations' physical, mental, and social wellbeing. Finding out whether there is a connection between exercise intensity, type, and quantity with changes in wellbeing outcomes was the secondary goal. Database searches were conducted using MeSH terms for young adult and adolescent populations, intervention (physical activity), and outcome (wellbeing), with eligibility screening and quality appraisal through the Critical Appraisals Skills Programme. This review of 19 studies found a strong link between physical activity and improved physical, mental, and social wellbeing outcomes, with lower intensity showing similar results. The review endorses physical activity for adolescent and young adult individuals, highlighting improvements in physical, mental, and social wellbeing, but further research is needed to understand its benefits.

In Europe Countries, **Leijdesdorff et al. (2023)** performed a study on *"Burden of mental health problems: quality of life and cost-of-illness in youth consulting Dutch walk-in youth health centers"* to evaluate the impact of mental health issues on the health-related quality of life (HRQoL) and cost-of-illness among first-time visitors of Dutch youth walk-in centers. The study assessed the prevalence-based burden of disease from a societal perspective, focusing on HRQoL and cost-of-illness through EuroQoL (EQ-5D-5L) and health care utilization items. The study found that Dutch youth with lower HRQoL experienced higher healthcare costs and missed school days, with females having higher costs and lower HRQoL. Living alone was a significant predictor of truancy, and healthcare use was lower in non-Dutch speakers. Mental health issues in youth in European countries significantly impact HRQoL and society, yet 75% are untreated, potentially leading to lifelong consequences.

In Iran, **Mohammadi et al. (2013)** conducted a study on *"Psychological problems in Iranian adolescents: application of the self-report form of strengths and difficulties questionnaire"* to explore the epidemiology of psychological issues among adolescents in five Iranian provinces: Tehran, Khorasan Razavi, Isfahan, East Azerbaijan, and Fars. The study found that conduct problems (24% prevalence) were the most prevalent psychological issue in five provinces, followed by social problems (5.76%). There was no significant difference in psychological problems between genders or age groups. Fars had the highest rates of conduct, hyperactivity, and overall criterion problems, while Esfahan had the highest rates of emotional and peer issues. The study found higher psychological problems among adolescents in Fars province, primarily related to conduct issues, with girls experiencing more emotional issues than boys.

In Italy, Learning Science Hub, University of Foggia, Foggia, Italy. **Limone & Toto (2022)** conducted a study on *"Factors That Predispose Undergraduates to Mental Issues: A Cumulative Literature Review for Future Research Perspectives"* This research explores academic and social risk factors predicting anxiety and depressive disorders among college students through a cumulative literature review, aiming to inform targeted interventions. The study found that mental and alimentary disorders were the most studied, while technology and new addictions among university students were excluded due to limited research. Mental health issues among undergraduates are prevalent, influenced by social, psychological, biological, lifestyle-based, and academic factors. Factors like academic excellence pressure, emotional stress, changes in environment, substance abuse, genetics, chronic illnesses, and brain injuries contribute to mental health issues.

In Japan, **Yamaguchi et al. (2021)** conducted a study on *"A survey of mental health literacy in Japanese high school teachers"* to identify students who are struggling with mental health issues and assist them in getting the right help. Therefore, it is essential for educators to possess high MHL levels. The study found that while 58.1% of teachers correctly identified mental illnesses in adolescence, life-time prevalence's were lower in male teachers, and confidence in helping depressed students was low. Japanese high school teachers' mental health literacy (MHL) is low, necessitating the development and

implementation of education programs to enhance their support for students with mental health issues.

In London, **Paulus et al. (2016)** carried out research on *"Practitioner Review: School-based interventions in child mental health"* to identify that school-based interventions (SBIs) are tried-and-true methods for enhancing the mental health of kids & conducted a thorough literature search in five popular online databases. Successful behavioral or cognitive-behavioral programs effectively address emotional and behavioral problems, requiring collaboration between school and home settings and individuals for real-life effectiveness.

In North America, **Foulger et al. (2013)** was undertaken a study *"Health risk behaviors in urban and rural Guatemalan adolescents"* to evaluate health risk behaviors among Guatemalan students in both urban and rural schools. The Global School-based Student Health Survey was utilized to assess and compare risk behaviors among two demographically and culturally distant school-based samples. Adolescent health risk behaviors in both schools were lower than in Latin America, with higher prevalence in urban and rural settings. Boys were more likely to engage in tobacco, alcohol, and sexual activities. Health promotion programs in schools and communities should help youth develop positive health behaviors, reduce risk behaviors, and identify effective preventative strategies for adolescent populations.

In Sri Lanka, **Woods et al. (2013)** conducted a study on *"The National Survey of Child and Adolescent Well-Being of Physical health, mental health, and behavior problems among early adolescents in foster care"* to investigate the correlation between chronic illness in long-term foster care adolescents and higher rates of internalizing and externalizing problems and delinquency. Chronic illness in adolescents leads to increased internalizing and externalizing problems, delinquent acts, and overall delinquency, with depression significantly influencing the effects of overall health. The study underscores the need for comprehensive services for foster care adolescents, emphasizing the intricate interplay between physical, mental, and behavioral health.

In UK, **Pitchforth et al. (2019)** studied on *"Mental health and well-being trends among children and young people in the UK, 1995-2014: analysis of repeated cross-sectional*

national health surveys" to determine whether recent trends in specific mental health outcomes among CYP in national health surveys from England, Scotland, and Wales have been similar. In order to examine trends in seven parent/self-reported variables related to general health and mental health, the study analyzed data from 140,830 participants in 36 national surveys between 1995 and 2014. Long-standing mental health conditions increased in England, Scotland, and Wales, with a decrease in high SDQT and SDQE scores among young children, but increased in Wales. UK CYP's mental health conditions have significantly increased, but there has been minimal change in psychological distress and emotional well-being questionnaire scores.

Koumoula et al. (2023) performed an investigation into *"The science of child and adolescent mental health in Greece: a nationwide systematic review"* to conducted a thorough analysis of scientific evidence on child and adolescent mental health in Greece to identify needs and make validated resources accessible. The study analyzed 533 prevalence estimates, 138 assessment instruments, and 34 intervention studies, categorized conditions by region, compiled locally validated instruments and psychometrics, and evaluated interventions' effectiveness. The Stavros Niarchos Founda has funded a comprehensive compilation of scientific evidence on child and adolescent mental health in Greece, providing valuable resources for clinical practice and policy making.

Leavey et al. (2020) conducted a study on *"Adolescent mental health problems, suicidality and seeking help from general practice: A cross-sectional study (Northern Ireland Schools and Wellbeing study)."* The study aims to investigate the prevalence and factors linked to mental health issues in adolescent boys and girls, as well as the factors influencing trust and contact with GPs. High rates of mental health problems and suicidality were reported, particularly among females. Factors like atheist/agnostic beliefs and having a private bedroom were significant. Trust in general practitioners was high, but low trust was reported among over 36%. The study highlights high mental health issues and suicidality rates among Northern Irish adolescents, particularly young women, and highlights the need for interventions to foster trust and help-seeking guidance.

Lee et al. (2018) was undertaken a study *"Differences in Factors Associated with Depressive Symptoms between Urban and Rural Female Adolescents in Korea"* to analyze the prevalence of depressive symptoms and identify factors linked to them in urban and rural areas using Ecological Models of Health Behavior. The study involved 460 female adolescents, using the Adolescent Mental-Health Problem-Behavior Questionnaire (AMPQ-II) and the Beck Depression Inventory, as instruments. Depressive symptoms were found in 15.7% of urban and 22.9% of rural adolescents, with health perceptions, school performance stress, academic issues, internet violations, general life happiness, worry/anxiety, and mood/suicidal ideation being common factors. Depressive symptoms are linked to various factors, varying between urban and rural female youths, necessitating tailored interventions at intrapersonal, interpersonal, and organizational levels.

London, Yan Ma et al. (2023) performed a study on *"A study of Review: School-based interventions to improve mental health literacy and reduce mental health stigma – a systematic review"* to study quality was evaluated using the EPHPP too (This systematic review was registered with PROSPERO). The burden of mental disorders may be reduced by preventing mental disorders, promoting mental well-being, and improving mental health literacy. 21 studies found moderate evidence for school-based mental health interventions improving mental health literacy and reducing stigma, but less long-term effectiveness due to lack of follow-ups. Future research should address methodological issues and process evaluations to improve intervention design and implementation, addressing uncertainties in outcomes assessment and methodological heterogeneity.

Melisa et al. (2012) conducted a study on *"Prevalence of Child Mental Health Problems in Sub-Saharan Africa"* to evaluate the prevalence of child mental health issues in community settings in sub-Saharan Africa. The study utilized a comprehensive search of MEDLINE, EMBASE, and PsycINFO, along with tracking references from identified articles and personal communications with local researchers. evaluate the study was, eleven studies, including 10 in a meta-analysis, analyzed data from 9713 children from 6 countries. Overall, 14.3% of children were identified as having psychopathology, with higher prevalence rates reported using screening questionnaires than clinical diagnostic

instruments. Sub-Saharan Africa's children and adolescents face significant mental health issues, with one in seven experiencing significant difficulties and 9.5% having a specific disorder, influenced by sociodemographic factors.

Mohammadi et al. (2016) carried out research on *"Psychiatric Disorders in Iranian Children and Adolescents. Iran J Psychiatry"* to gain insight into the prevalence of mental health issues in children and teenagers in Tehran, Shiraz, Isfahan, Tabriz, and Mashhad, five different Iranian provinces. The study involved 9,636 children and adolescents aged 6-18 years from Tehran, Shiraz, Isfahan, Tabriz, and Mashhad, selected using a multistage cluster random sampling method. Oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD) were found to be prevalent in five provinces, with high rates in boys and girls. The highest rates were observed in 6–9-year-olds, while ODD and ADHD were highest in girls. Tehran and Mashhad had the highest rates of ODD and ADHD. The study reveals higher psychiatric disorder frequency in Iran, with Tehran, Mashhad, Isfahan, Shiraz, and Tabriz having the highest rates, indicating increased mental health service utilization.

Mohammadi et al. (2017) carried out research on *"Epidemiology of Psychiatric Disorders in Iranian Children and Adolescents (IRCAP) and Its Relationship with Social Capital, Life Style and Parents' Personality Disorders: Study Protocol"* to investigate the prevalence of psychiatric disorders in Iranian children and adolescents, its correlation with social capital, lifestyle, and parents' personality disorders. A national project in Iran selected 1000 children and adolescents aged 6-18 years in each province, resulting in a total sample size of 31,000, randomly collected 170 blocks. The IRCAP study provides an epidemiological survey on the prevalence of psychiatric disorders in children and adolescents in 31 Iranian provinces, comparing urban and rural deviance rates. The study conducted an epidemiological survey on Iranian youths, providing estimates for specific child psychiatric disorders prevalence. The data will aid in service planning, providing health professionals with a database for clinical assessments and interventions.

Naveed et al. (2020) was undertaken a study on *"Prevalence of common mental disorders in South Asia: A systematic review and meta-regression analysis"* to determine

the prevalence of common mental disorder (CMDs) in South Asian countries. The study found a high prevalence of depressive symptoms among 173,449 participants in South Asian countries, with alcohol abuse at 12.9%, anxiety at 25.8%, tobacco smoking at 18.6%, PTSD at 17.2%, mixed anxiety and depression at 28.4%, suicidal behaviors at 6.4%, misuse of opiates at 0.8%, tobacco chewing at 21.0%, cannabis use at 3.4%, GAD at 2.9%, bipolar disorder at 0.6%, IV drug abuse at 2.5%, panic disorder at 0.01%, stimulant use at 0.9%, OCD at 1.6%, and phobic disorders at 1.8%.Pakistan has the highest prevalence of chronic mental disorders (CMDs) among eight South Asian countries, highlighting the need for effective policymaking and culturally appropriate interventions.

Ojio et al. (2020) carried out research *on "Innovative approach to adolescent mental health in Japan: School-based education about mental health literacy"* to promote mental health promotion, prevention, and care as well as lessen stigma among adolescents by increasing mental health literacy through school-based education. Japan's government has developed a Course of Study for mental illness instruction, implementing curriculum guidelines from 2022, and developing educational resources for schoolteachers. The educational strategy focuses on understanding mental illness mechanisms, symptoms, self-help strategies, help-seeking behavior, and stigma reduction for high school students, using resources like animated films and manuals. Their efforts aim to promote mental health education in Japan and other countries, promoting early intervention and prevention of mental illnesses in adolescents.

On the Netherland, **Reijneveld et al. (2010)** executed studies on *"Area Deprivation Affects Behavioral Problems of Young Adolescents in Mixed Urban and Rural Areas: The TRAILS Study."* The study explores the impact of area deprivation and urbanization on the occurrence and development of behavioral issues among adolescents in a mixed urban and rural area. Adolescents from the most deprived tertile had higher behavioral problem scores than those from the least deprived tertile, with socioeconomic position explaining half of these differences. Other factors like familial and parental characteristics did not significantly explain these differences. Adolescents in deprived rural and urban areas often experience behavioral problems, similar to those in highly urbanized areas, with little effect from urbanization.

Pengpid & Peltzer (2020) accomplished study on *"Prevalence and associated factors of psychological distress among a national sample of in-school adolescents in Morocco"* to determine the prevalence and factors associated with psychological distress in Moroccan adolescent schoolchildren. They performed a cross-sectional survey in Morocco as a School-Based Student Health Survey (GSHS). Psychological distress is prevalent in 23.3 out of 29.2% of students, with factors such as female sex, older age, bullying, physical violence, lack of close friends, hunger, parental neglect, school truancy, sedentary behavior, serious injuries, low peer support, parental neglect, passive smoking, substance use, and fast-food consumption. Nearly one in four students experienced psychological distress and several factors have been identified to aid in prevention and control strategies.

Phiri et al. (2023) conducted a study on *"Prevalence of sleep disturbance among adolescents with substance use": a systematic review and meta-analysis.* Goal of study on teenagers all over the world are struggling with sleep disorders. One of the most frequent causes of sleep disturbances is substance abuse. A study was conducted using search strings in various databases to identify articles related to substance use, sleep disturbances, and sleep disorders. After screening 16,613 articles, 13,980 were excluded, and the remaining 100 were included in a meta-analysis. The study excluded studies with different age groups, irrelevant measurements, or non-English publications. The study found a high prevalence of sleep disturbances among adolescents with substance use, particularly marijuana users. Insomnia and hypersomnolence were common. The findings suggest a global concern and warrant further research.

Rasalingam et al. (2017) perform a study on *"Peer Victimization and Related Mental Health Problems in Early Adolescence"* to explores the link between peer victimization, mental health issues, and daily life impact, considering the potential mediating role of parental and peer support. A cross-sectional health survey among adolescents and their parents (N=9,000) used the Strengths and Difficulties Questionnaire to measure mental health problems and their impact on daily life. 17.6% of boys and 15.3% of girls reported peer victimization, with higher emotional, conduct, and hyperactivity symptoms. Boys had higher emotional problems, and peer and parental support

buffered mental health problems among victimized adolescents. The study underscores the significance of interventions enhancing peer support for early adolescents who have been victimized.

Rasalingam et al. (2022) executed a study *on "Assessment of mental health problems among adolescents in Sri Lanka: findings from the cross-sectional Global School-based Health Survey"* to estimate and evaluate the prevalence and risk factors for three significant mental health issues among Sri Lankan adolescent populations: suicidal ideation, anxiety, and loneliness. secondary analysis of cross-sectional data from 3262 adolescents from the 2016 Global School-Based Health Survey (GSHS), which was carried out by the World Health Organization. The study found that loneliness, anxiety (30.8%), and suicidal ideation (3.7%) were prevalent among adolescents, with females being more affected. Factors like social interaction, nutrition, and physical activity reduced these risks. The study highlights the higher prevalence of mental health issues among Sri Lankan adolescents, suggesting that future policy decisions should involve an integrated approach involving individual, family, and community involvement.

Ravens-Sieberer et al. (2008) conducted research on *"Prevalence of mental health problems among children and adolescents in Germany: results of the BELLA study within the National Health Interview and Examination Survey."* The study aims to investigate the prevalence of mental health issues among children and adolescents in Germany, examining the correlation between symptoms, impairment, and treatment options. 14.5% of kids and teenagers aged 7 to 17 had at least one mental health issue that was also highly comorbid with an impairment. 8.6% and 6.6% of people had symptoms, respectively. The HRQoL of those with mental health issues was significantly impaired, despite the fact that less than half received treatment. Early prevention is crucial due to the significant impact of mental health problems on well-being and functioning, particularly in children and adolescents who experience a significant decrease in their HRQoL.

Ravens-Sieberer et al. (2008) explored a study on *"Mental health of children and adolescents in 12 European countries—results from the European KIDSCREEN study"* to examine the emotional well-being and behavior of 22,000 children and adolescents

aged 8–18 from a European public health perspective (KIDSCREEN). The KIDSCREEN Study examined emotional well-being and behavior in 22,000 children and adolescents aged 8-18 in a national representative sample. The prevalence of mental health problems in children and adolescents varies across countries and socio-demographic subgroups, with risk factors including adverse family climate, low socio-economic status, poor social support, and decreased parental well-being. The study discussed cross-cultural mental health patterns, highlighting high-risk groups' poor social support and parents' mental distress, emphasizing the need for strengthening social resources in prevention and interventions.

Research on child and adolescent mental health prevention and promotion in Africa, **Jorns-Presentati et al. (2021**) on *"The prevalence of mental health problems in sub-Saharan adolescents: A systematic review"* to analyze epidemiological studies published between 2008 and 2020, which reveal the high prevalence of mental health issues among adolescents in sub-Saharan Africa. A search of 1,549 records revealed 51 studies, 37 of which included articles on the prevalence of depression, anxiety disorders, emotional and behavioral difficulties, posttraumatic stress, and suicidal behavior in adolescents living with HIV. This review highlights the high prevalence of mental disorders among youth in sub-Saharan Africa, highlighting the need for comprehensive clinical and policy interventions.

Resent in Korea, **Kim et al. (2021)** conducted a study *on "A web-based study of Parental Mental Health and Children's Behaviors and Media Usage during COVID-19-Related School Closures"* to investigate the relationship between parental stress, media usage, and sleep issues in primary school children during COVID-19 school closures, focusing on various factors. During school closures, children gained weight, spent less time in physical activities, and accessed more media. Parental stress, depression, sleep problems, tablet time, and behavior issues were associated with COVID-19. COVID-19 closures exacerbated mental health issues for parents and children, necessitating ongoing monitoring and expanded support systems to address these challenges.

Resent in Norwegia, **Vedoy et al. (2021)** conducted a study on *"The longitudinal association between objectively measured physical activity and mental health among*

Norwegian adolescents" to investigate the potential link between objectively assessed PA and outcomes related to mental health. In relation to mental health issues (MHP) and mental wellbeing (MWB), volume (total PA), intensity (moderate-to-vigorous PA [MVPA]), and sedentary behavior (SED) were specifically examined. The longitudinal study involved 599 adolescents at lower secondary school, measuring physical activity (PA) and mental wellbeing (MWB) using accelerometry and questionnaires, and examining relationships between changes. Increased SED in boys positively correlated with MWB, while a small positive association was found in girls. No associations were found between changes in movement categories and MHP scores. The study found no clear association between PA volume and MHP in healthy adolescents, but a relationship between increased SED and MWB among boys and girls.

Resent in UK, **Viner et al. (2022)** was undertaken a study on *"School Closures During Social Lockdown and Mental Health, Health Behaviors, and Well-being Among Children and Adolescents During the First COVID-19 Wave" A Systematic Review"* to review of published studies excluding associations with transmission of infection on the effects of school closures during broader social lockdown on children and adolescents aged 0 to 19 years. The study screened 16,817 records, reviewed 151 in full text, and included 36 studies, adjusting quality assessment based on study type, and conducted a narrative synthesis of results. 36 studies from 11 countries, involving 79,781 children and adolescents and 18,028 parents, evaluated school closures during the COVID-19 pandemic. 69% of studies identified mental health associations, with 18% to 60% scoring above risk thresholds for distress. Studies on sleep and diet provided inconclusive evidence. Short-term school closures during the COVID-19 pandemic have been linked to adverse mental health symptoms and behaviors among children and adolescents, highlighting the interconnectedness of lockdown measures.

Saito et al. (2022) performed an investigation referred to as *"Mental health in Japanese children during school closures due to the COVID-19"* to examine the effects of school closures on children's daily lives and mental health. This study was conducted using The Japanese-language version of the World Health Organization Five Well-Being Index (WHO-5-J). The study found that students in the closure group experienced disrupted sleep, eating habits, and physical activities, while those in the reopening group

experienced better rest. School closures disrupted sleep, eating habits, and physical activities in elementary and junior high school students, leading to decreased activity and difficulty finding interests, but improved sleep.

Sawyer et al. (2002) conducted a study on *"The Mental Health of Young People in Australia: Key Findings from the Child and Adolescent Component of the National Survey of Mental Health and Well-Being"* to assess the prevalence of three mental disorders, their health-related issues, quality of life, and health-risk behaviors among adolescents with mental health issues. The parent-version of the Diagnostic Interview Schedule for Children Version IV was used to assess mental disorders. A study revealed 14% of children and adolescents have mental health issues, with many at increased risk for suicidal behavior, and only 25% had attended professional services within six months. Mental health issues in Australia require careful study to balance individual and population-focused interventions, considering comorbid problems and balancing individual care with population health strategies.

Slobodskaya & Semenova (2016) carried out research on *"Child and adolescent mental health problems in Tyva Republic, Russia, as possible risk factors for a high suicide rate"* to explore the prevalence and correlations of mental health issues among Native Tyvinian children and adolescents using internationally recognized measures and diagnoses. The study was a cross-sectional survey conducted in the Western rural areas of Tyva and the capital city of Kyzyl. Mental health problems are prevalent in 25% of adolescents, with rural areas having a higher risk of psychopathology, while urban areas have a lower prevalence, similar to other countries. The study highlights the urgent need for interventions to reduce risk and effectively support Tyvinian children and adolescents with mental health issues.

Spitzer & Cameron (1995) conducted a study on *"School-age children's perception of mental illness"* to explore examining their understanding of the concept, characterization, and treatment of the mentally ill. A study of 90 school-age children found age not significantly affecting their ability to classify deviant behavior, but a sex main effect was observed. Boys outperform girls in identifying deviant behaviors and

understanding mental illness, distinguishing between mental retardation and mental illness, identifying etiologies, and selecting appropriate treatment methods.

Srinath et al. (2010) perform a study on *"Epidemiology of child and adolescent mental health disorders in Asia"* to investigate the significant burden of child and adolescent mental health (CAMH) issues in Asia. A nonclinical-based English literature search from 51 Asian countries found a general prevalence of CAMH disorders ranging from 10-20%. However, instruments used were inconsistent and most studies did not use a second stage for diagnostic confirmation. Socioeconomic status, academic achievement, and abnormal psychosocial situations are the most common factors influencing CAMH prevalence. The review discusses the challenges faced in CAMH epidemiological studies in Asia, suggesting improvements in methodology and promoting uniformity for future studies.

Study in the north-west region of the Netherlands, **Bot et al. (2011)** perform a study on *"A cross-sectional study of Prevalence of psychosocial problems in Dutch children aged 8–12 years and its association with risk factors and quality of life."* to assess the prevalence of psychosocial issues among Dutch children aged 8-12 years and its correlation with risk factors and quality of life. The study involved 2703 children, comprising 1392 boys and 1311 girls. The study found that 10.4% of the total sample had psychosocial problems, with boys having a higher prevalence (13.9% vs 6.6%). Boys had more hyperactivity/inattention, conduct, peer relationship, and prosocial behavior issues. Risk factors for psychosocial problems included chronic diseases, life events, low parental education, and income under a modal level. This study identifies risk factors for children's psychosocial problems, particularly among boys, which can inform the development of targeted prevention strategies for high-risk children.

Swart et al. (2023) made an attempt to study on *"A turn in the road, but still a rough journey"* Parent and child perspectives of outcomes after pre-adolescent inpatient psychiatric admission to describe the perspectives of the children and parents on the short-, medium-, and long-term effects of pre-adolescent inpatient psychiatric admissions, and to analyze these dyadic experiential data to find outcome variables that matter to families and service users and could be used in future outcomes-based

research. The study used qualitative methodology, conducting semi-structured interviews with ten parent-child dyads, to collect perspectives on children admitted to a pre-adolescent unit and analyze their experiences post-discharge. The study involved ten parent-child dyads of children in pre-adolescent psychiatric units in the Western Cape, South Africa, with a range of diagnoses including anorexia nervosa, ADHD, autism spectrum disorder, epilepsy, and more. The majority of parents were mothers, with one father and one set of mother and father participants.

Tanzil & Tanzil (2016) conducted studies regarding *"Child Mental Health Research in Pakistan; Major Challenges and Pitfalls: A Systematic Review"* to comprehend Pakistan's current state of child mental health research & the study method used "Pub Med and Pakmedinet database" was searched using key words. Small-scale studies reveal common mental health disorders among Pakistani children, but challenges include lack of recognition, validated tools, intervention studies, and health system capacity. Capacity building in mental health research is crucial for evaluating current child mental health burdens, developing screening tools, and raising awareness, making child mental health a priority issue.

The Netherlands, **Olak et al. (2008)** an investigative project on "Socioeconomic position and mental health problems in pre- and early-adolescents; the trial study" to determine the differences in relationships between different mental health dimensions, although the exact relationship is unknown. SEP was found to be inversely associated with all dimensions, with lower odds ratios for externalizing problems and internalizing problems compared to high SEP. When adjusted for externalizing problems, SEP effects on internalizing problems were less pronounced. Adolescent mental health risk increases with decreasing SEP, especially for externalizing problems, partly due to shared aspects with externalizing problems.

The study *"Association of overweight and obesity with mental distress in Iranian adolescents"* is evaluated by **Jari et al. (2014)** in Iran to evaluate, in a nationally representative sample of Iranian adolescents, the association between obesity and several psychological problems. A nationwide study in Iran from 2009-2010 surveyed 5570 10-18-year-olds across 27 provinces using the World Health Organization Global

School-based Health Survey questionnaire. This study involved 5528 students, with 49.7% being girls. The mean age was 14.7 years. 7.9% were overweight, 8.8% obese. 58.7% had anxiety, 62.6% depression, and 49.4% insomnia. No significant association was found between overweight and obesity and anxiety, depression, or insomnia. Iranian adolescents' excess weight doesn't increase psychological distress risk, possibly due to positive family and peer attitudes towards fatness during adolescence.

There was a descriptive cross-sectional study perform by **Banstola (2017)** on *"Psychosocial Problem among School-going Adolescents in Pokhara, Western Nepal."* The study aims to evaluate the prevalence and factors of psychosocial problems among 360 adolescents enrolled in public schools in Pokhara Lekhnath Metropolitan City. The study found that 21.7% of adolescents have psychosocial problems, with those facing physical/verbal abuse, feeling unwell at home, experiencing high academic stress, not staying with parents, having limited family income, coming from joint families, having illiterate mothers, and having disrupted marital status being more likely to have these issues. A significant number of school-going adolescents suffer from psychosocial problems, with internalizing issues being the most common. Factors like abuse, high academic stress, and poor family income increase the risk of developing these problems.

UK, **McPherson et al. (2014)** perform a study on *"The association between social capital and mental health and behavioral problems in children and adolescents: an integrative systematic review."* The study synthesized international research on the impact of family and community social capital on mental health and behavioral issues in children and adolescents. The study utilized nine electronic databases, hand searching, and review-specific criteria to identify relevant studies. A study of 55 studies, mostly cross-sectional surveys in North America and seven in the UK, found that family and community social capital is linked to mental health and behavioral issues in children and adolescents, with positive parent-child relations and extended family support being particularly significant. This review explores the relationship between social capital and mental health in children and adolescents, highlighting gaps in knowledge and potential future research for policy development.

Vreeman et al. (2017) performed studies on *"Mental health challenges among adolescents living with HIV".* The goal of this narrative review is to evaluate the most recent research on the mental health issues that adolescents living with HIV face, including their access to mental health services and the significance of these issues when switching from pediatric to adult care services. Mental health challenges in HIV-infected adolescents significantly impact HIV prevention and treatment, yet little research exists on their impact, interventions, and healthcare systems to promote mental health. Adolescent mental health issues for HIV-infected youth should be addressed proactively, and care systems should integrate mental health support throughout life stages, addressing the burden of resource-limited settings.

Wang et al. (2021) conducted a study on *"A Cross-sectional study of Mental Health Problems Among School-Aged Children After School Reopening: A Cross-Sectional Study During the COVID-19 Post-pandemic in East China"* to examine the rate of prevalence of mental health problems in East China pupils. For total difficulty, borderline, moderately abnormal, and conspicuously abnormal scores, respectively, were 7.16, 3.34, and 1.96%; for prosocial conduct, they were 13.83, 13.45, and 17.85%. The largest adjusted OR of 7.90 (95% CI 3.33-18.75) was found in children with psychological stressors who were very worried of failing to adapt to school and lifestyle. These children had a considerably higher risk of falling into a worse category of mental health status. The amount of time spent on computer games and at home was favorably correlated with mental health issues, but physical activity and social interaction were adversely correlated. Boys (OR = 6.95, 95% CI 4.83-8.55), middle-high school students (OR = 7.52, 95% CI 4.16-8.61), and Taizhou residents all showed greater effects of psychological stressors on overall difficulty. Following the reopening of schools, elementary school students exhibited a high prevalence of emotional and behavioral issues, particularly less prosocial behavior. For pupils returning to the school building, the Chinese government, communities, schools, and families need to offer more effective support. Children with disabilities who have emotional and behavioral issues also need to have these issues addressed.

Wrigley et al. (2005) conducted a study *on "Across-sectional survey of Role of Stigma and Attitudes Toward Help-Seeking from a General Practitioner for Mental Health*

Problems in a Rural Town" to investigates the influence of perceived stigma and attitudes towards seeking care on the likelihood of seeking help from a general practitioner for mental health issues. The study found no significant correlation between symptom measures, disability, and help-seeking. Factors positively influencing attitudes towards seeking professional psychological help included lower perceived stigma and biological causal attributions for schizophrenia, and perceived helpfulness of GPs. Attitudes towards mental health help-seeking are influenced by causal attributions and perceived stigma, requiring efforts to reduce stigma and enhance mental health literacy.

Yen et al. (2014) conducted a study *on "Association between school bullying levels/types and mental health problems among Taiwanese adolescents"* to compare the mental health risks among adolescents with varying levels and types of bullying experiences. The Chinese version of the School Bullying Experience Questionnaire was used to assess bullying involvement among 6,406 adolescents, revealing mental health issues such as depression, suicidality, insomnia, anxiety, and hyperactivity. The study found that both victim and perpetrator of bullying are significantly associated with mental health problems, except general anxiety. Both types of bullying increase the risk of certain mental health issues, and there are differences among adolescents involved. The assessment of adolescents involved in various levels or types of bullying should consider the difference in comorbid mental health problems.

Zhao et al. (2019) study on Chinese teenagers. *"Association between depression and overweight in Chinese adolescents: a cross-sectional study"* to analyze whether gender influenced the relationship between depression and the prevalence of overweight or obesity. The study involved 1081 adolescents from China Family Panel Studies, assessing depression using the CES-D and analyzing its association with overweight or obesity using an ordered logistic regression model. Depression prevalence in Chinese adolescents is 23.22%, with depressed affect and lack of positive affect significantly associated with overweight or obesity. Females' lack of positive affect is the only significant association, while all other depression measures are positive in males. The study suggests that depression is linked to obesity among Chinese adolescents,

particularly males, and is supported by open access articles under the Creative Commons Attribution Non-Commercial license.

Zulcic-Nakic et al. (2012) conducted a study on *"Psychological problems sequalae in adolescents after artificial abortion"* to evaluate the psychological well-being of female adolescents who have undergone artificial abortion up to the 12th week of pregnancy. The study was conducted at the Department of Gynecology and Obstetrics, University Clinical Center Tuzla, Bosnia-Herzegovina, as a control case study. PTSD was more common in adolescents who aborted a pregnancy (30%) than in those who did not abort (13.3%). Anxiety was higher in the abortion group, and depression symptoms were higher in adolescents who aborted a pregnancy. Experience of life-threatening injuries and life-threatening experiences reliably predicted PTSD, while abortion and life-threatening experiences reliably predicted depression. Adolescents who aborted pregnancy had higher rates of PTSD, depression, and anxiety, with abortion only predicting depression and not PTSD.

2.3   Research Questions

Mental Health problems are recent worldwide public health concern as it leads to impair a considerable number of human beings of various ages with mental health problems. Parents, practitioners and policy makers recognized the importance of children's and young adults' mental health as human beings with sound and better mental health are able to lead a physically and socially healthier and positive life and they are less likely to engage themselves in numerous risk-taking behaviors.

According to world scenario many researchers and educationist showed their sufficient attention and keen interest to study the Mental Health problems among the children's and adolescents. But no study was found on mental Health problem among the school going children residing at Bangladesh. Moreover, there is a huge superstitious and stigma exists regarding mental health illness in societies of Bangladesh. As a result, proper access and intervention planning is lacking in the existing educational system in Bangladesh. This shows that there exists a clear knowledge gap. This existing research

gap made the researcher to specify the research problem with relevant research question.

Thus, the researcher encountered with the following research questions: -

1. What is the existing status of Mental Health related problems faced by school-going children in Bangladesh?

2. What are the common types of mental health problems included in different dimensions of Mental Health problems faced by them?

3. How does Mental Health problems of school-going children are related to different demographic characteristics of students viz. age, gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification?

2.4   Statement of the Problem

To answer the above-mentioned research, Question the problem of the study is identified and stated as "*MENTAL HEALTH PROBLEMS AMONG SCHOOL-GOING CHILDREN IN BANGLADESH*"

2.5   Delimitations of the Study

The present study is delimited to the following areas:

1. The study was delimited to 13 districts of Bangladesh viz., Dhaka, Tangail, Jamalpur, Mymemsingh, Sherpur, Jhinaidha, Magura, Kushtia, Jashore, Khulna, Bandharban, Panchagor, and Rongpur only.
2. The students studying in classes 6 to 8 only were considered as the participants of the study.
3. The study was delimited to only nine demographic factors i.e., age, gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification.

4. The age limits of the students were delimited to 11-17 years only.

2.6   Objectives of the Study

In view of the basic research questions and delimitations of the study, the following objectives were identified: -

i. To understand the present scenario of Mental Health Problems among the school going children in Bangladesh.

ii. To assess the rate of prevalence rate of Mental Health Problems among the school going children in Bangladesh.

iii. To examine each dimension of Mental Health Problems i.e., Emotional Problem, Conduct Problem, Hyperactive Problem, Peer problem and Pro-social Problem in relation to student's age, gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification.

2.7   Hypotheses of the Study

In view of the basic research questions and objectives of the study the following Null-Hypotheses are formulated:

$H_01:$ There is no significant difference in the rate of prevalence of Mental Health problems with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

$H_02:$ There is no significant difference in the rate of prevalence of Emotional problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

H₀3: There is no significant difference in the rate of prevalence of Conduct problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

H₀4: There is no significant difference in the rate of prevalence of Hyperactive problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

H₀5: There is no significant difference in the rate of prevalence of Peer problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

H₀6: There is no significant difference in the rate of prevalence of Pro-social problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.

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CHAPTER - III
METHOD AND PROCEDURE

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METHOD AND PROCEDURE

This chapter gives an overview of the research design in two parts. The first part, Method, outlines the study design, sample, variables and instrument for data collection, while the second part describes the general procedure of data collection.

3.1 Method

The primary objective of the current study was to conduct an investigation specially aimed at determining the extent to which Mental Health issues are prevalent among school-going adolescents in Bangladesh. In order to achieve this objective, an exhaustive survey was carried out, with the intention of gathering comprehensive data on the subject matter. This survey was conducted in a total of 24 schools, which were randomly selected from 13 districts out of 64 districts in Bangladesh. The districts from which the schools were chosen include Dhaka, Tangail, Jamalpur, Mymemsingh, Sherpur, Jhinaidha, Magura, Kushtia, Jashore, Khulna, Bandharban, Panchagor, and Ronpur. Care was taken to ensure that the students were male and female, types of families, Parental education level and from schools located in urban, sub-urban and rural areas. This enables us to find out and compare the Mental Health problems between male and female adolescent students, their family type, habitat, parent's education level, studying in Bengali and English medium schools and located urban, sub-urban and rural areas.

3.1.1 Study Design

The study was conducted using a cross-sectional survey research framework, which involves a clearly defined problem and objectives (Best et al. 2008). This method is useful for studying groups of people similar in characteristics but differing in some variables. Surveys are used to collect detailed descriptions of existing phenomena and intelligent plans for improvement. The study design aimed to collect quantitative data about emotional and behavioural attributes and practices from a large population involving respondents from different backgrounds.

The study aimed to answer the following questions within this broad framework as -

i)   What is the rate of prevalence of mental health problems among the adolescent school going children?

ii)   What are the impacts of some variables like-gender, habitat, parental education level, medium of instruction, type of school, locality of school and family type on the Mental Health of the students?

iii)   Whether emotional and behavioural attributes influence the Mental Health of the children?

3.1.2 Population and Sample

Population: Students studying in classes VI to VIII belonging to the age group of 11-17 years of Bangladesh were considered as the population for the study.

Sample: Since a good number of samples representing the population are required to collect information from the target group, schools were chosen randomly from Dhaka, Tangail, Jamalpur, Mymemsingh, Sherpur, Jhinaidha, Magura, Kushtia, Jashore, Khulna, Bandharban, Panchagor, and Ronpur and its suburban areas to represent the target group. The study was conducted on a total participant of 2121students (N=2121) in the age group of 11 to 17 years (mean age 14.95 years) studying in class VI-VIII attending Bengali and English medium schools affiliated to different broad of school in Bangladesh. A Table showing age wise distribution of sample is given in Appendix 1. Age- wise distribution of sample is illustrated in Figure 3.1.

Figure 3.1   Map showing sampling area

Figure 3.1   Map showing sampling area

Figure 3.2 Age wise Distribution of Sample
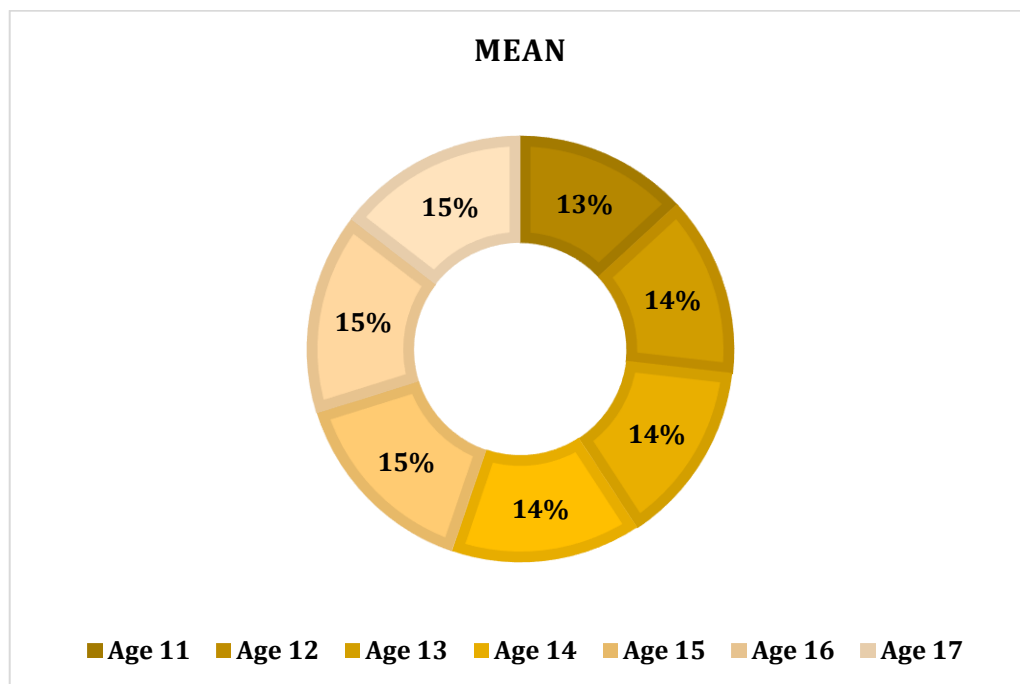
The school were chosen taking into consideration of their accessibility to the researcher, time frame and the financial cost that the researcher had to meet. The study sample was drawn from total twenty-four schools where only two school was English medium and rest of Bengali medium schools located in Dhaka, Tangail, Jamalpur, Mymemsingh, Sherpur, Jhinaidha, Magura, Kushtia, Jashore, Khulna, Bandharban, Panchagor, and Ronpur of Bangladesh. Thus, 2121 students from 24 schools were the sample of the study. Table 3.1 shows the school wise detail of the participants of the study.

Table 3.1 Distribution of Sample

SL. No.	School Name	Name of District	Broad	Type	Locality	No. of Students	Medium
1.	Mohammadpur Preparatory Girls High School	Dhaka	Dhaka	Private	Urban	100	English
2.	Mohammadpur Preparatory Boys High School, Dhaka	Dhaka	Dhaka	Private	Urban	100	English
3.	Shulakuri High School, Modhupur, Tangail	Tangail	Dhaka	Semi-Govt.	Sub-Urban	105	Bengali
4.	Boroikuri High School, Modhupur, Tangail	Tangail	Dhaka	Semi-Govt.	Rural	78	Bengali
5.	Bhutia High School, Modhupur, Tangail	Tangail	Dhaka	Semi-Govt.	Rural	99	Bengali
6.	Prgacha St. Pol High School,Pirgacha, Modhupur, Tangail	Tangail	Dhaka	Semi-Govt.	Rural	89	Bengali
7.	Jamalpur Jila Govt. Boys High School, Jamalpur	Jamalpur	Mymemsingh	Govt.	Urban	99	Bengali
8.	Nandina Negjahan Girls High Shool Nandina, Jamalpur	Jamalpur	Mymemsingh	Semi-Govt.	Urban	95	Bengali
9.	Binnakuri High School, Moktagacha, Mymemsigh	Mymemsingh	Mymemsingh	Semi-Govt.	Rural	101	Bengali
10.	Molajani High School, Muktagacha, Mymensigh	Mymemsingh	Mymemsingh	Semi-Govt.	Rural	100	Bengali
11.	Madla High school,Khulumbaria , Shailokupa, Jhinaidha	Sherpur	Mymemsigh	Semi-Govt.	Sub-Urban	209	Bengali
12.	Madla High school,Khulumbaria , Shailokupa, Jhinaidha	Jhinaidha	Jashore	Govt.	Rural	113	Bengali
13.	Magura Adharsh girls high School, Magura	Magura	Jashore	Private	Urban	105	Bengali
14.	Magura Govt. Boys high School, Magura	Magura	Jashore	Govt.	Urban	109	Bengali
15.	Khuksa Govt. Pilot High School, Khoksa, Kushtia	Kushtia	Jashore	Govt.	Sub-Urban	99	Bengali
16.	Jashore Govt. Girls School, Jashore	Jashore	Jashore	Govt.	Urban	50	Bengali
17.	Jashore Jilla School, Jashore	Jashore	Jashore	Govt.	Urban	54	Bengali
18.	Hazi Faeyz Uddin Girls High School, Boira, Khulna	Khulna	Jashore	Private	Urban	53	Bengali
19.	Saforon Nessa Girls High School, Khulna	Khulna	Jashore	Private	Urban	50	Bengali

20.	Matamohury girls High School, Alikadom, Bandharbon	Bandharbon	Chittagong	Semi-Govt.	Sub-Urban	56	Bengali
21.	Bandharban Govt.Boys High School, Bandharban	Bandharbon	Chittagong	Govt.	Urban	42	Bengali
22.	Sangu High School, Hafezghuna, Bandhorban	Bandharbon	Chittagong	Semi-Govt.	Sub-Urban	33	Bengali
23.	Rowshan Ara Memorial Shishu Shorgha Bhidda Niketon, Tetulia, Ponchagor	Ponchagor	Dinajpur	Private	Urban	70	Bengali
24.	Robarts gong High Scool & college, Alamnagor, Rongpur	Rongpur	Dinajpur	Semi-Govt.	Urban	90	Bengali

Out of the total 2121 students included in the study, 985 were male and 1136 were female. And among the total number of students, 514 came from rural areas, 584 came from semi-urban areas and 1023 came from urban areas.

The gender and habitat wise distribution is shown in Table 3.2, and the locality wise distribution is shown in Table 3.3. The illustration is shown is figure 3.2 below:

Table 3.2 Distribution of Sample according to Habitat

Variable	Rural	Semi-Urban	Urban	Total
Male	N= 240	N= 252	N= 493	985 (46.4%)
Female	N= 274	N= 332	N= 530	1136 (53.6%)
Total	514 (24.2%)	584 (27.5%)	1023 (48.2%)	2121

Figure 3.3 Gender and Habitat wise Distribution of Sample
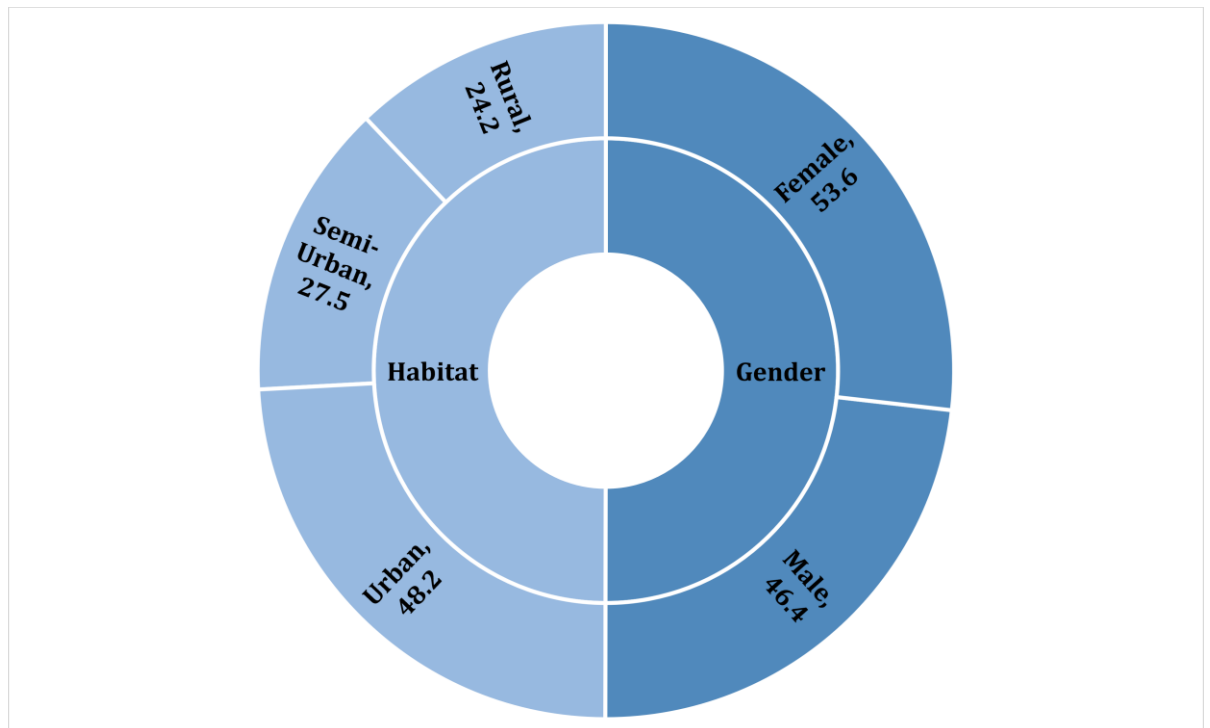
Out of the total (n= 2121) sample, 631children were from nuclear families and 1490 children were from joint families. The distribution is shown in table 3.3 and the illustration is shown in figure 3.3.

Table 3.3 Distribution of Sample according to Family Type

Variable	Nuclear	Joint	Total
Male	N= 673	N= 312	985 (46.4%)
Female	N= 817	N= 319	1136 (53.6%)
Total	1490 (70.2%)	631 (29.8%)	2121

Figure 3.4 Family Type wise Distribution of Sample
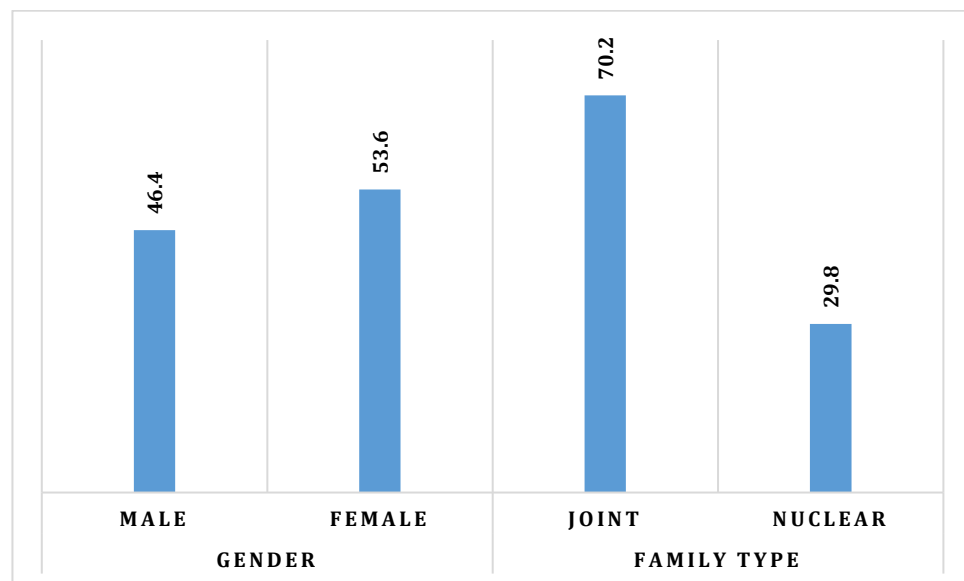
Out of the total 2121 students included in this study, 47 male, 101 female adolescents (Total Illiterate Fathers, n=148) whose fathers were Illiterate and 58 male, 86 female adolescents (Total Illiterate Mothers, n=144) whose mothers were Illiterate.

Out of the total sample (n=2121), there were 200 male, 214 female adolescents (Total Primary Education Level, n=414) whose fathers completed the Primary Education Level and 199 male, 227 female adolescents (Total Primary Education Level, n=426) whose mothers were completed the Primary Education Level.

237 male, 296 female school adolescents (Total Secondary Education Level, n=533) whose fathers completed the Secondary Education Level and 348 male, 392 female adolescents (Total Secondary Education Level, n=740) whose mothers were completed the Secondary Education Level.

501 male, 525 female school adolescents (Total Higher Study, n=1026) whose fathers completed the Higher Studies and 380 male, 431 female adolescents (Total Higher Studies, n=811) whose mothers were completed the Higher Studies.

The summary of the sample distribution is shown in table 3.4 and the illustration is shown in figure 3.4.

Table 3.4 Distribution of Sample according to Education Level of Father & Mother

Variable	Illiterate		Primary		Secondary		Higher Study		Total	
Parents	Father	Mother	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Male	N= 47	N= 58	N= 200	N= 199	N= 237	N= 348	N= 501	N= 380	985 (46.4%)	985 (46.4%)
Female	N= 101	N= 86	N= 214	N= 227	N= 296	N= 392	N= 525	N= 431	1136 (53.6%)	1136 (53.6%)
Total	148 (7.0%)	144 (6.8%)	414 (19.5%)	426 (20.1%)	533 (25.1%)	740 (34.9%)	1026 (48.4%)	811 (38.2%)	2121	2121

Figure 3.5 Distribution of Sample according to Education Level of Father & Mother
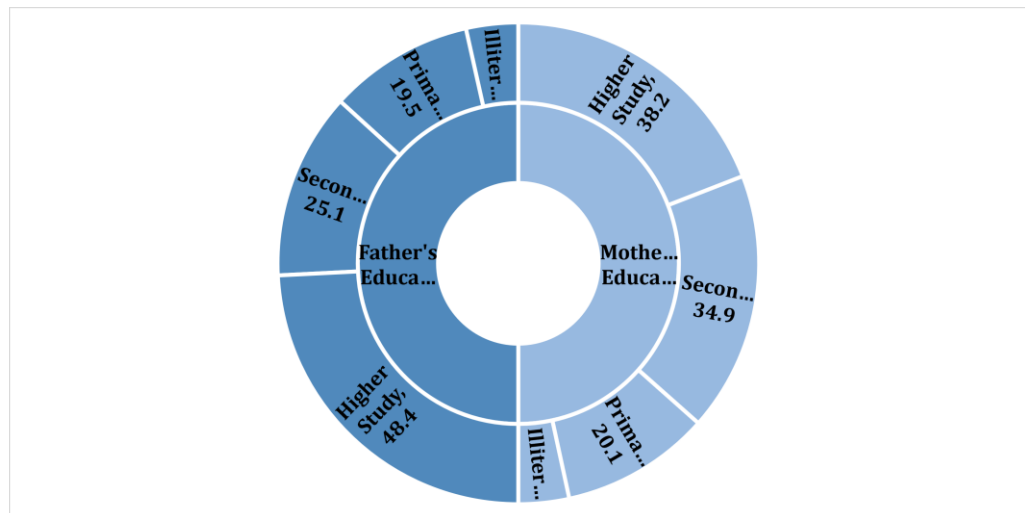
Out of the total adolescents (n= 2121) in this study, 586 were attending school located in the rural areas, 507 were sub-urban areas and 1028 students in urban areas. School Locality wise distribution is shown in table 3.5 and the illustration is shown in figure 3.5 below.

Table 3.5 Distribution of Sample according to Location of the schools

Variable	Rural	Sub-Urban	Urban	Total
Male	**N= 263**	**N= 230**	**N= 492**	**985 (46.4%)**
Female	**N= 323**	**N= 277**	**N= 536**	**1136 (53.6%)**
Total	**586 (27.6%)**	**507 (23.9%)**	**1028 (48.5%)**	**2121**

Figure 3.6 Distribution of Sample according to Location of the schools
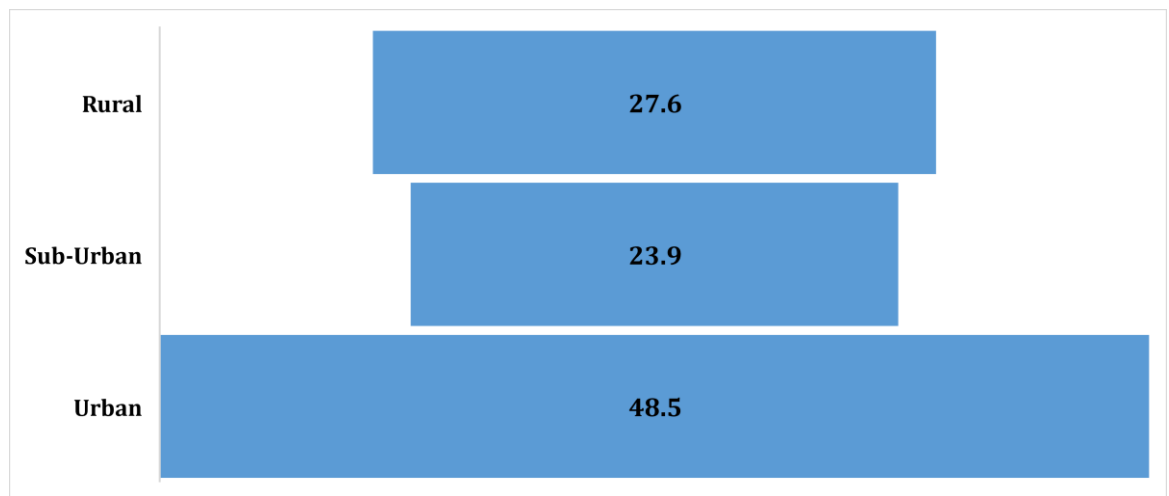
Out of the total sample (n=2121) in this study, where 375 male and 198 female school-going adolescents (Total Adolescents, n=573), studying in Government schools, 466 male and 600 female students (Total Adolescents, n=1066) studying in Semi-Government schools and 144 male and 338 female students (Total Adolescents, n=482) studying in Private schools. The gender and school type wise distribution are shown Table 3.6 and the illustration is shown in figure 3.6 below:

Table 3.6 Distribution of Sample according to Gender and School Type

Variable	Govt.	Semi Govt.	Private	Total
Male	N= 375	N= 466	N= 144	985 (46.4%)
Female	N= 198	N= 600	N= 338	1136 (53.6%)
Total	573 (27.0%)	1066 (50.3%)	482 (22.7%)	2121

Figure 3.7 Distribution of Sample according to Gender and School Type

- Gender Male - Gender Female - School Type Govt. - School Type Semi-Govt. - School Type Private
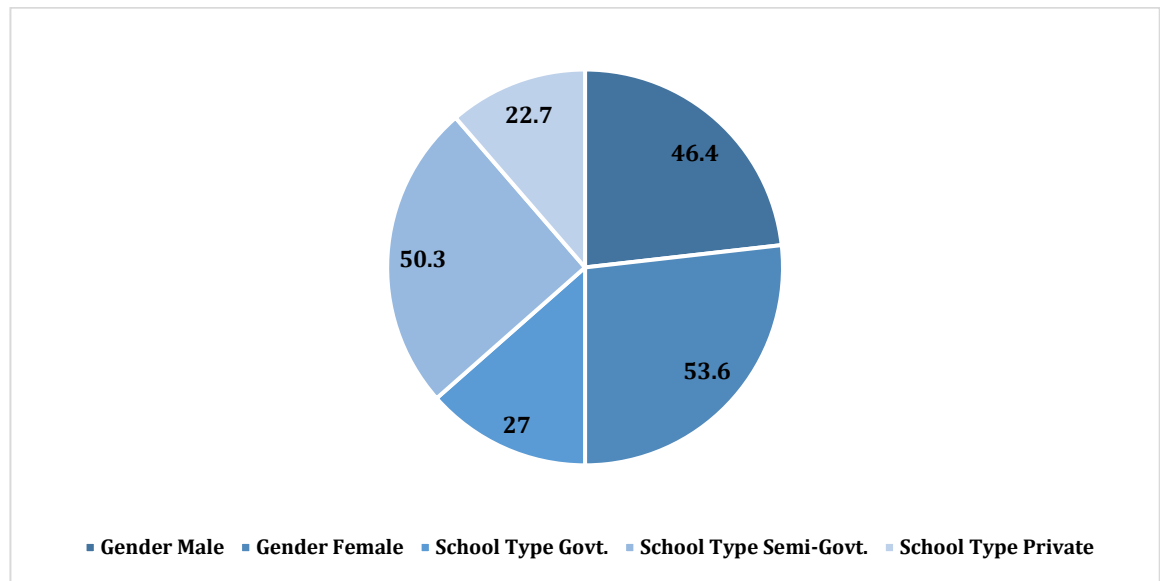
Out of the total sample 2121 in this present study, 884 male, 1036 female (Total Students, n=1920) students were studying in Bengali Medium School and only 101 male, 100 female (Total Students, n=201) students were studying in English Medium School. The gender and Medium of Instruction wise distribution are shown Table 3.7 and the illustration is shown in figure 3.7and 3.8 below:

Table 3.7 Distribution of Sample according to Gender and Medium

Variable	Bengali Medium	English Medium	Total
Male	N= 884	N=101	985 (46.4%)
Female	N= 1036	N= 100	1136 (53.6%)
Total	1920 (90.5%)	201 (9.5%)	2121

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Figure 3.8 Gender Distribution
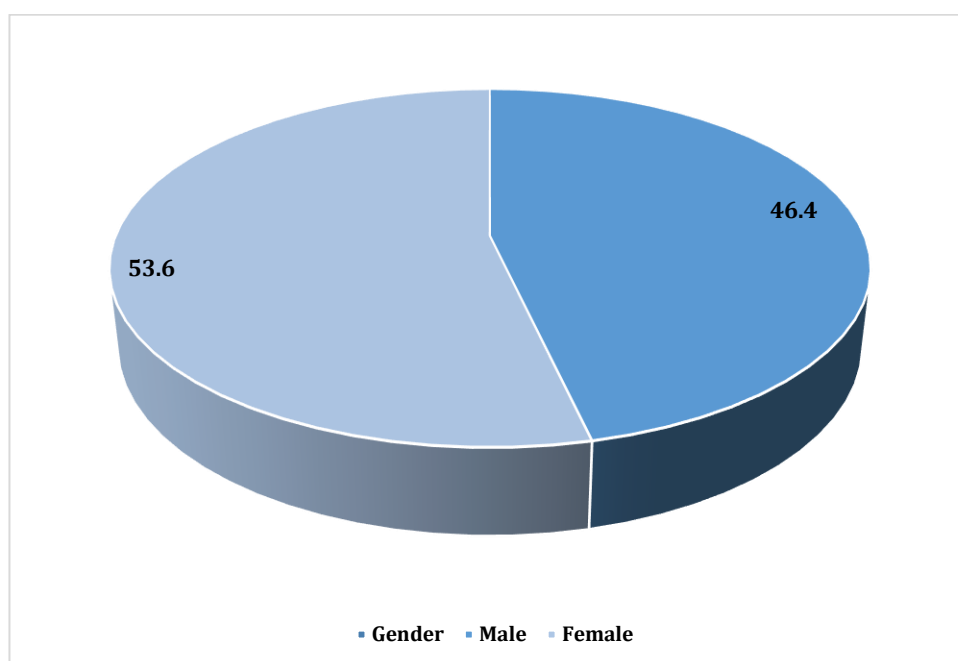
Figure 3.9 Medium Distribution
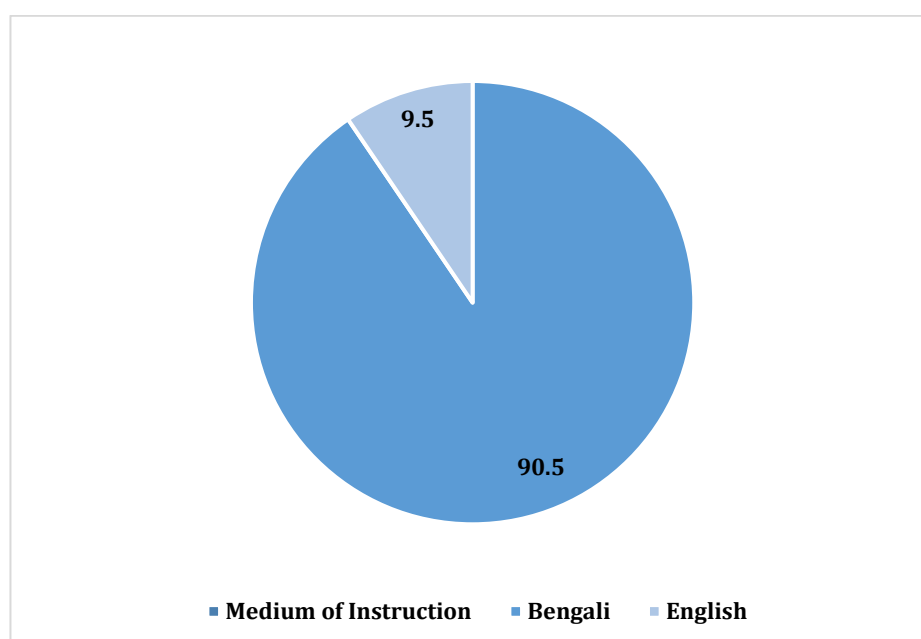
Table 3.8 Distribution of Sample according to Different Variables

Variable	Value 1 (n1)	Value 2 (n2)	Value 3 (n3)	Value 4 (n4)	Total (N)
Gender	Male (985)	Female (1136)	–	–	2121
Habitat	Rural (514)	Semi-Urban (584)	Urban (1023)	–	2121
Family Type	Nuclear (631)	Joint (1490)	–	–	2121
Father's Education	Illiterate (148)	Primary (414)	Secondary (533)	Higher Study (1026)	2121
Mother's Education	Illiterate (144)	Primary (426)	Secondary (740)	Higher Study (811)	2121
Locality of School	Rural (586)	Sub-Urban (507)	Urban (1028)	–	2121
School Type	Govt. (573)	Semi-Govt. (1066)	Private (482)	–	2121
Medium of Instruction	Bengali (1920)	English (201)	–	–	2121

Figure 3.10 Percentage Distribution of Sample according to different Variables
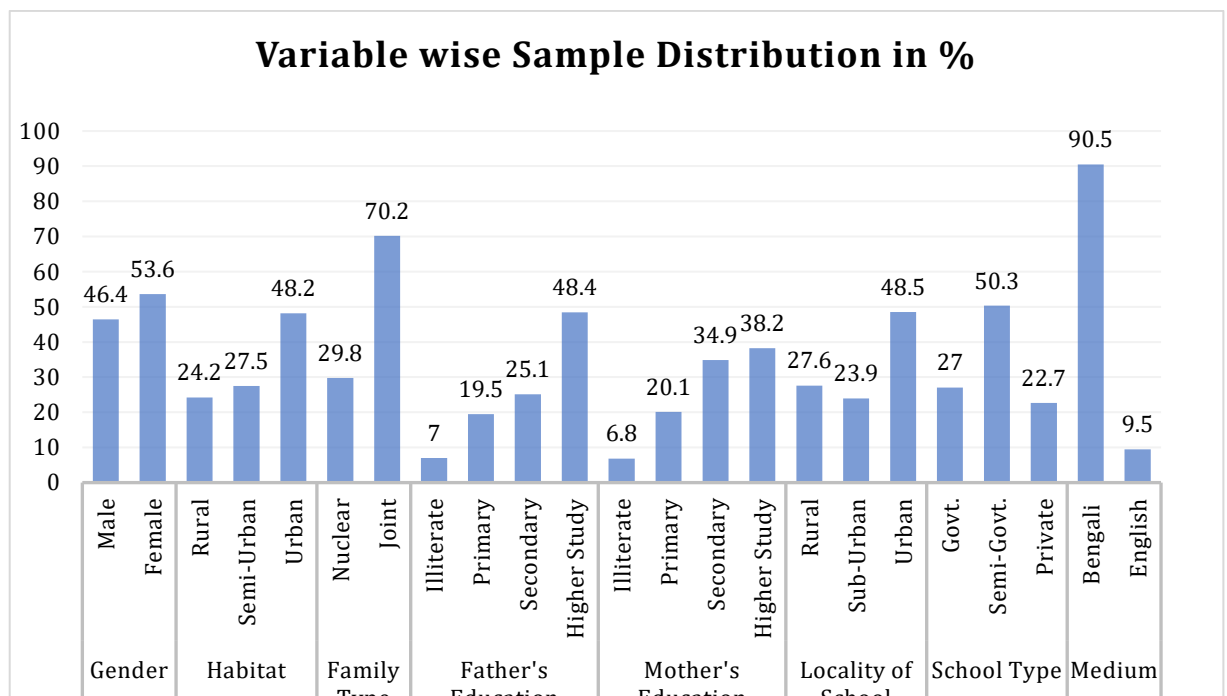
3.1.3 Description of Variables

A variable is measurable characteristic or a logical set of the subject (participant) of the research that can vary. In the present study the following variables were identified and used.

1. ***Independent Variables:*** Independent variables are believed to be the influencing variables that affect the dependent variables. The following independent variables were used in the study.

    i. Age

    ii. Gender

    iii. Habitat

    iv. Locality of school

    v. Medium of instruction

    vi. Type of family

    vii. Type of school

    viii. Father's educational qualification

    ix. Mother's educational qualification

2. ***Dependent Variable:*** In the present study, Mental Health problem of the adolescent school going children as outcome was the dependent variable. The dependent variable Mental Health or total difficulty (TD) includes its various dimensions or sub variables – Emotional Problem (EP), Conduct Problem (CP), Hyperactivity Problem (HP), Peer Problem (PP) and Pro-social Problem (PrS). The study aimed at measuring the influence of independent variables on the status of dependent variable – Total Difficulty or Mental Health Problem. It was assumed that there might be some other extraneous variables which could influence the dependent variable. Randomization technique in selection of the school or sample selection was used to control these intervening variables. It was hoped that this randomization might neutralized the effects of intervening variables with equal probability.

Figure 3.11   Thematic Diagram of the Variables
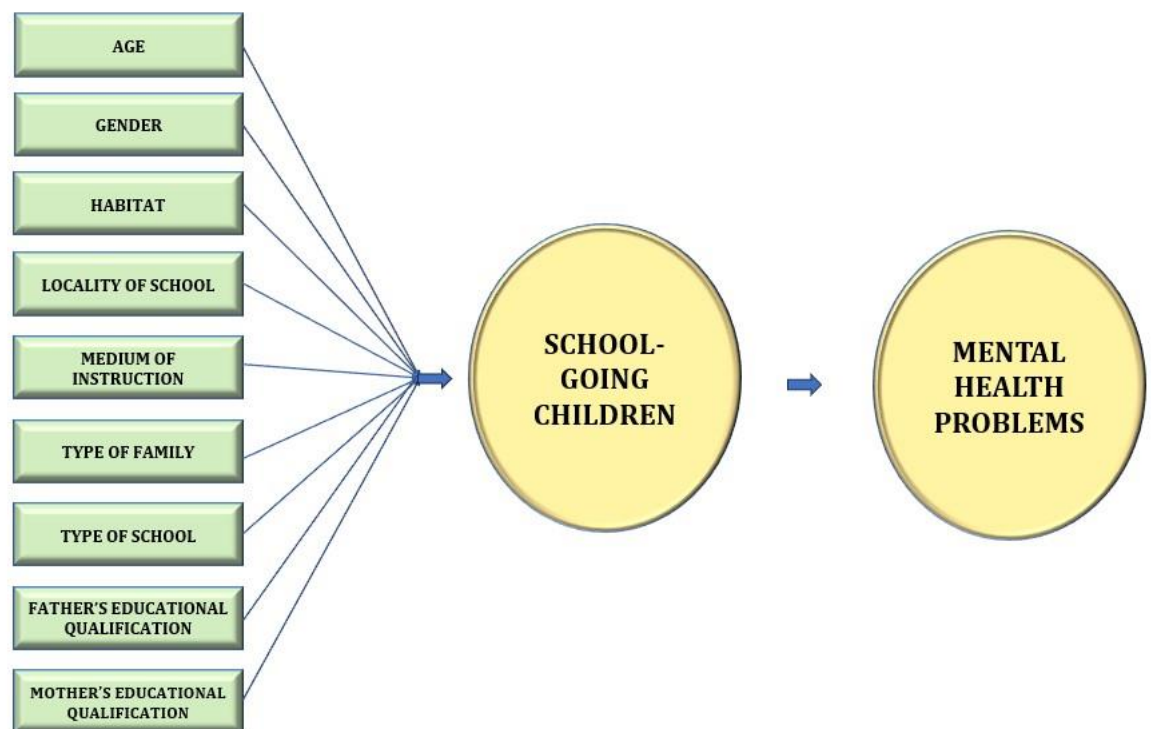
3.1.4 Tools of Data Collection

It is important for a study to gather data to test the hypotheses or answer the research questions. Tools are distinctively used to collect information and data to describe and qua version of the quantify the data according to the study design. In the present study the self-report version of the Strength and Difficulties Questionnaire (SDQ) was used to collect data as it is considered to be simple and user-friendly questionnaire. A formal permission was obtained via mail from the Youthinmind to use the questionnaire for this study (Appendix 2).

For the purpose of collecting data from the concerned sample two separate tools will be implemented they are as follows:

1. **<u>Information Schedule</u>:** Self framed information schedule will be developed by the researcher to collect the general background information of the respondents on i.e., gender, age, location of the schools, medium of instruction in school, family type and number of siblings.

2. **Strengths and Difficulties Questionnaire:** In the present study strengths and difficulties questionnaire (SDQ) will be used for the data collection purpose from the concerned samples. The SDQ questionnaire is developed by Robert Goodman (1997) and it is considered as a multi- informant screening tool for identifying both emotional and behavioural problems in children. The tool is further divided into 5 sub-scales measuring 5 dimensions of mental health problems which consist of 5 questions in each dimension. The five dimensions are as follows:

1. Emotional Problems (EP),
2. Conduct Problems (CP),
3. Hyperactive problems (HP),
4. Peer Problems (PP) and
5. Pro-social Problems (PrS).

About SDQ: Robert Goodman (1997) developed a multi-information screening tool to identify both emotional and behavioural issues in children to assess their Mental Health status. Screening tools should be culturally relevant. The selection of culturally appropriate and age/development stage specific tools may be a minefield (Bhola et al. 2003). This screening tool can be used in over 60 languages including Bengali, Hindi, and English. It has been used in epidemiological studies in more than 40 countries. This tool is culture free and can be used as a brief instrument to collect information on the symptoms of internalizing and externalizing child Mental health problems in children aged 4-17 years. It is used to measure 25 attributes with some positives and some negatives. The 25 attributes are further broken down into 05 subscales consisting of 05 attributes each, see Appendices-3 and 4 for details.

i)   Emotional Problems (EP) – 05 items – Question Nos. 3,8,13,16,24

ii)   Conduct Problems (CP) - 05 items - Question Nos. 5, 7, 12, 18, 22

iii)   Hyperactive problems (HP) - 05 items - Question Nos. 2, 10, 15, 21, 25

iv)   Peer Problems (PP) - 05 items - Question Nos. 6, 11, 14, 19, 23

v)   Pro-social Behaviour (PrS) - 05 items - Question Nos. 1, 4, 9, 17, 20

The response of each item is scored 0, 1 or 2, where '0' stands for 'Not True', '1' stands for 'Somewhat True' and '2' stands for 'Certainly True'. The scores for each sub-scale ranges from 0 to 10. Adding the scores of Emotional Problem, Conduct Problem, Hyperactive Problem and Peer Problem, the Total Difficulty score or the Mental Health status is generated. The score of Pro-social Behaviour is not taken into account for this purpose. Table 3.7 shows the value of the scores.

Table 3.9 Value of SDQ scoring

Sub-Scales	Close to average	Slightly raised/ (lowered*)	High/ (Low*)	Very High/ (Very Low*)
Total Difficulty score**	0-13	14-16	17-19	20-40
Emotional Problem score	0-3	4	5-6	7-10
Conduct Problem score	0-2	3,4	5	6-10
Hyperactivity score	0-5	6,7	8	9,10
Peer Problem score	0-2	3	4	5-10
Prosocial score	8-10	7	6	0-5

Only for Pro-social score.

Total Difficulty refers to Overall Mental Health

Note: **Value (Meaning) of ratings considered:**

 Close to average – **Normal**

 Slightly raised - Minor or No problem means **Normal**

 High **– Borderline**; may have problems in future, if not taken care of

 Very High – **Abnormal**; Severe or definite problem, requires interventions

Evaluation of SDQ: The SDQ has shown to be of acceptable reliability and validity, performing at least as well as Rutter Questionnaire and Child Behaviour Checklist (Goodman & Scott as quoted by Hussain, S.A. 2010). Research by Kessler et al. has shown that the brief version of the SDQ is a reliable and valid instrument for screening psychiatric disorder in adolescent (Pastor et al. 2012). Goodman, Ford, Simmons,

Gatward and Meltzer reported the scale's internal reliability to be acceptable with a Cronbach alfa coefficient of 0.73.5, 10 as quoted by Reddy et al. (2011). In a study Koskelainen et al. (2000) found that the internal consistency and validity of SDQ was 0.71 and opined it to be a useful and promising screening instrument for epidemiological research and clinical purposes.

A pilot study was conducted by this researcher and the test-retest correlation was found to be very high as good as 0.78.

Information sheet: Along with the SDQ questionnaire, an information sheet was provided to each of the students participating in the study to collect basic information.

3.2 Procedure

This phase of study briefly outlines the different steps of data collection and the process of analysing it.

3.2.1 Data Collection

Data for the present research study were collected to study the Mental Health problems of the adolescent school going children. Initially 24 schools were randomly selected. These schools include both English and Bengali medium and located in rural, semi-urban and urban area. The researcher personally contacted the head of the schools and explained the purpose of the study and sought permission to conduct the study. A total number of 24schools, 02 English medium and 20 Bengali medium schools finally agreed to participate in the study. With the consent of the school authority a schedule was prepared for data collection. The schedule is shown in Table 3.10 below.

Table 3.10 Schedule of Data Collection

SL. No.	Date	School Name
1.	04/07/2022	Mohammadpur Preparatory Girls High School
2.	03/07/2022	Mohammadpur Preparatory Boys High School, Dhaka
3.	26/06/2022	Shulakuri High School, Modhupur, Tangail
4.	04/09/2022	Boroikuri High School, Modhupur, Tangail
5.	04/09/2022	Bhutia High School, Modhupur, Tangail
6.	04/09/2022	Prgacha St. Pol High School,Pirgacha, Modhupur, Tangail
7.	27/06/2022	Jamalpur Jila Govt. Boys High School, Jamalpur
8.	27/06/2022	Nandina Negjahan Girls High Shool Nandina, Jamalpur
9.	04/09/2022	Binnakuri High School, Moktagacha, Mymemsigh
10.	04/09/2022	Molajani High School, Muktagacha, Mymensigh
11.	12/06/2022	ndilpur Abdul Mozid High School, Shreebordhi, Sherp ndilpur Abdul Mozid High School, Shreebordhi, Sherp ndilpur Abdul Mozid High School, Shreebordhi, Sherp ndilpur Abdul Mozid High School, Shreebordhi, Sherp Indilpur Abdul Mozid High School, Shreebordhi, Sherp Indilpur Abdul Mozid High School, Shreebordhi, Sherp Indilpur Abdul Mozid High School, Shreebordhi, Sherp

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		Indilpur Abdul Mazid High School, Shreebordhi, Sherpur
12.	20/06/2022	Madla High school,Khulumbaria , Shailokupa, Jhinaidha
13.	20/06/2022	Magura Adharsh girls high School, Magura
14.	19/06/2022	Magura Govt. Boys high School, Magura
15.	21/06/2022	Khuksa Govt. Pilot High School, Khoksa, Kushtia
16.	10/09/2023	Jashore Govt. Girls School, Jashore
17.	12/09/2023	Jashore Jilla School, Jashore
18.	13/09/2023	Hazi Faeyz Uddin Girls High School, Boira, Khulna
19.	13/09/2023	Saforon Nessa Girls High School, Khulna
20.	05/07/2022	Matamohury girls High School,Alikadom, Bandharbon
21.	05/07/2022	Bandharban Govt.Boys High School, Bandharban
22.	05/07/2022	Sangu High School, Hafezghuna, Bandhorban
23.	27/07/2022	Rowshan Ara Memorial Shishu Shorgha Bhidda Niketon, Tetulia, Ponchagor
24.	20/09/2022	Robarts gong High Scool & college, Alamnagor, Rongpur

On the schedule date, during the regular class, the questionnaires were distributed to all the students present in the class. They were asked to read the questionnaire and were explained how to attempt it. The researcher was available in the class room to answer and clarify to the queries of the students. It took an average of 15 minutes per class. Then the students were asked to fill up the information sheet regarding their family type and number of siblings they have. It was ensured that the students respond to the questions

freely and spontaneously, and the privacy of the responses made by them was maintained.

3.2.2 Data Quality

Both the researcher and the supervisor were watchful to ensure the quality of the data and several steps were taken to maintain it. The comparison of enumerated and post enumerated data was found to be good as most of the indicators matched in about more than 90 per cent of cases which ensured the quality of the data.

3.2.3 Tabulation of Data

Each of the 25 responses of individual questionnaires was marked with scoring values. The scores of the sub-scale were added and finally the scores of the sub-scales were added to find out the score of total difficulty. A summary was prepared at the bottom of individual sheet. These data so found were edited and tallied to obtain numerical data. The whole data set so acquired was systematically and sequentially tabulated for further analysis and interpretation.

3.2.4 Data Analysis

Raw data of 2121 students gathered were individually tabulated in excels sheet. Data was analysed using Statistical Package for Social Sciences (SPSS package), version 20.0 because it accommodates a large number of variables at the same time and reduces detailed laborious calculations by hand and thereby minimizes the chance of error. For the purpose of data analysis quantitative statistical method will be employed. Mean and Standard deviation and graphical representation will be used for showing descriptive statistical findings. Chi-square test of independence is used as inferential statistical for analysing the significance difference. The Whole process of analysis and interpretation of data will be done with the help of IMB SPSS version 20.0.

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CHAPTER - IV
ANALYSIS AND INTERPRETATION OF DATA

CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

The present chapter has been divided into two parts. The first part is the statistics with analysis and interpretation using descriptive statistics and represented by means of percentage analysis and graphical representation. The second part deals with inferential statistics using Chi-square test to find out significant differences of or comparing the Means of variables and predictor sub-variables.

4.1 Analysis of Mental Health Problems on the basis of Different Variables using Descriptive Statistics

4.1.1. Assessment of Mental Health Problems in Adolescent School-going Children

The study was conducted on a total number of 2121 of students of the age group of 11 – 17 years attending schools studying in class VI-VIII drawn from English and Bengali Medium schools in Bangladesh, located both in rural and urban areas of Bangladesh and surrounding districts. The overall degrees of Mental Health problem (Total Difficulty) of the total adolescent school going children are shown in table 4.1.

Table 4.1 Percentage distribution of Mental Health problem of school going Adolescents

			Total
Total Difficulty	**Closed to Average**	Count	539
		% of Total	25.41%
	Slightly Raised	Count	499
		% of Total	23.53%
	High	Count	413

		% of Total	19.47%
	Very High	Count	670
		% of Total	31.59%
		Count	2121
Total		% of Total	100%

Out of the total (N=2121) students i.e. 31.59% showed Very High score of SDQ in total difficulty. This indicates that they fall under abnormal category, which suggests that these children have definite problems in coping with the difficulties of daily life. These students need intervention. Another 413 students (19.47%) students scored High and are in border line. They may have problems, if not taken care of. Rest of the students may have minor or no difficulty scoring 23.53% as Slightly Raised and 25.41% as Close to Average in SDQ score, which can be termed as normal. The illustration is given in Figure 4.1.

Figure 4.1 Total Difficulty (Mental Health) Score
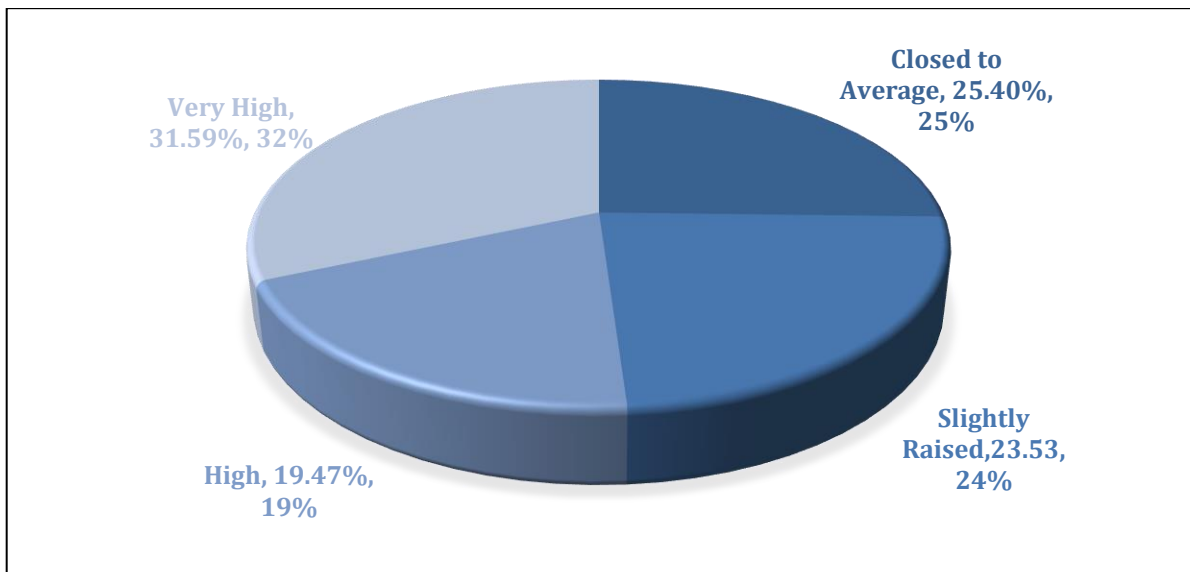
4.1.2 Age wise Distribution of Mental Health Problem

The study showed that the rate of prevalence of Mental Health problems varied for different age group of students which is given in Table 4.2.

Table 4.2 Percentage distribution of Mental Health problem on the basis of Age Group of the Students

*Total Difficulty * Age of the Students Crosstabulation*

			Age (in years) of the students							Total
			11	**12**	**13**	**14**	**15**	**16**	**17**	
Total Difficulty	**Closed to Average**	Count	26	39	72	85	126	78	113	539
		% within Age group	4.82%	7.24%	13.36%	15.77%	23.38%	14.47%	20.96%	25.41%
		% of Total	1.23%	1.84%	3.39%	4.01%	5.94%	3.68%	5.33%	25.41%
	Slightly Raised	Count	15	22	69	80	117	102	94	499
		% within Age group	3.01%	4.41%	13.83%	16.03%	23.45%	20.44%	18.84%	23.53%
		% of Total	0.71%	1.04%	3.25%	3.77%	5.52%	4.81%	4.43%	23.53%
	High	Count	7	17	41	68	99	98	83	413
		% within Age group	1.69%	4.12%	9.93%	16.46%	23.97%	23.73%	20.10%	19.47%
		% of Total	0.33%	0.80%	1.93%	3.21%	4.68%	4.62%	3.91%	19.47%
	Very High	Count	14	23	64	106	182	146	135	670
		% within Age group	2.09%	3.43%	9.55%	15.82%	27.16%	21.79%	20.15%	31.59%
		% of Total	0.66%	1.08%	3.02%	5.00%	8.58%	6.88%	6.36%	31.59%
Total	**Total**	Count	52	101	246	339	524	424	425	2121
		% within Age group	100%	100%	100%	100%	100%	100%	100%	100%
		% of Total	2.45%	4.76%	11.60%	15.98%	24.71%	19.10%	20.04%	100%

From the above table it has been observed that out of the total students 524 (24.71%) belonged to the age group of 15. Within this age group 182 (27.16%) were rated Vey High or Abnormal score which means they have problems, with another 23.97% as High or Borderline. This was followed by the students belonging to the age group of 14 and within

this group 15.82% were rated Very High or Abnormal SDQ score with another 16.46% as High; age group of 16 with 21.79% Very High and 23.11% High. This was followed by the students belonging to the age group of 11 and within this group 20.09% were rated Very High or Abnormal SDQ score with another 1.69% as High; age group of 17 with 20.15% Very High and 20.10% High. Age group of 12 had the lowest score with 3.43% as Very High and 4.12% High. The age wise distribution of Mental Health Problems (Very High Score) is illustrated in Figure 4.2.

Figure 4.2 Age Wise Distribution of Mental Health Problems

AGE VS. TOTAL DIFFICULTY (MH PROBLEM)

Legend: ■ Closed to Average ■ Slightly Raised ■ High ■ Very High

Age	Closed to Average	Slightly Raised	High	Very High
11	4.82	3.01	1.69	2.09
12	7.24	4.41	4.12	3.43
13	13.36	13.83	9.93	9.55
14	15.77	16.03	16.46	15.82
15	23.38	23.45	23.97	27.16
16	14.47	20.44	23.73	21.79
17	20.96	18.84	20.1	20.15
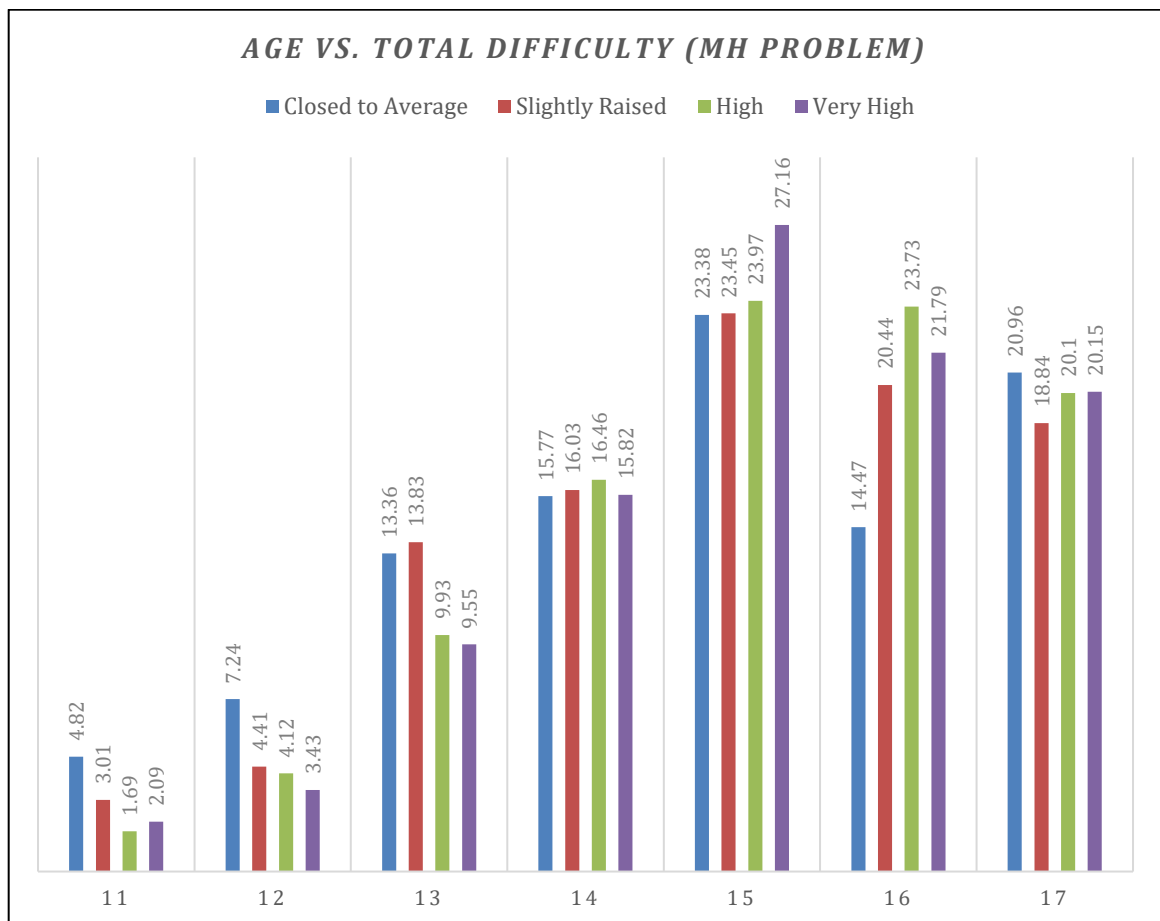
4.1.3 Comparison of Mental Health Problem between Male and Female Students

Gender wise analysis of Mental Health Problems of the students as emerged through SDQ scoring is given in the following Table 4.3.

Table 4.3 Percentage distribution of Mental Health problem on the basis of Gender Variable

*Total Difficulty * Gender of the Students Crosstabulation*

			Gender		Total
			Male	**Female**	
Total Difficulty	**Closed to Average**	Count	266	273	539
		% within Gender	49.35%	50.65%	25.41%
		% of Total	12.54%	12.87%	25.41%
	Slightly Raised	Count	252	247	499
		% within Gender	50.50%	49.45%	23.53%
		% of Total	11.88%	11.65%	23.53%
	High	Count	185	228	413
		% within Gender	44.79%	55.21%	19.47%
		% of Total	8.72%	10.75%	19.47%
	Very High	Count	282	388	670
		% within Gender	42.09%	57.91%	31.59%
		% of Total	13.30%	18.29%	31.59%
Total	**Total**	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

The gender wise analysis of SDQ score shown in table 4.3 indicates that out of 985 (46.44%) male students under study, 282 (42.09%) have Very High or Abnormal SDQ scoring indicating having definite Mental Health Problems, and out of 1136 female students 388 (57.91%) showed Very High score. Female students have more problems than that of male students. 55.21% of the female students and 44.79% male were on the borderline having High SDQ score and they are likely to be at risk. 49.35% males with 50.65% female students were rated close to average, and 50.50% males and 49.45%

female students scored slightly raised. These age group may be considered as Normal. Figure 4.3 illustrates the gender wise distribution of Mental Health Problems of the children under study.

Figure 4.3 Gender wise Distribution of Mental Health Problems
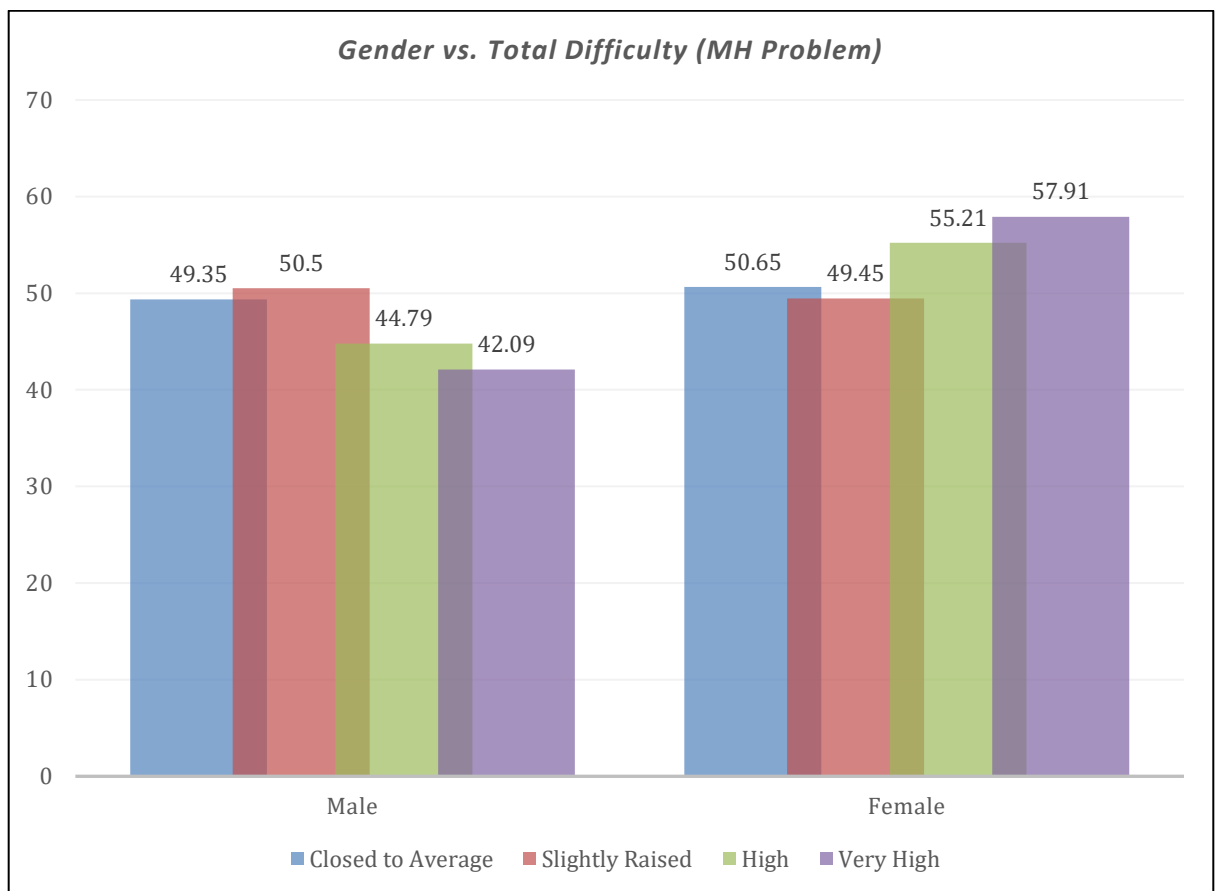
4.1.4 Comparison of Mental Health Problems on the basis of Habitat

Table 4.4 Percentage distribution of Mental Health Problems on the basis of Habitat

Total Difficulty * Habitat of the students Crosstabulation

			Habitat			Total
			Urban	Semi-Urban	Rural	
Total Difficulty	**Closed to Average**	Count	175	200	164	539
		% within Age group	32.47%	37.10%	30.43%	25.41%
		% of Total	8.25%	9.43%	7.73%	25.41%
	Slightly Raised	Count	220	151	128	499
		% within Age group	44.09%	30.26%	25.65%	23.53%
		% of Total	10.37%	7.12%	6.03%	23.53%
	High	Count	237	81	95	413
		% within Age group	57.38%	19.61%	23.00%	19.47%
		% of Total	11.17%	3.82%	4.48%	19.47%
	Very High	Count	391	152	127	670
		% within Age group	58.36%	22.69%	18.96%	31.59%
		% of Total	18.43%	7.17%	5.99%	31.59%
Total	**Total**	Count	1023	584	514	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.23%	27.53%	24.23%	100%

Table 4.4 gives an account of Total Difficulty or Mental Health problems with respect to the habitat (Urban, Semi-Urban and Rural) the children belong to. Out of the total students under study 48.23% (N=1023) were from Urban, 27.53% (N=584) were from Semi-Urban and 24.23% (N=514) belonged to Rural areas. 391 (58.36%) of the children

from Urban areas scored Very High SDQ scores which indicates that they have definite Mental Health problem. Another 237 (57.38%) children from Urban areas had Borderline scores and are likely to have some sort of problems. Less number of students from Rural areas showed having Mental Health problems in comparison to children belonging to Urban and Semi-Urban areas. 18.96% (N=127) of the children from the Rural areas have the Very High SDQ score with 23.00% (N=95) High SDQ score. Rest of the students from all the groups may have minor or no problems.

Figure 4.4 Habitat wise Distribution of Mental Health Problems
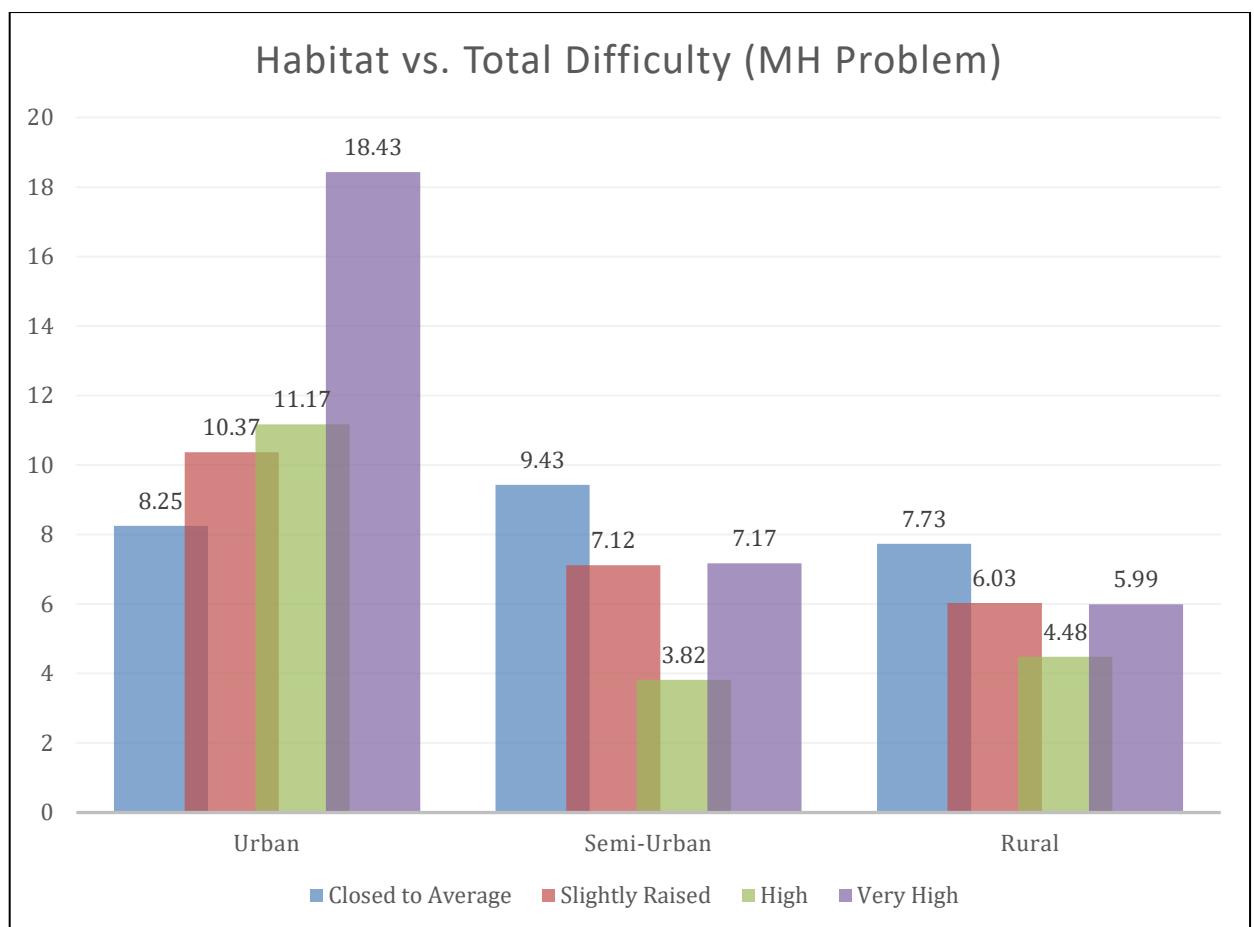
4.1.5 Comparison of Mental Health Problem between Children Belonging to Nuclear and Joint Family

The 4.5 gives an account of the Total Difficulty or Mental Health problems with respect to the family type (Nuclear and Joint family) the children belonged to. Out of the total students under study 1490 (70.25%) were from Nuclear family and 631 (29.75%) belonged to Joint Family. 425 (63.43%) of the children from Nuclear Family scored Very High SDQ scores which indicates that they have definite Mental Health problems. Another 268 (64.89%) children from Nuclear Family had Borderline scores and are likely to have Mental Health problems. Less number of students from Joint Family showed having Mental Health problems in comparison to children belonging to Nuclear Family. 36.57% (N=245) of the children from the Joint Family have the Very High SDQ scores with 35.11% (N=145) High SDQ score. Rest of the students from both the groups may have minor or no problem.

Table 4.5 Percentage Distribution of Mental Health Problems on the basis of Family Type Variable

*Total Difficulty * Family Type Crosstabulation*

			Family Type		Total
			Nuclear	**Joint**	
Total Difficulty	**Closed to Average**	Count	445	94	539
		% within Age group	82.56%	17.44%	25.41%
		% of Total	20.98%	4.43%	25.41%
	Slightly Raised	Count	352	147	499
		% within Age group	70.54%	29.46%	23.53%
		% of Total	16.60%	6.93%	23.53%
	High	Count	268	145	413
		% within Age group	64.89%	35.11%	19.47%
		% of Total	12.64	6.84%	19.47%
	Very High	Count	425	245	670
		% within Age group	63.43%	36.57%	31.59%
		% of Total	20.04%	11.55%	31.59%
		Count	1490	631	2121

Total	% within Age group	100%	100%	100%
Total	% of Total	70.25%	29.75%	100%

The illustration of Mental Health problems of students belonging to Nuclear and Joint family is given figure 4.5

Figure 4.5 Family Type Wise Distribution of Mental Health Problems
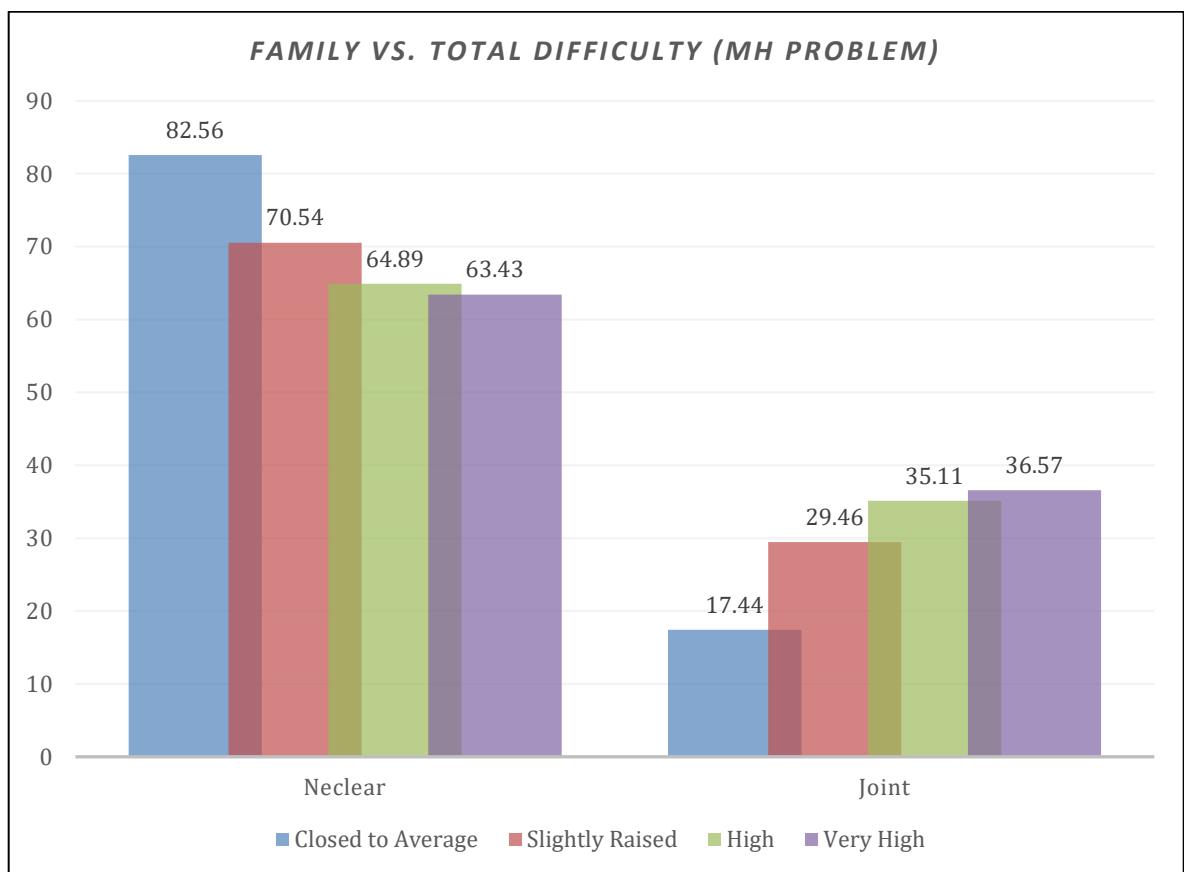
4.1.6 Comparison of Mental Health Problem between student's Parental Education Level

The following Table 4.6 and 4.7 shows the state of Mental Health Problems among the children on the basis of their Parental Education Level. Figure 4.6 and 4.7 illustrates the distribution of the students on the basis of their Parental Education Level.

Table 4.6. Percentage distribution of Mental Health Problems on the basis of Father's Education Level.

*Total Difficulty * Father's Education Level of the Students Crosstabulation*

			Father's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Total Difficulty	**Closed to Average**	Count	15	78	123	323	539
		% within Age group	2.78%	14.47%	22.82%	59.93%	25.41%
		% of Total	0.71%	3.68%	5.80%	15.23%	25.41%
	Slightly Raised	Count	21	91	135	252	499
		% within Age group	4.21%	18.24%	27.05%	50.50%	23.53%
		% of Total	0.99%	4.29%	6.36%	11.88%	23.53%
	High	Count	38	86	111	178	413
		% within Age group	9.20%	20.82%	26.88%	43.10%	19.47%
		% of Total	1.79%	4.05%	5.23%	8.39%	19.47%
	Very High	Count	74	159	164	273	670
		% within Age group	11.04%	23.73%	24.48%	40.75%	31.59%

		% of Total	3.49%	7.50%	7.73%	12.87%	31.59%
Total	Total	Count	148	414	533	1026	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.98%	19.52%	25.13%	48.37%	100%

Table 4.6.a. shows the total difficulty score (degree of mental health problems) in relation to Father's Educational attainment of the children under study. Out of total 2121 students, 148 (6.98%) students had Illiterate fathers, 414 (19.52%) students had fathers who had completed Primary school, 533 (25.13%) had fathers who had completed Secondary school and 1026 (48.37%) had fathers who had completed the Higher studies. The result showed that the number of children with mental health problems was higher among those students who had fathers who completed higher studies than those who had no formal education. 11.04% (N=74) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 9.20% (N=38) High or Borderline scores whereas 40.75% (N=273) of the students who had fathers who completed higher studies were rated Very High with 43.10% (N=178) as High SDQ scores. A detailed illustration is given in figure 4.6.a.

Figure 4.6.a. Father's Education Level Wise Distribution of Mental Health Problems

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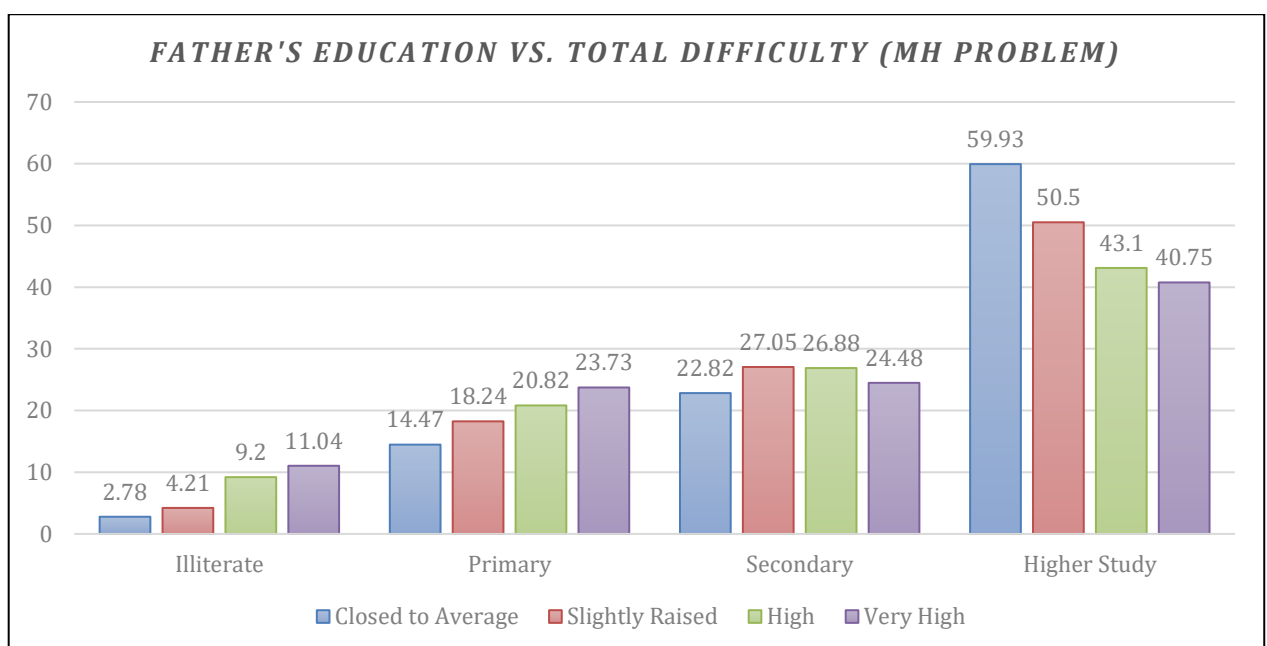
Table 4.7 shows the total difficulty score (degree of mental health problems) in relation to Mother's Educational attainment of the children under study. Out of total 2121 students, 144 (6.79%) students had Illiterate mothers, 426 (20.08%) students had mothers who had completed Primary school, 740 (34.89%) had mothers who had completed Secondary school and 811 (38.24%) had mothers who had completed the Higher studies. The result showed that the number of children with mental health problems was higher among those students who had mothers who completed higher studies than those who had no formal education. 11.34% (N=76) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 6.05% (N=25) High or Borderline scores whereas 29.55% (N=198) of the students who had mothers who completed higher studies were rated Very High with 35.11% (N=145) as High SDQ scores. A detailed illustration is given in figure 4.7.

Table 4.7 Percentage distribution of Mental Health Problems on the basis of Mother's Education Level.

*Total Difficulty * Mother's Education Level of the Students Crosstabulation*

			Mother's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Total Difficulty	Closed to Average	Count	21	79	175	264	539
		% within Age group	3.90%	14.66%	32.47%	48.98%	25.41%
		% of Total	0.99%	3.72%	8.25%	12.45%	25.41%
	Slightly Raised	Count	22	93	180	204	499
		% within Age group	4.41%	18.64%	36.07%	40.88%	23.53%
		% of Total	1.04%	4.38%	8.49%	9.62%	23.53%
	High	Count	25	87	156	145	413
		% within Age group	6.05%	21.07%	37.77%	35.11%	19.47%
		% of Total	1.18%	4.10%	7.35%	6.84%	19.47%
	Very High	Count	76	167	229	198	670
		% within Age group	11.34%	24.93%	34.18%	29.55%	31.59%
		% of Total	3.58%	7.87%	10.80%	9.34%	31.59%

			144	426	740	811	2121
		Count	144	426	740	811	2121
Total	**Total**	% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

Figure 4.6.b. Mother's Education Level Wise Distribution of Mental Health Problems

Mother`s Education vs. Total Difficulty (MH Problem)

Closed to Average: Illiterate 0.99, Primary 3.72, Secondary 8.25, Higher Stusy 12.45
Slightly Raised: Illiterate 1.04, Primary 4.38, Secondary 8.49, Higher Stusy 9.62
High: Illiterate 1.18, Primary 4.1, Secondary 7.35, Higher Stusy 6.84
Very High: Illiterate 3.58, Primary 7.87, Secondary 10.8, Higher Stusy 9.34

Legend: ■ Illliterate ■ Primary ■ Secondary ■ Higher Stusy
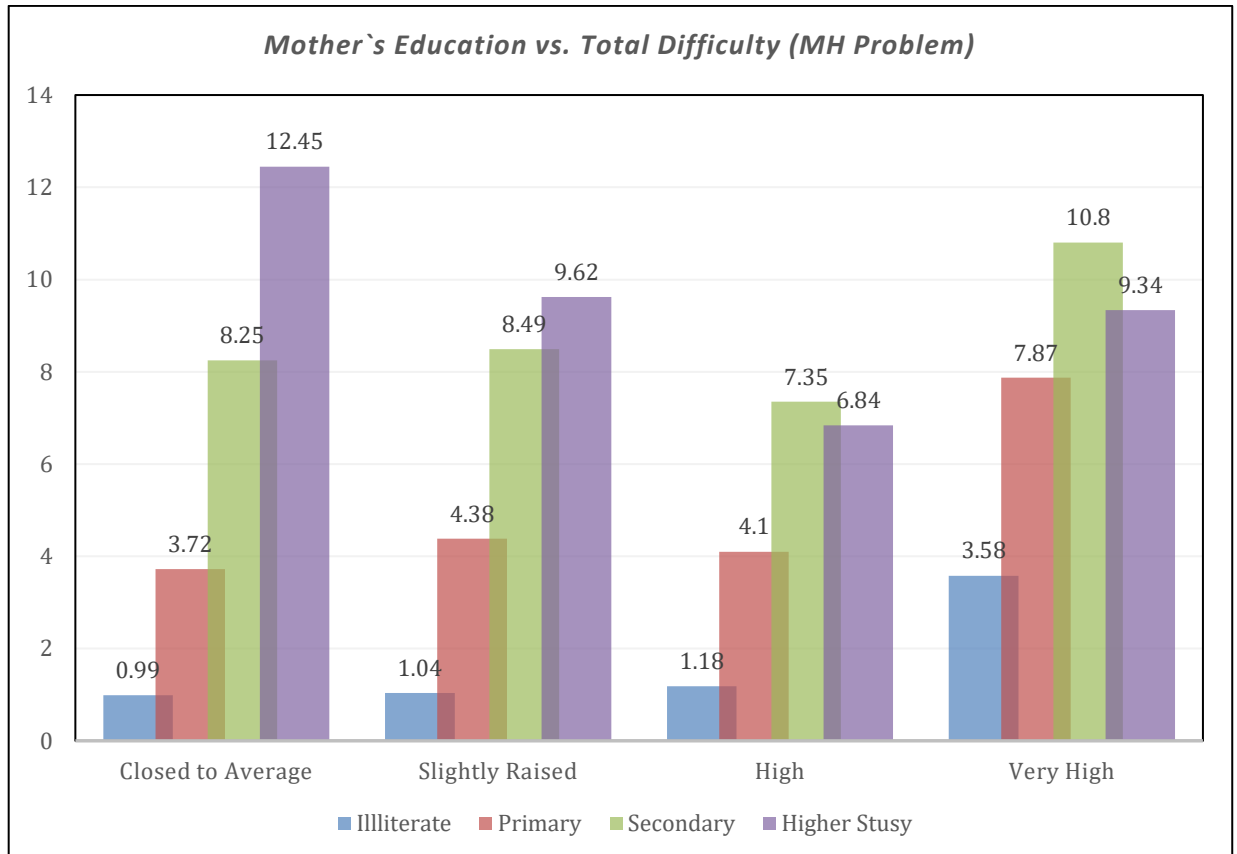
4.1.7 Comparison of Mental Health Problem between students studying among the children attending schools located in the rural and urban areas

The following Table 4.8 shows the state of Mental Health Problems among the children attending schools located in the rural and urban areas.

Table 4.8 Percentage Distribution of Mental Health Problems on the basis of Locality of School

Total Difficulty * Locality of School Crosstabulation

			Locality of School			Total
			Urban	Sub-Urban	Rural	
Total Difficulty	**Closed to Average**	Count	175	136	228	539
		% within Age group	32.47%	25.23%	42.30%	25.41%
		% of Total	8.25	6.41%	10.75%	25.41%
	Slightly Raised	Count	221	137	141	499
		% within Age group	44.29%	27.45%	28.26%	23.53%
		% of Total	10.42%	6.46%	6.65%	23.53%
	High	Count	238	83	92	413
		% within Age group	57.62%	20.10%	22.28%	19.47%
		% of Total	11.22%	3.91%	4.34%	19.47%
	Very High	Count	394	151	125	670
		% within Age group	58.81%	36.56%	18.66%	31.59%
		% of Total	18.58%	7.12%	5.89%	31.59%
Total	**Total**	Count	1028	507	586	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.47%	23.90%	27.63%	100%

From the above Table it is observed that 27.63% (N=586) of the student were attending schools located in rural, 23.90% (N=507) students were attending schools located in sub-urban area and 48,47% (N=1028) were from schools located in urban area. The result

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showed that number of children having mental health problem is more among the students attending the schools located in urban areas than that of schools located in rural and sub-urban areas. 58.81% of the students from urban schools had Very High or Abnormal SDQ scores with 57.62% (N=238) High or Borderline scores whereas 18.66% of the students from rural schools and 22.54% of the students from sub-urban schools were rated Very High with 22.28% and 20.10% as High SDQ scores. A detailed illustration is given in figure 4.7

Figure 4.7 Locality of School Wise Distribution of Mental Health
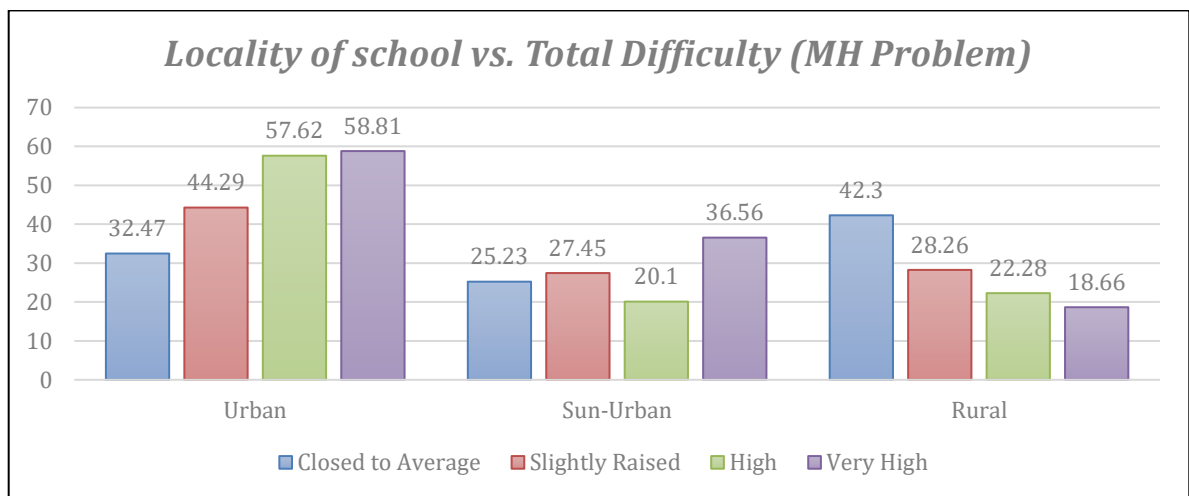
4.1.8 Comparison of Mental Health Problem between students studying among the children attending schools Government, Semi-government and Private

The following Table 4.9 shows the state of Mental Health Problems among the children attending schools' government, semi-government and private.

Table 4.9 Percentage Distribution of Mental Health Problems on the basis of School Type

Total Difficulty * Type of School Crosstabulation

			School Type			Total
			Govt.	**Semi-govt.**	**Private**	
Total Difficulty	**Closed to Average**	Count	80	398	61	539
		% within Age group	14.84%	73.84%	11.32%	25.41%
		% of Total	3.77%	18.76%	2.88%	25.41%
	Slightly Raised	Count	110	285	104	499
		% within Age group	22.04%	57.11%	20.84%	23.53%
		% of Total	5.19%	13.44%	4.90%	23.53%
	High	Count	136	160	117	413
		% within Age group	32.93%	38.74%	28.33%	19.47%
		% of Total	6.41%	7.54%	5.52%	19.47%
	Very High	Count	247	223	200	670
		% within Age group	36.87%	33.28%	29.85%	31.59%
		% of Total	11.65%	10.51%	9.43%	31.59%
Total	**Total**	Count	573	1066	482	2121
		% within Age group	100%	100%	100%	100%
		% of Total	27.02%	50.26%	22.73%	100%

From the above Table it is observed that 27.02% (N=573) of the students were attending Govt. schools, 50.26% (N=1066) were attending Semi-govt. schools and 22.73% (N= 482) were from Private schools. The result showed that number of children having mental health problem is more among the students attending the Semi-govt. schools and Govt. schools than that of Private schools. 36.87% of the students from Govt. schools had Very High or Abnormal SDQ scores with 32.93% High or Borderline scores whereas 33.28% of the students from Semi-govt. schools were rated Very High with 38.74% as High SDQ scores. And 29.85% of the students from Private schools were rated Very High with 28.33% High SDQ scores. A detailed illustration is given in figure 4.8.

Figure 4.8 School Type Wise Distribution of Mental Health
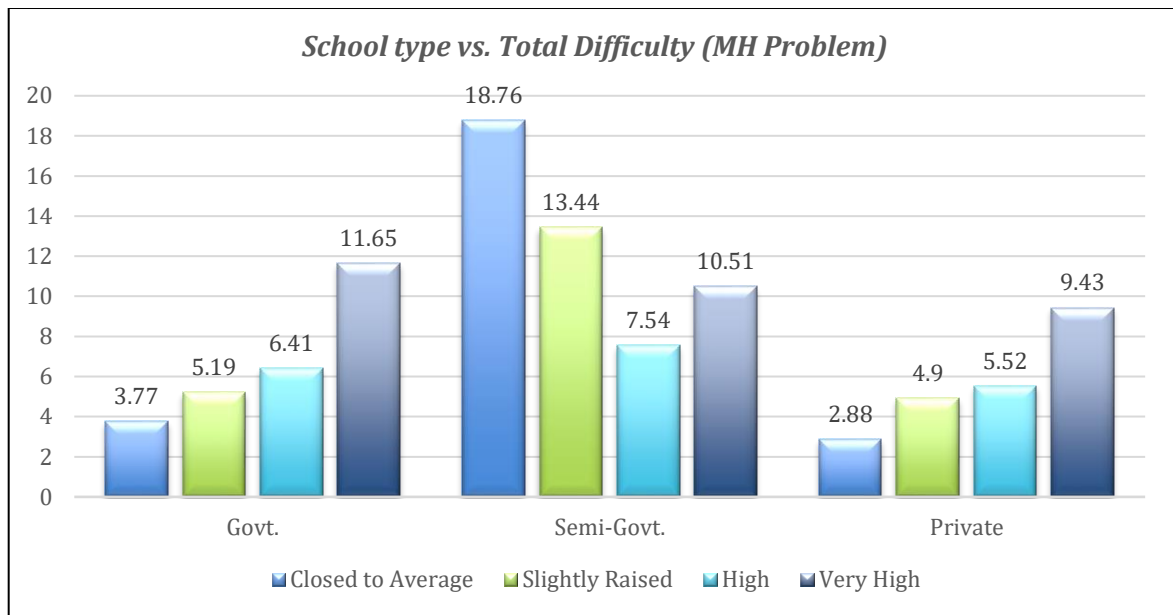
4.1.9 Comparison of Mental Health Problem between Children studying in English and Bengali medium of instruction variable

Table 4.10 Percentage Distribution of Mental Health Problems on the basis of Medium of Instruction Variable.

*Total Difficulty * Medium of Instruction Crosstabulation*

		Medium		Total
		Bengali	English	
Closed to Average	Count	509	30	539
	% within Age group	94.43%	5.57%	25.41%
	% of Total	23.10%	1.41%	25.41%
Slightly Raised	Count	448	51	499
	% within Age group	89.78%	10.22%	23.53%
	% of Total	21.12%	2.40%	23.53%
	Count	363	50	413

Total	**High**	% within Age group	87.89%	12.11%	19.47%
Difficulty		% of Total	17.11%	2.36%	19.47%
	Very High	Count	600	70	670
		% within Age group	89.55%	10.45%	31.59%
		% of Total	28.29%	3.30%	31.59%
Total	**Total**	Count	1920	201	2121
		% within Age group	100%	100%	100%
		% of Total	90.52%	9.48%	100%

Table 4.9 shows the total difficulty score (degree of mental health problems) with respect to medium of instruction through which the children study. Out of total 2121 students, 1920 (90.52%) students attend Bengali medium schools and 201 (9.48%) students attend English medium schools. 600 (89.55%) students attending Bengali medium school showed Very High SDQ score which means they have definite or severe mental health problem with another 363 (87.89%) Less students had High or Borderline Scores. Less number of students was found in English medium schools having mental health problems. 70 (10.45%) students attending English medium schools had Very High SDQ score with another 50 (12.11%) students fell under High or Borderline Scoring. Figure 4.9 illustrates the distribution.

Figure 4.9 Medium of Instruction Wise Distribution of Mental Health Problems
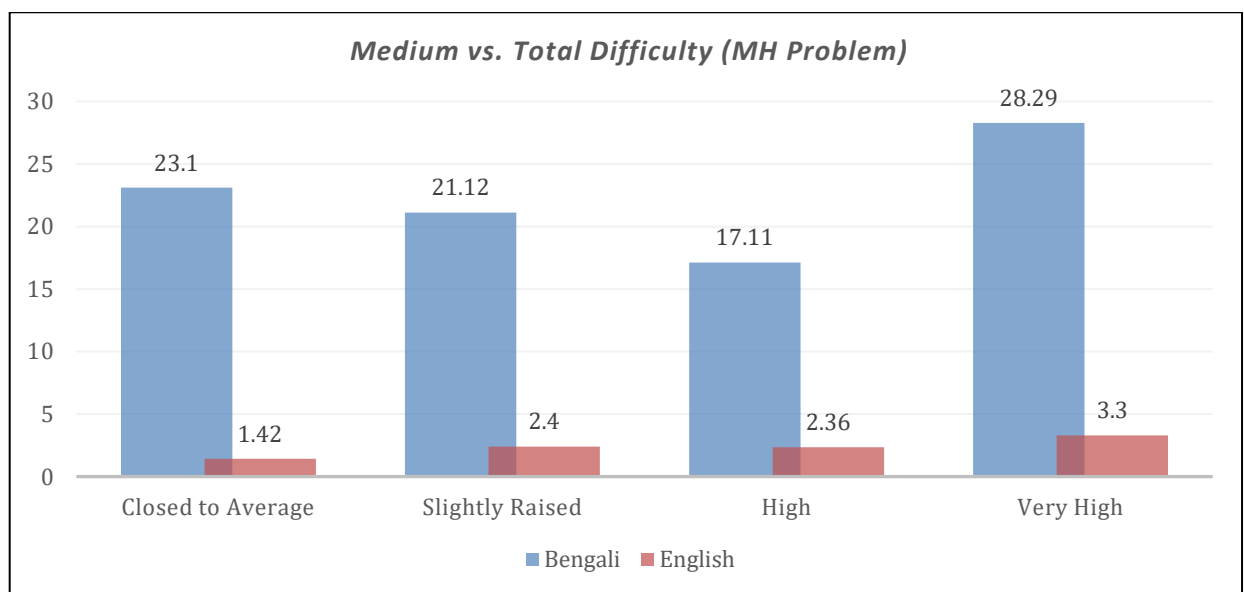
4.1.10 Assessment of Different Dimension of Mental Health Problems

Out of the 2121 students under this study, 140 students (6.60%) of students showed having definite Emotional Problem scoring Very High or Abnormal SDQ score. Another 362 (17.07%) scored High which means they are on the Borderline. Similarly, 2.88% of the students scored Very High and 4.15% scored High in Conduct Problem; 0.24% of the students scored Very High and 0.66% scored High in Hyperactivity Problem; 11.36% of the students scored Very High and 9.19% scored High in Peer Problem; and 11.32% of the students scored Very High and 5.94% scored High in Pro-social Problem.

4.1.11 Comparison of Emotional Problem on the basis of Different Variables

The following Table 4.11 shows the comparison of the status of Emotional Problem of school going adolescents on the basis of different variables i.e. gender, habitat, medium of instruction, locality of school, type of family, parental educational attainment and type of school.

Table 4.11 Percentage Distribution of Emotional Problem on the basis of different Variable

Emotional Problem * Gender of the Students Crosstabulation

			Gender		Total
			Male	Female	
Emotional Problem	Closed to Average	Count	665	631	1296
		% within Gender	51.31%	48.69%	61.10%
		% of Total	31.35%	29.75%	61.10%
	Slightly Raised	Count	145	178	323
		% within Gender	44.89%	55.11%	15.23%
		% of Total	6.84%	8.39%	15.23%
	High	Count	133	229	362
		% within Gender	36.74%	63.26%	17.07%
		% of Total	6.27%	10.80%	17.07%
	Very High	Count	42	98	140
		% within Gender	30.00%	70.00%	6.60%

		% of Total	1.98%	4.62%	6.60%
Total	**Total**	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

Emotional Problem * Habitat of the students Crosstabulation

			Habitat			Total
			Urban	**Semi-Urban**	**Rural**	
Emotional Problem	**Closed to Average**	Count	612	333	351	1296
		% within Age group	47.22%	25.69%	27.08%	61.10%
		% of Total	28.85%	15.70%	16.55%	61.10%
	Slightly Raised	Count	160	82	81	323
		% within Age group	49.54%	25.39%	25.08%	15.22%
		% of Total	7.54%	3.87%	3.82%	15.22%
	High	Count	60	124	178	362
		% within Age group	16.57%	34.25%	49.17%	17.07%
		% of Total	2.83%	5.85%	8.40%	17.07%
	Very High	Count	73	45	22	140
		% within Age group	52.14%	32.14%	15.71%	6.60%
		% of Total	3.44%	2.12%	1.04%	6.60%
Total	**Total**	Count	1023	584	514	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.23%	27.53%	24.23%	100%

*Emotional Problem * Family Type Crosstabulation*

			Family Type		Total
			Nuclear	Joint	
Emotional Problem	Closed to Average	Count	949	347	1296
		% within Age group	73.22%	26.77%	61.10%
		% of Total	44.74%	16.36%	61.10%
	Slightly Raised	Count	222	101	323
		% within Age group	68.73%	31.27%	15.22%
		% of Total	10.47%	4.76%	15.22%
	High	Count	233	129	362
		% within Age group	64.36%	35.64%	17.07%
		% of Total	10.98%	6.08%	17.07%
	Very High	Count	86	54	140
		% within Age group	61.42%	38.57%	6.60%
		% of Total	4.05%	2.54%	6.60%
Total	Total	Count	1490	631	2121
		% within Age group	100%	100%	100%
		% of Total	70.25%	29.75%	100%

Emotional Problem * Locality of School Crosstabulation

			Locality of School			Total
			Urban	Sub-Urban	Rural	
Emotional Problem	Closed to Average	Count	615	256	425	1296
		% within Age group	47.45%	19.75%	32.80%	61.10%
		% of Total	29.00%	12.07%	20.03%	61.10%
	Slightly Raised	Count	162	89	72	323
		% within Age group	50.15%	27.55%	22.30%	15.22%
		% of Total	7.64%	4.20%	3.40%	15.22%
	High	Count	178	116	68	362
		% within Age group	49.17%	32.04%	18.78%	17.07%
		% of Total	8.40%	5.47%	3.21%	17.07%
		Count	73	46	21	140
		% within Age group	52.14%	32.86%	15.00%	6.60%

Very High	% of Total	3.44%	2.16%	0.99%	6.60%
Total **Total**	Count	1028	507	586	2121
	% within Age group	100%	100%	100%	100%
	% of Total	48.23%	23.90%	27.63%	100%

Emotional Problem * Type of School Crosstabulation

			School Type			Total
			Govt.	Semi-govt.	Private	
Emotional Problem	**Closed to Average**	Count	310	720	266	1296
		% within Age group	23.92%	55.56%	20.52%	61.10%
		% of Total	14.62%	33.95%	12.54%	61.10%
	Slightly Raised	Count	100	145	78	323
		% within Age group	30.96%	44.89%	24.14%	15.22%
		% of Total	4.71%	6.84%	3.68%	15.22%
	High	Count	114	162	96	362
		% within Age group	31.50%	44.75%	26.52%	17.07%
		% of Total	5.37%	7.64%	4.52%	17.07%
	Very High	Count	49	49	42	140
		% within Age group	35.00%	35.00%	30.00%	6.60%
		% of Total	2.31%	2.31%	1.98%	6.60%
Total	**Total**	Count	573	1066	482	2121
		% within Age group	100%	100%	100%	100%
		% of Total	27.02%	50.26%	22.73%	100%

*Emotional Problem * Medium of Instruction Crosstabulation*

		Medium		Total
		Bengali	English	
Closed to Average	Count	1169	127	1296
	% within Age group	90.20%	9.80%	61.10%
	% of Total	55.12%	5.99%	61.10%

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Emotional Problem	**Slightly Raised**	Count	295	28	323
		% within Age group	91.33%	8.67%	15.22%
		% of Total	13.91%	1.32%	15.22%
	High	Count	328	34	362
		% within Age group	90.61%	9.40%	17.07%
		% of Total	15.46%	1.60%	17.07%
	Very High	Count	128	12	140
		% within Age group	91.43%	8.57%	6.60%
		% of Total	6.03%	0.57%	6.60%
Total	**Total**	Count	1920	201	2121
		% within Age group	100%	100%	100%
		% of Total	90.52%	9.48%	100%

*Emotional Problem * Father's Education Level of the Students Crosstabulation*

			Father's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Emotional Problem	**Closed to Average**	Count	65	227	316	688	1296
		% within Age group	5.02%	17.52%	24.38%	53.09%	61.10%
		% of Total	3.06%	10.70%	14.90%	32.44%	61.10%
	Slightly Raised	Count	25	68	88	142	323
		% within Age group	7.74%	21.05%	27.24%	43.96%	15.22%
		% of Total	1.18%	3.20%	4.15%	6.69%	15.22%
	High	Count	42	84	91	145	362
		% within Age group	11.60%	23.20%	25.14%	40.06%	17.07%
		% of Total	1.98%	3.96%	4.30%	6.84%	17.07%
	Very High	Count	16	35	38	51	140
		% within Age group	11.43%	25.00%	27.14%	36.42%	6.60%
		% of Total	0.75%	1.65%	1.79%	2.40%	6.60%
Total	**Total**	Count	148	414	533	1026	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.98%	19.52%	25.13%	48.37%	100%

Emotional Problem * Mother's Education Level of the Students Crosstabulation

			Illiterate	Primary	Secondary	Higher Study	Total
			Mother's Education Level				
Emotional Problem	**Closed to Average**	Count	65	227	442	562	1296
		% within Age group	5.02%	17.52%	34.10%	43.36%	61.10%
		% of Total	3.06%	10.70%	20.84%	26.50%	61.10%
	Slightly Raised	Count	23	65	128	107	323
		% within Age group	7.12%	20.12%	39.63%	33.13%	15.22%
		% of Total	1.08%	3.06%	6.03%	5.04%	15.22%
	High	Count	37	91	127	107	362
		% within Age group	10.22%	25.14%	35.08%	29.56%	17.07%
		% of Total	1.74%	4.29%	5.99%	5.04%	17.07%
	Very High	Count	19	43	43	35	140
		% within Age group	13.57%	30.71%	30.71%	25.00%	6.60%
		% of Total	0.90%	2.03%	2.03%	1.65%	6.60%
Total	**Total**	Count	144	426	740	811	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

On the basis of Table 4.11, the comparisons of prevalence of Emotional Problem were observed with respect to the following different variables:

Gender Variable - The gender wise analysis of SDQ score shown in table indicates that out of 985 male students under study, 42 (30%) have Very High or Abnormal SDQ scoring indicating having definite Emotional Problems, and out of 1136 female students 98 (70%) showed Very High score. Female students have more Emotional Problems than that of male students. 63.26% (229) of the female students and 36.74% (133) male were on the borderline having High SDQ score and they are likely to be at risk. 51.31% (665) males with 48.69% female students were rated close to average, and 44.89% (145) males and 55.11% (178) female students scored slightly raised. These age group may be considered

as Normal. Figure 4.11. illustrates the gender wise distribution of Emotional Problems of the children under study.

Habitat Variable - In Urban areas, a significant portion of children, 52.14% (N=73), scored Very High SDQ scores, indicating definite emotional problems. Additionally, 16.57% (N=60) of Urban children exhibited Borderline scores, suggesting the likelihood of facing some form of problems. On the other hand, a smaller percentage of students from Rural areas showed signs of emotional problems. Specifically, 15.71% (N=22) of children from Rural areas had Very High SDQ scores. Overall, these findings suggest that a higher proportion of children in Urban areas face emotional challenges compared to those in Semi-Urban and Rural areas. The disparity in the prevalence of emotional problems among these groups may indicate the influence of habitat on the Emotional Problems of children. It is essential to consider these variations for targeted interventions and support strategies to address the specific needs of children in different habitats.

Family Type Variable - The data in Table 4.11. sheds light on the prevalence of Emotional Problems among children based on their family type—Nuclear and Joint family. Of the total students under investigation, 70.25% (N=1490) hailed from Nuclear families, while 29.75% (N=631) belonged to Joint families. Within Nuclear families, a substantial proportion of children, 61.42% (N=86), exhibited Very High SDQ scores, indicative of definite emotional problems. Additionally, 64.36% (N=233) of children in Nuclear families demonstrated Borderline scores, suggesting a likelihood of emotional challenges. In contrast, fewer students from Joint families displayed signs of emotional problems. Specifically, 38.571% (N=54) of children from Joint families had Very High SDQ scores, and 35.64% (N=129) had High SDQ scores. These findings imply that a higher percentage of children in Nuclear families experience emotional problems compared to those in Joint families. The disparity in the prevalence of emotional challenges between these family types suggests a potential influence of family structure on children's mental health. It is crucial to consider these variations for targeted interventions and support strategies tailored to the specific needs of children in different family environments. Addressing

mental health concerns within the context of family dynamics is essential for promoting the well-being of children in diverse family settings.

Locality of School Variable - From the above Table it is observed that 27.63% (N=586) of the student were attending schools located in rural, 23.90% (N=507) students were attending schools located in sub-urban area and 48,46% (N=1028) were from schools located in urban area. The result showed that number of children having emotional problem is more among the students attending the schools located in urban areas than that of schools located in rural and sub-urban areas. 52.14% of the students from urban schools had Very High or Abnormal SDQ scores with 49.17% (N=178) High or Borderline scores whereas 15.00% of the students from rural schools and 32.04% of the students from sub-urban schools were rated Very High with 18.78% and 32.86% as High SDQ scores. A detailed illustration is given in figure 4.11.

Type of School - The data presented in the table indicates that among the surveyed students, 27.02% (N=573) attended Government schools, 50.26% (N=1066) attended Semi-government schools, and 22.73% (N=482) were enrolled in Private schools. Notably, a higher proportion of students from Government and Semi-government schools exhibited emotional problems compared to those from Private schools. Specifically, 35.00% of students from Government schools had Very High or Abnormal SDQ scores, along with 31.50% having High or Borderline scores. In the case of Semi-government schools, 35.00% of students were rated Very High, with 44.75% exhibiting High SDQ scores. Private schools showed a lower prevalence, with 30.00% of students having Very High scores and 26.52% having High SDQ scores. Figure 4.11. provides a detailed visual representation of these findings.

Medium of Instructions Variable - Table 4.11 shows the Emotional problems with respect to medium of instruction through which the children study. Out of total 2121 students, 1920 (90.52%) students attend Bengali medium schools and 201 (9.48%) students attend English medium schools. Among the students attending Bengali medium schools, a significant majority of 128 students (91.43%) displayed Very High SDQ scores,

indicating definite or severe mental health problems. Additionally, 328 students (90.61%) in this category exhibited High or Borderline scores. In contrast, a smaller proportion of students in English medium schools were found to have mental health issues. Specifically, 12 students (8.57%) in English medium schools had Very High SDQ scores, and an additional 34 students (9.40%) fell into the High or Borderline scoring range. The distribution of these findings is visually represented in Figure 4.11.

Father's Educational Level Variable - Table 4.11 provides insight into the total difficulty scores, reflecting the degree of emotional problems among students, concerning their fathers' educational attainment. The study encompassed a total of 2121 students, with 6.98% (N=148) having illiterate fathers, 19.52% (N=414) having fathers who completed primary school, 25.13% (N=533) with fathers completing secondary school, and the majority, 48.37% (N=1026), having fathers who completed higher studies. Surprisingly, the results indicate a higher prevalence of emotional problems among students whose fathers completed higher studies compared to those with no formal education. Specifically, 11.43% (N=16) of students with illiterate fathers exhibited Very High or Abnormal SDQ scores, accompanied by 11.60% (N=42) with High or Borderline scores. In contrast, 36.42% (N=51) of students with fathers who completed higher studies were rated as having Very High SDQ scores and 40.06% (N=145) with High or Borderline scores. This unexpected finding suggests that factors beyond paternal educational attainment may contribute significantly to children's mental health. Further exploration and nuanced analysis are warranted to understand the complex interplay of various factors influencing emotional well-being in children, considering socio-economic, environmental, and familial aspects. Addressing mental health concerns in a holistic manner, considering diverse backgrounds and circumstances, remains crucial for effective intervention and support strategies. A detailed illustration is given in figure 4.11.

Mother's Educational Level Variable - Table 4.11 presents the overall difficulty scores, indicating the degree of Emotional Problems in correlation with the educational attainment of the mothers of the children under examination. Among the total 2121 students, 144 (6.79%) had mothers with no formal education, 426 (20.08%) had mothers who completed Primary school, 740 (34.89%) had mothers with completed Secondary school, and 811 (38.24%) had mothers who pursued Higher studies. The findings

revealed a higher prevalence of Emotional Problems among students whose mothers had completed higher studies compared to those with no formal education. Specifically, 13.57% (N=19) of students with Illiterate fathers exhibited Very High or Abnormal SDQ scores, with 10.22% (N=37) having High or Borderline scores. On the other hand, 25.00% (N=35) of students with mothers who completed higher studies had Very High scores, and 29.56% (N=107) had High SDQ scores. Figure 4.10. illustrates the mother's education distribution of Emotional Problems of the children under study.

Figure 4.10 Variable Wise Distribution of Emotional Problem

4.1.12 Comparison of Conduct Problem on the basis of Different Variables

The following Table 4.12 shows the comparison of the status of Emotional Problem of school going adolescents on the basis of different variables i.e. gender, habitat, medium of instruction, locality of school, type of family, parental educational attainment and type of school.

Table 4.12 Percentage Distribution of Conduct Problem on the basis of different Variable

*Conduct Problem * Gender of the Students Crosstabulation*

			Gender		Total
			Male	**Female**	
Conduct Problem	**Closed to Average**	Count	717	830	1547
		% within Gender	46.35%	53.65%	72.94%
		% of Total	33.80%	39.13%	72.94%
	Slightly Raised	Count	197	228	425
		% within Gender	46.35%	53.65%	20.04%
		% of Total	9.29%	10.75%	20.04%
	High	Count	40	48	88
		% within Gender	45.45%	54.55%	4.15%
		% of Total	1.89%	2.26%	4.15%
	Very High	Count	31	30	61
		% within Gender	50.82%	49.18%	2.88%
		% of Total	1.46%	1.41%	2.88%
Total	**Total**	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

Conduct Problem * Habitat of the students Crosstabulation

			Habitat			Total
			Urban	Semi-Urban	Rural	
Conduct Problem	**Closed to Average**	Count	707	417	423	1547
		% within Age group	45.70%	26.96%	27.34%	72.94%
		% of Total	33.33%	19.66%	19.94%	72.94%
	Slightly Raised	Count	225	123	77	425
		% within Age group	52.94%	28.94%	18.12%	20.04%
		% of Total	10.61%	5.80%	3.63%	20.04%
	High	Count	56	22	10	88
		% within Age group	63.64%	25.00%	11.36%	4.15%
		% of Total	2.64%	1.04%	0.47%	4.15%
	Very High	Count	35	22	4	61
		% within Age group	57.38%	36.07%	6.56%	2.88%
		% of Total	1.65%	1.04%	0.19%	2.88%
Total	**Total**	Count	1023	584	514	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.23%	27.53%	24.23%	100%

*Conduct Problem * Family Type Crosstabulation*

			Family Type		Total
			Nuclear	Joint	
	Closed to Average	Count	1124	423	1547
		% within Age group	72.66%	27.34%	72.94%
		% of Total	52.99%	19.94%	72.94%
	Slightly Raised	Count	277	148	425
		% within Age group	65.18%	34.82%	20.04%
		% of Total	13.06%	6.98%	20.04%

Conduct Problem	**High**	Count	49	39	88
		% within Age group	55.68%	44.32%	4.15%
		% of Total	2.31%	1.84%	4.15%
	Very High	Count	40	21	61
		% within Age group	65.57%	34.43%	2.88%
		% of Total	1.89%	0.99%	2.88%
Total	**Total**	Count	1490	631	2121
		% within Age group	100%	100%	100%
		% of Total	70.25%	29.75%	100%

Conduct Problem * Locality of School Crosstabulation

			Locality of School			Total
			Urban	**Sub-Urban**	**Rural**	
Conduct Problem	**Closed to Average**	Count	711	350	486	1547
		% within Age group	45.96%	22.62%	31.42%	72.94%
		% of Total	33.52%	16.50%	22.91%	72.94%
	Slightly Raised	Count	226	113	86	425
		% within Age group	53.18%	26.59%	20.24%	20.04%
		% of Total	10.66%	5.33%	4.05%	20.04%
	High	Count	55	23	10	88
		% within Age group	62.50%	26.14%	11.36%	4.15%
		% of Total	2.59%	1.08%	0.47%	4.15%
	Very High	Count	36	21	4	61
		% within Age group	59.01%	34.43%	6.56%	2.88%
		% of Total	1.70%	0.99%	0.19%	2.88%
Total	**Total**	Count	1028	507	586	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.47%	23.90%	27.63%	100%

Conduct Problem * Type of School Crosstabulation

		School Type			Total
		Govt.	Semi-govt.	Private	
Closed to Average	Count	366	841	340	1547
	% within Age group	23.66%	54.36%	21.98%	72.94%
	% of Total	17.26%	39.65%	16.03%	72.94%
Slightly Raised	Count	133	180	112	425
	% within Age group	31.29%	42.35%	26.35%	20.04%
	% of Total	6.27%	8.49%	5.28%	20.04%
High	Count	44	27	17	88
	% within Age group	50.00%	30.68%	19.32%	4.15%
	% of Total	2.07%	1.27%	0.80%	4.15%
Very High	Count	30	18	13	61
	% within Age group	49.18%	29.51%	21.31%	2.88%
	% of Total	1.41%	0.85%	0.61%	2.88%
Total	Count	573	1066	482	2121
	% within Age group	100%	100%	100%	100%
	% of Total	27.02%	50.26%	22.73%	100%

Conduct Problem (row label on left), *Total* (bottom left label)

*Conduct Problem * Medium of Instruction Crosstabulation*

		Medium		Total
		Bengali	English	
Closed to Average	Count	1414	133	1547
	% within Age group	91.40%	8.60%	72.94%
	% of Total	66.67%	6.27%	72.94%
Slightly Raised	Count	378	47	425
	% within Age group	88.94%	11.06%	20.04%
	% of Total	17.82%	2.22%	20.04%
High	Count	79	9	88
	% within Age group	89.77%	10.23%	4.15%
	% of Total	3.72%	0.42%	4.15%
Very High	Count	49	12	61
	% within Age group	80.33%	19.67%	2.88%
	% of Total	2.31%	0.57%	2.88%

Conduct Problem (row label on left)

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	Total	Count	1920	201	2121
Total		% within Age group	100%	100%	100%
		% of Total	90.52%	9.48%	100%

*Conduct Problem * Father's Education Level of the Students Crosstabulation*

			Father's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Conduct Problem	**Closed to Average**	Count	101	287	386	773	1547
		% within Age group	6.53%	18.55%	24.95%	49.97%	72.94%
		% of Total	4.76%	13.53%	18.20%	36.44%	72.94%
	Slightly Raised	Count	41	96	110	178	425
		% within Age group	9.65%	22.59%	25.88%	41.88%	20.04%
		% of Total	1.93%	4.53%	5.19%	8.39%	20.04%
	High	Count	3	18	27	40	88
		% within Age group	3.41%	20.45%	30.68%	45.45%	4.15%
		% of Total	0.14%	0.85%	1.27%	1.89%	4.15%
	Very High	Count	3	13	10	35	61
		% within Age group	4.92%	21.31%	16.39%	57.38%	2.88%
		% of Total	0.14%	0.61%	0.47%	1.65%	2.88%
Total	**Total**	Count	148	414	533	1026	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.98%	19.52%	25.13%	48.37%	100%

Conduct Problem * Mother's Education Level of the Students Crosstabulation

			Mother's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Conduct Problem	**Closed to Average**	Count	96	289	549	613	1547
		% within Age group	6.21%	18.68%	35.49%	39.63%	72.94%
		% of Total	4.53%	13.63%	25.88%	28.90%	72.94%
	Slightly Raised	Count	37	101	147	140	425
		% within Age group	8.71%	23.76%	34.59%	32.94%	20.04%
		% of Total	1.74%	4.76%	6.93%	6.60%	20.04%
	High	Count	3	24	29	32	88
		% within Age group	3.41%	27.27%	32.95%	36.36%	4.15%
		% of Total	0.14%	1.13%	1.37%	1.51%	4.15%
	Very High	Count	8	12	15	26	61
		% within Age group	13.11%	19.67%	24.59%	42.62%	2.88%
		% of Total	0.38%	0.57%	0.70%	1.23%	2.88%
Total	**Total**	Count	144	426	740	811	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

Gender Variable - The gender wise analysis of SDQ score shown in table 4.12 indicates that out of 985 male students under study, 31 (50.82%) have Very High or Abnormal SDQ scoring indicating having definite Conduct Problems, and out of 1136 female students 30 (49.18%) showed Very High score. Female students encounter more challenges compared to their male counterparts. Among the surveyed students, 54.55% of females and 45.45% of males exhibited borderline high SDQ scores, indicating a potential risk. Additionally, 46.35% of males and 53.65% of females were rated as close to average, while 46.35% of males and 53.65% of females scored slightly raised, placing them in the normal range for their age group. Figure 4.12 depicts the distribution of Conduct Problems based on gender for the children in the study.

Habitat Variable - Table 4.12 gives an account of Conduct problems with respect to the habitat (Urban, Semi-Urban and Rural) the children belong to. Out of the total students under study 48.23% (N=1023) were from Urban, 27.53% (N=584) were from Semi-Urban and 24.23% (N=514) belonged to Rural areas. 35 (57.38%) of the children from Urban areas scored Very High SDQ scores which indicates that they have definite Conduct problem. Another 56 (63.64%) children from Urban areas had Borderline scores and are likely to have some sort of problems. Less number of students from Rural areas showed having Conduct problems in comparison to children belonging to Urban and Semi-Urban areas. 6.56% (N=4) of the children from the Rural areas have the Very High SDQ score with 11.36% (N=10) High SDQ score. Rest of the students from all the groups may have minor or no problems. Figure 4.12 depicts the distribution of Conduct Problems based on gender for the children in the study.

Family Type Variable - The 4.12 gives an account of the Conduct Problems with respect to the family type (Nuclear and Joint family) the children belonged to. Out of the total students under study 1490 (70.25%) were from Nuclear Nuclear family and 631 (29.75%) belonged to Joint Family. 40 (65.57%) of the children from Nuclear Family scored Very High SDQ scores which indicates that they have definite conduct problems. Another 49 (55.68%) children from Nuclear Family had Borderline scores and are likely to have conduct problems. Less number of students from Joint Family showed having conduct problems in comparison to children belonging to Nuclear Family. 34.43% (N=21) of the children from the Joint Family have the Very High SDQ scores with 44.32% (N=39) High SDQ score. Rest of the students from both the groups may have minor or no problem.

Locality of School Variable - From the above Table it is observed that 27.63% (N=586) of the student were attending schools located in rural, 23.90% (N=507) students were attending schools located in sub-urban area and 48.47% (N=1028) were from schools located in urban area. The result showed that number of children having Conduct Problem is more among the students attending the schools located in urban areas than that of schools located in rural and sub-urban areas. A significant majority, 59.01%, of

students attending urban schools exhibited Very High or Abnormal SDQ scores, and 62.50% of them had scores categorized as High or Borderline. In contrast, a lower percentage of students from rural schools (6.56%) and suburban schools (34.43%) demonstrated Very High SDQ scores, with corresponding High scores at 11.36% and 26.14%, respectively. A detailed visual representation is provided in Figure 4.12.

School Type Variable - From the above Table it is observed that 27.02% (N=573) of the students were attending Govt. schools, 50.26% (N=1066) were attending Semi-govt. schools and 22.73% (N= 482) were from Private schools. The findings indicate a higher prevalence of conduct problems among students attending Semi-govt. and Govt. schools compared to those in Private schools. Specifically, 49.18% of students from Govt. schools demonstrated Very High or Abnormal SDQ scores, with 50.00% falling into the High or Borderline category. Similarly, in Semi-govt. schools, 29.51% of students had Very High SDQ scores, and 30.68% had High scores. In contrast, Private schools exhibited lower percentages, with 21.31% of students having Very High scores and 19.32% with High SDQ scores. This pattern is visually represented in Figure 4.12.

Medium of Instructions Variable - Table 4.12 presents the total difficulty scores, reflecting the degree of conduct problems, in relation to the medium of instruction in which children are educated. Among the total 2121 students, a significant majority, 90.52%, attend Bengali medium schools, while 9.48% are enrolled in English medium schools. Notably, 80.33% of students in Bengali medium schools exhibited Very High SDQ scores, indicating definite or severe mental health problems, and an additional 89.77% had High or Borderline scores. In contrast, a smaller proportion of students in English medium schools, 19.67%, showed Very High SDQ scores, and 10.23% fell into the High or Borderline scoring category. The distribution of these findings is visually represented in Figure 4.12.

Father's Educational Level Variable - Table 4.12 presents the total difficulty scores, indicating the degree of conduct problems, in relation to the educational attainment of the fathers of the students under examination. Out of the total 2121 students, 6.98% had fathers with no formal education, 19.52% had fathers who completed Primary school, 25.13% had fathers with completed Secondary school, and the majority, 48.37%, had fathers who completed Higher studies. Surprisingly, the results revealed a higher occurrence of mental health problems among students whose fathers completed higher

studies compared to those with no formal education. Specifically, 4.92% of students with illiterate fathers had Very High or Abnormal SDQ scores, and 3.41% had High or Borderline scores. Conversely, 57.38% of students with fathers who completed higher studies demonstrated Very High SDQ scores, with 45.45% falling into the High SDQ score range. A detailed visual representation of these findings is provided in Figure 4.12.

Mother's Educational Level Variable - Table 4.12 shows the total difficulty score (degree of conduct problems) in relation to Mother's Educational attainment of the children under study. Out of total 2121 students, 144 (6.79%) students had Illiterate mothers, 426 (20.08%) students had mothers who had completed Primary school, 740 (34.89%) had mothers who had completed Secondary school and 811 (38.24%) had mothers who had completed the Higher studies. The findings indicate that the prevalence of mental health problems is higher among students whose mothers completed higher studies compared to those with no formal education. Specifically, 13.11% of students with illiterate mothers had Very High or Abnormal SDQ scores, and 3.41% had High or Borderline scores. In contrast, 42.62% of students with mothers who completed higher studies exhibited Very High SDQ scores, with 36.36% falling into the High SDQ score range. This suggests a noteworthy association between maternal educational attainment and the likelihood of children experiencing mental health challenges, as detailed in Figure 4.11.

Figure 4.11 Variable Wise Distribution of Conduct Problem

4.1.13 Comparison of Hyperactive Problem on the basis of Different Variables

The following Table 4.13 shows the comparison of the status of Emotional Problem of school going adolescents on the basis of different variables i.e. gender, habitat, medium of instruction, locality of school, type of family, parental educational attainment and type of school.

Table 4.13 Percentage Distribution of Hyperactive Problem on the basis of different Variable.

*Hyperactive Problem * Gender of the Students Crosstabulation*

			Gender		Total
			Male	Female	
Hyperactive Problem	**Closed to Average**	Count	934	1070	2004
		% within Gender	46.61%	53.39%	94.48%
		% of Total	44.04%	50.45%	94.48%
	Slightly Raised	Count	43	55	98
		% within Gender	43.88%	56.12%	4.62%
		% of Total	2.03%	2.59%	4.62%
	High	Count	4	10	14
		% within Gender	28.57%	71.42%	0.66%
		% of Total	0.19%	0.47%	0.66%
	Very High	Count	4	1	5
		% within Gender	80%	20.00%	0.24%
		% of Total	0.19%	0.04%	0.24%
Total	**Total**	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

Hyperactive Problem * Habitat of the students Crosstabulation

		Habitat			Total
		Urban	Semi-Urban	Rural	
Closed to Average	Count	948	555	501	2004
	% within Age group	47.31%	27.69%	25.00%	94.48%
	% of Total	44.70%	26.17%	23.62%	94.48%
Slightly Raised	Count	60	26	12	98
	% within Age group	61.22%	26.53%	12.24%	4.62%
	% of Total	2.83%	1.22%	0.57%	4.62%
High	Count	11	3	0	14
	% within Age group	78.57%	21.43%	0.00%	0.66%
	% of Total	0.52%	0.14%	0.00%	0.66%
Very High	Count	4	0	1	5
	% within Age group	80.00%	0.00%	20.00%	0.24%
	% of Total	0.19%	0.00%	0.05%	0.24%
Total	Count	1023	584	514	2121
	% within Age group	100%	100%	100%	100%
	% of Total	48.23%	27.53%	24.23%	100%

Hyperactive Problem is indicated in the left margin spanning the upper rows and *Total* spans the bottom row.

*Hyperactive Problem * Family Type Crosstabulation*

		Family Type		Total
		Nuclear	Joint	
Closed to Average	Count	1413	591	2004
	% within Age group	70.51%	29.49%	94.48%
	% of Total	66.62%	27.86%	94.48%
Slightly Raised	Count	65	33	98
	% within Age group	66.33%	33.67%	4.62%
	% of Total	3.06%	1.56%	4.62%

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Hyperactive Problem					
	High	Count	10	4	14
		% within Age group	71.43%	28.57%	0.66%
		% of Total	0.47%	0.19%	0.66%
	Very High	Count	2	3	5
		% within Age group	40.00%	60.00%	0.24%
		% of Total	0.09%	0.14%	0.24%
Total	**Total**	Count	1490	631	2121
		% within Age group	100%	100%	100%
		% of Total	70.25%	29.75%	100%

Hyperactive Problem * Locality of School Crosstabulation

			Locality of School			Total
			Urban	**Sub-Urban**	**Rural**	
Hyperactive Problem	**Closed to Average**	Count	952	478	574	2004
		% within Age group	47.50%	23.85%	28.64%	94.48%
		% of Total	44.88%	22.54%	27.06%	94.48%
	Slightly Raised	Count	61	26	11	98
		% within Age group	62.24%	26.53%	11.22%	4.62%
		% of Total	2.88%	1.23%	0.52%	4.62%
	High	Count	11	3	0	14
		% within Age group	78.57%	21.43%	0.00%	0.66%
		% of Total	0.52%	0.14%	0.00%	0.66%
	Very High	Count	4	0	1	5
		% within Age group	80.00%	0.00%	20.00%	0.24%
		% of Total	0.19%	0.00%	0.05%	0.24%
Total	**Total**	Count	1028	507	586	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.46%	23.90%	27.63%	100%

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Hyperactive Problem * Type of School Crosstabulation

			School Type			Total
			Govt.	Semi-govt.	Private	
Hyperactive Problem	**Closed to Average**	Count	529	1031	444	2004
		% within Age group	26.40%	51.45%	22.16%	94.48%
		% of Total	24.94%	48.61%	20.93%	94.48%
	Slightly Raised	Count	36	29	33	98
		% within Age group	36.73%	29.59%	33.67%	4.62%
		% of Total	1.70%	1.37%	1.56%	4.62%
	High	Count	3	6	5	14
		% within Age group	21.43%	42.86%	35.71%	0.66%
		% of Total	0.14%	0.28%	0.26%	0.66%
	Very High	Count	5	0	0	5
		% within Age group	100%	0.00%	0.00%	0.24%
		% of Total	0.24%	0.00%	0.00%	0.24%
Total	**Total**	Count	573	1066	482	2121
		% within Age group	100%	100%	100%	100%
		% of Total	27.02%	50.26%	22.73%	100%

*Hyperactive Problem * Medium of Instruction Crosstabulation*

			Medium		Total
			Bengali	English	
	Closed to Average	Count	1816	188	2004
		% within Age group	90.62%	9.38%	94.48%
		% of Total	85.62%	8.86%	94.48%
	Slightly Raised	Count	88	10	98
		% within Age group	89.80%	10.20%	4.62%
		% of Total	4.15%	0.47%	4.62%

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Hyperactive Problem					
High	Count	11	3	14	
	% within Age group	78.57%	21.43%	0.66%	
	% of Total	0.52%	0.14%	0.66%	
Very High	Count	5	0	5	
	% within Age group	100.00%	0.00%	0.24%	
	% of Total	0.24%	0.00%	0.24%	
Total	Count	1920	201	2121	
	% within Age group	100%	100%	100%	
	% of Total	90.52%	9.48%	100%	

*Hyperactive Problem * Father's Education Level of the Students Crosstabulation*

		Father's Education Level				
		Illiterate	Primary	Secondary	Higher Study	Total
Closed to Average	Count	138	391	502	973	2004
	% within Age group	6.89%	19.51%	25.05%	48.55%	94.48%
	% of Total	6.51%	18.43%	23.69%	45.87%	94.48%
Slightly Raised	Count	8	19	26	45	98
	% within Age group	8.16%	19.39%	26.53%	45.92%	4.62%
	% of Total	0.38%	0.90%	1.23%	2.12%	4.62%
High	Count	2	3	2	7	14
	% within Age group	14.29%	21.43%	14.23%	50.00%	0.66%
	% of Total	0.09%	0.14%	0.09%	0.33%	0.66%
Very High	Count	0	1	3	1	5
	% within Age group	0.00%	20.00%	60.00%	20.00%	0.24%
	% of Total	0.00%	0.05%	0.14%	0.05%	0.24%
Total	Count	148	414	533	1026	2121
	% within Age group	100%	100%	100%	100%	100%
	% of Total	6.98%	19.52%	25.13%	48.37%	100%

Hyperactive Problem (left label spanning the data rows); *Total* (bottom left label)

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*Hyperactive Problem * Mother's Education Level of the Students Crosstabulation*

			Mother's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Hyperactive Problem	**Closed to Average**	Count	133	401	702	768	2004
		% within Age group	6.64%	20.01%	35..3%	38.32%	94.48%
		% of Total	6.27%	18.91%	33.10%	36.21%	94.48%
	Slightly Raised	Count	9	21	32	36	98
		% within Age group	9.18%	21.43%	32.65%	36.73%	4.62%
		% of Total	0.42%	0.99%	1.51%	1.70%	4.62%
	High	Count	1	4	4	5	14
		% within Age group	7.14%	28.57%	28.57%	35.71%	0.66%
		% of Total	0.05%	0.19%	0.19%	0.24%	0.66%
	Very High	Count	1	0	2	2	5
		% within Age group	20.00%	0.00%	40.00%	40.00%	0.24%
		% of Total	0.05%	0.00%	0.09%	0.09%	0.24%
Total	**Total**	Count	144	426	740	811	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

Gender Variable - The gender-specific analysis of SDQ scores presented in Table 4.13 reveals that among the 985 male students in the study, 28.63% (282) exhibit Very High or Abnormal SDQ scores, indicative of definite Hyperactive Problems. In comparison, 20.00% (1) of the 1136 ***female*** students show Very High scores. This suggests that female students face more challenges than their male counterparts. Additionally, 71.42% (10) of female students and 28.57% (4) of males fall into the High SDQ score range, posing a potential risk. The majority, 46.61% (934) of males and 53.39% (1070) of females, are

rated as close to average, while 43.88% (43) of males and 56.12% (55) of females scored slightly raised, indicating a normal range for their age group. Figure 4.13 visually represents the gender-wise distribution of mental health problems among the children in the study.

Habitat Variable - Table 4.13 gives an account of Hyperactive problems with respect to the habitat (Urban, Semi-Urban and Rural) the children belong to. Out of the total students under study 48.23% (N=1023) were from Urban, 27.53% (N=584) were from Semi-Urban and 24.23% (N=514) belonged to Rural areas the analysis of SDQ scores reveals significant differences in the prevalence of hyperactive problems among children from urban, semi-urban, and rural areas. In urban areas, a substantial 80.00% (4) of children demonstrated Very High SDQ scores, indicating definite hyperactive problems. Additionally, 61.22% (60) of urban children had Borderline scores, suggesting the likelihood of some sort of problems. In comparison, fewer students from rural areas exhibited hyperactive problems, with 20.00% (1) having Very High SDQ scores and none showing High SDQ scores. The findings suggest that children in urban areas are more prone to hyperactive problems compared to those in rural areas. However, it's worth noting that the majority of students in all groups may have minor or no problems, indicating a relatively normal range of behaviour. This highlights the importance of considering environmental factors in understanding and addressing Hyperactive Problems concerns among children in different geographical settings.

Family Type Variable - The 4.13 gives an account of the Hyperactive problems with respect to the family type (Nuclear and Joint family) the children belonged to. Out of the total students under study 1490 (70.25%) were from Nuclear family and 631 (29.75%) belonged to Nuclear Family. Two children (40.00%) from Nuclear Families exhibited Very High SDQ scores, suggesting the presence of definite mental health problems. Additionally, 10 children (71.43%) from Nuclear Families displayed Borderline scores, indicating a likelihood of hyperactive problems. In contrast, a lower proportion of students from Joint Families showed signs of hyperactive problems when compared to children from Nuclear Families. Specifically, 60.00% (N=3) of children from Joint Families

had Very High SDQ scores, and 28.57% (N=4) had High SDQ scores. The remaining students from both family groups may have minor or no discernible problems based on these scores.

Locality of School Variable - From the above Table it is observed that 27.63% (N=586) of the student were attending schools located in rural, 23.90% (N=507) students were attending schools located in sub-urban area and 48.46% (N=1028) were from schools located in urban area. The findings indicate a higher prevalence of hyperactive problems among children attending schools in urban areas compared to those in rural and suburban areas. Specifically, 80.00% (N=4) of students from urban schools exhibited Very High or Abnormal SDQ scores, with an additional 78.57% (N=11) showing High or Borderline scores. In contrast, only 20.00% (N=1) of students from rural schools and none (0%) from suburban schools were classified as Very High, and 0% (N=0) and 21.43% (N=3) exhibited High SDQ scores, respectively. Refer to Figure 4.13 for a detailed visual representation of these findings.

School Type Variable - From the above Table: it is observed that 27.02% (N=573) of the students were attending Govt. schools, 50.26% (N=1066) were attending Semi-govt. schools and 22.73% (N= 482) were from Private schools. The result showed that number of children having hyperactive problem is more among the students attending the Semi-govt. schools and Govt. schools than that of Private schools. 100% of the students from Govt. schools had Very High or Abnormal SDQ scores with 21.43% High or Borderline scores whereas 0.00% of the students from Semi-govt. schools were rated Very High with 42.86% as High SDQ scores. And 0.00% of the students from Private schools were rated Very High with 35.71% High SDQ scores. A detailed illustration is given in figure 4.13.

Medium of Instruction Variable - Table 4.13 shows the hyperactive problems with respect to medium of instruction through which the children study. Out of total 2121 students, 1920 (90.52%) students attend Bengali medium schools and 201 (9.48%) students attend English medium schools. 5 (100.00%) students attending Bengali

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medium school showed Very High SDQ score which means they have definite or severe mental health problem with another 11 (78.57%) Less students had High or Borderline Scores. Less number of students was found in English medium schools having mental health problems. 0 (0%) students attending English medium schools had Very High SDQ score with another 3 (21.43%) students fell under High or Borderline Scoring. Figure 4.13 illustrates the distribution.

Father's Educational Level Variable - Table 4.13 shows the total of Hyperactive problems in relation to Father's Educational attainment of the children under study. Out of total 2121 students, 148 (%) students had Illiterate fathers, 414 (19.52%) students had fathers who had completed Primary school, 533 (25.13%) had fathers who had completed Secondary school and 1026 (48.37%) had fathers who had completed the Higher studies. The result showed that the number of children with Hyperactive Problems was higher among those students who had fathers who completed higher studies than those who had no formal education. 0.00% (N=0) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 14.29% (N=2) High or Borderline scores whereas 20.00% (N=1) of the students who had fathers who completed higher studies were rated Very High with 50.00% (N=7) as High SDQ scores. A detailed illustration is given in figure 4.13.

Mother's Educational Level Variable - Table 4.13 shows the Hyperactive Problems in relation to Mother's Educational attainment of the children under study. Out of total 2121 students, 144(6.79%) students had Illiterate fathers, 426 (20.08%) students had fathers who had completed Primary school, 740 (34.89%) had fathers who had completed Secondary school and 811 (38.24%) had fathers who had completed the Higher studies. The result showed that the number of children with mental health problems was higher among those students who had fathers who completed higher studies than those who had no formal education. 20.00% (N=1) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 7.14% (N=1) High or Borderline scores whereas 40.00% (N=2) of the students who had fathers who completed higher studies were rated

Very High with 35.71% (N=5) as High SDQ scores. A detailed illustration is given in figure 4.12.

Figure 4.12 Variable Wise Distribution of Hyperactive Problem

4.1.14 Comparison of Peer Problem on the basis of Different Variables

The following Table 4.14 shows the comparison of the status of Emotional Problem of school going adolescents on the basis of different variables i.e. gender, habitat, medium of instruction, locality of school, type of family, parental educational attainment and type of school.

Table 4.14 Percentage Distribution of Peer Problem on the basis of different Variable.

*Peer Problem * Gender of the Students Crosstabulation*

			Gender		Total
			Male	Female	
Peer Problem	Closed to Average	Count	609	738	1347
		% within Gender	45.21%	54.79%	63.51%
		% of Total	28.71%	34.79%	63.51%
	Slightly Raised	Count	153	185	338
		% within Gender	45.27%	54.73%	15.94%
		% of Total	7.21%	8.72%	15.94%
	High	Count	92	103	195
		% within Gender	47.18%	52.82%	9.19%
		% of Total	4.34%	4.86%	9.19%
	Very High	Count	131	110	241
		% within Gender	54.36%	45.64%	11.36%
		% of Total	6.18%	5.19%	31.59%
Total	Total	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

Peer Problem * Habitat of the students Crosstabulation

			Habitat			Total
			Urban	Semi-Urban	Rural	
Peer Problem	**Closed to Average**	Count	570	424	353	1347
		% within Age group	42.32%	31.48%	26.21%	63.51%
		% of Total	26.87%	19.99%	16.64%	63.51%
	Slightly Raised	Count	191	59	88	338
		% within Age group	56.51%	17.46%	26.04%	15.94%
		% of Total	9.01%	2.78%	4.15%	15.94%
	High	Count	125	39	31	195
		% within Age group	64.10%	20.00%	15.90%	9.19%
		% of Total	5.89%	1.84%	1.46%	9.19%
	Very High	Count	137	62	42	241
		% within Age group	56.85%	25.73%	17.43%	11.36%
		% of Total	6.46%	2.92%	1.98%	31.59%
Total	**Total**	Count	1023	584	514	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.23%	27.53%	24.23%	100%

*Peer Problem * Family Type Crosstabulation*

		Family Type		Total
		Nuclear	Joint	
Closed to Average	Count	965	382	1347
	% within Age group	71.64%	28.36%	63.51%
	% of Total	45.50%	18.01%	63.51%
	Count	250	88	338
	% within Age group	73.96%	26.04%	15.94%

Peer Problem	**Slightly Raised**	% of Total	11.79%	4.15%	15.94%
	High	Count	114	81	195
		% within Age group	58.46%	41.54%	9.19%
		% of Total	5.37%	3.82%	9.19%
	Very High	Count	161	80	241
		% within Age group	66.80%	33.20%	11.36%
		% of Total	7.59%	3.77%	31.59%
Total	**Total**	Count	1490	631	2121
		% within Age group	100%	100%	100%
		% of Total	70.25%	29.75%	100%

Peer Problem * Locality of School Crosstabulation

			Locality of School			Total
			Urban	**Sub-Urban**	**Rural**	
Peer Problem	**Closed to Average**	Count	573	339	435	1347
		% within Age group	42.54%	25.17%	32.29%	63.51%
		% of Total	27.02%	15.98%	2051%	63.51%
	Slightly Raised	Count	191	72	75	338
		% within Age group	56.51%	21.30%	22.19%	15.94%
		% of Total	9.00%	3.40%	3.54%	15.94%
	High	Count	126	33	36	195
		% within Age group	64.62%	16.92%	18.46%	9.19%
		% of Total	5.94%	1.56%	1.70%	9.19%
	Very High	Count	138	63	40	241
		% within Age group	57.26%	26.14%	16.60%	11.36%
		% of Total	6.51%	2.97%	1.89%	31.59%
Total	**Total**	Count	1028	507	586	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.46%	23.90%	27.63%	100%

*Peer Problem * Type of School Crosstabulation*

			School Type			Total
			Govt.	Semi-govt.	Private	
Peer Problem	**Closed to Average**	Count	349	746	252	1347
		% within Age group	25.91%	55.38%	18.71%	63.51%
		% of Total	16.45%	35.17%	11.88%	63.51%
	Slightly Raised	Count	90	141	107	338
		% within Age group	26.63%	41.72%	31.66%	15.94%
		% of Total	4.24%	6.65%	5.04%	15.94%
	High	Count	52	81	62	195
		% within Age group	26.67%	41.54%	31.79%	9.19%
		% of Total	2.45%	3.82%	2.92%	9.19%
	Very High	Count	82	98	61	241
		% within Age group	34.02%	40.66%	25.31%	11.36%
		% of Total	3.87%	4.62%	2.88%	31.59%
Total	**Total**	Count	573	1066	482	2121
		% within Age group	100%	100%	100%	100%
		% of Total	27.02%	50.26%	22.73%	100%

*Peer Problem * Medium of Instruction Crosstabulation*

			Medium		Total
			Bengali	English	
Peer Problem	**Closed to Average**	Count	1254	93	1347
		% within Age group	93.10%	6.90%	63.51%
		% of Total	59.12%	4.38%	63.51%
	Slightly Raised	Count	295	43	338
		% within Age group	87.28%	12.72%	15.94%
		% of Total	13.91%	2.02%	15.94%
	High	Count	159	36	195
		% within Age group	81.54%	18.46%	9.19%
		% of Total	7.45%	1.70%	9.19%
	Very High	Count	212	29	241
		% within Age group	87.97%	12.03%	11.36%

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		% of Total	10.00%	1.37%	31.59%	
Total	Total	Count	1920	201	2121	
		% within Age group	100%	100%	100%	
		% of Total	90.52%	9.48%	100%	

*Peer Problem * Father's Education Level of the Students Crosstabulation*

			Father's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Peer Problem	Closed to Average	Count	75	255	345	672	1347
		% within Age group	5.57%	18.93%	25.61%	49.89%	63.51%
		% of Total	3.54%	12.02%	16.27%	31.69%	63.51%
	Slightly Raised	Count	25	66	92	155	338
		% within Age group	7.40%	19.53%	27.22%	45.86%	15.94%
		% of Total	1.18%	3.11%	4.34%	7.31%	15.94%
	High	Count	28	40	36	91	195
		% within Age group	14.36%	20.51%	18.46%	46.67%	9.19%
		% of Total	1.32%	1.89%	1.70%	4.29%	9.19%
	Very High	Count	20	53	60	108	241
		% within Age group	8.30%	21.99%	24.90%	44.81%	11.36%
		% of Total	0.94%	2.50%	2.83%	5.09%	31.59%
Total	Total	Count	148	414	533	1026	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.98%	19.52%	25.13%	48.37%	100%

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Peer Problem * Mother's Education Level of the Students Crosstabulation

			Mother's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Peer Problem	**Closed to Average**	Count	73	264	461	549	1347
		% within Age group	5.41%	19.60%	34.22%	40.76%	63.51%
		% of Total	3.44%	12.45%	21.74%	25.88%	63.51%
	Slightly Raised	Count	27	63	127	121	338
		% within Age group	7.99%	18.64%	37.57%	35.80%	15.94%
		% of Total	1.27%	2.97%	5.99%	5.70%	15.94%
	High	Count	22	46	59	68	195
		% within Age group	11.28%	23.59%	30.26%	34.87%	9.19%
		% of Total	1.04%	2.17%	2.78%	3.21%	9.19%
	Very High	Count	22	53	93	73	241
		% within Age group	9.13%	21.99%	38.59%	30.29%	11.36%
		% of Total	1.04%	2.50%	4.38%	3.44%	11.36%
Total	**Total**	Count	144	426	740	811	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

Gender Variable - The gender wise analysis of SDQ score shown in table 4.14 indicates that out of 985 male (46.44%) students under study, 131(54.36%) have Very High or Abnormal SDQ scoring indicating having definite Peer Problems, and out of 1136(53.56) female students 110 (45.64%) showed Very High score. Female students have more problems than that of male students. 52.82% (103) of the female students and 47.18% (92) male were on the borderline having High SDQ score and they are likely to be at risk. 45.21% (609) males with 54.79% (738) female students were rated close to average, and 45.27% (153) males and 54.73% (185) female students scored slightly raised. These age group may be considered as Normal. Figure 4.14 illustrates the gender wise distribution of Peer Problems of the children under study.

Habitat Variable - Table 4.14 gives an account of peer problems with respect to the habitat (Urban, Semi-Urban and Rural) the children belong to. Out of the total students under study 48.23% (N=1023) were from Urban, 27.53% (N=584) were from Semi-Urban and 24.23% (N=514) belonged to Rural areas. 137(56.85%) of the children from Urban areas scored Very High SDQ scores which indicates that they have definite Peer problem. Another 125 (64.10%) children from Urban areas had Borderline scores and are likely to have some sort of problems. Less number of students from Rural areas showed having Peer problems in comparison to children belonging to Urban and Semi-Urban areas. 17.43% (N=42) of the children from the Rural areas have the Very High SDQ score with 15.90% (N=31) High SDQ score. Rest of the students from all the groups may have minor or no problems.

Family Type Variable - The 4.14 gives an account of the Peer problems with respect to the family type (Nuclear and Joint family) the children belonged to. Out of the total students under study 1490 (70.25%) were from Nuclear family and 631 (29.75%) belonged to Nuclear Family. 161 (66.80%) of the children from Nuclear Family scored Very High SDQ scores which indicates that they have definite Peer problems. Another 114 (58.46%) children from Nuclear Family had Borderline scores and are likely to have peer problems. Less number of students from Joint Family showed having peer problems in comparison to children belonging to Nuclear Family. 33.20% (N=80) of the children from the Joint Family have the Very High SDQ scores with 41.54% (N=81) High SDQ score. Rest of the students from both the groups may have minor or no problem.

Locality of School Variable - The table shows the distribution of students in rural, sub-urban, and urban schools, (Locality of school) which are 27.63% (N=586), 23.90% (N=507), and 48.46% (N=1028) respectively. It also reveals that urban students have more mental health issues than rural and sub-urban students. Among the urban students, 57.26% (N=138) had Very High or Abnormal SDQ scores and 64.62% (N=126) had High or Borderline scores. In contrast, only 16.60% (N=40) of the rural students and 26.14% (N=63) of the sub-urban students had Very High SDQ scores, and 18.46% (N=36) and

16.92% (N=33) had High SDQ scores respectively. Figure 4.14 provides a visual representation of these results.

School Type Variable - The table 4.14. compares the of students in Govt., Semi-govt., and Private schools, based on the SDQ scores. The SDQ scores are a measure of psychological well-being, ranging from Normal to Very High or Abnormal. From the above Table it is observed that 27.02% (N=573) of the students were attending Govt. schools, 50.26% (N=1066) were attending Semi-govt. schools and 22.73% (N= 482) were from Private schools. The result showed that number of children having mental health problem is more among the students attending the Semi-govt. schools and Govt. schools than that of Private schools. 34.02%(N=82) of the students from Govt. schools had Very High or Abnormal SDQ scores with 26.67%(N=52) High or Borderline scores whereas 40.66% (N=98) of the students from Semi-govt. schools were rated Very High with 41.72%(N=81) as High SDQ scores. And 25.31%(N=61) of the students from Private schools were rated Very High with 31.79%(N=62) High SDQ scores. Figure 4.14 illustrates these results graphically.

Medium of Instruction Variable - Table 4.14 shows the Peer problems with respect to medium of instruction through which the children study. Out of total 2121 students, 1920 (90.52%) students attend Bengali medium schools and 201 (9.48%) students attend English medium schools. 212 (87.54%) students attending Bengali medium school showed Very High SDQ score which means they have definite or severe peer health problem with another 159 (81.547%) Less students had High or Borderline Scores. Less number of students was found in English medium schools having mental health problems. 29 (12.03%) students attending English medium schools had Very High SDQ score with another 36 (18.46%) students fell under High or Borderline Scoring. Figure 4.14 illustrates the distribution.

Father's Educational Level Variable - Table 4.14 shows the Peer problems in relation to Father's Educational attainment of the children under study. Out of total 2121 students, 148 (6.98%) students had Illiterate fathers, 414 (19.52%) students had fathers who had completed Primary school, 533 (25.13%) had fathers who had completed Secondary

school and 1026 (48.37%) had fathers who had completed the Higher studies. The result showed that the number of children with peer problems was higher among those students who had fathers who completed higher studies than those who had no formal education. 8.30% (N=20) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 14.36% (N=28) High or Borderline scores whereas 44.81% (N=108) of the students who had fathers who completed higher studies were rated Very High with 46.67%(N=91) as High SDQ scores. A detailed illustration is given in figure 4.14

Mother's Educational Level Variable - Table 4.14 shows the Peer problems in relation to Mother's Educational attainment of the children under study. Out of total 2121 students, 144(6.79%) students had Illiterate fathers, 426 (20.08%) students had fathers who had completed Primary school, 740 (34.89%) had fathers who had completed Secondary school and 811 (38.24%) had fathers who had completed the Higher studies. The result showed that the number of children with mental health problems was higher among those students who had fathers who completed higher studies than those who had no formal education. 3.13% (N=22) of the students who had Illiterate fathers had Very High or Abnormal SDQ scores with 11.28% (N=22) High or Borderline scores whereas 30.29% (N=73) of the students who had fathers who completed higher studies were rated Very High with 34.87% (N=68) as High SDQ scores. A detailed illustration is given in figure 4.13.

Figure 4.13 Variable Wise Distribution of Peer Problem

4.1.15 Comparison of Pro-social Problem on the basis of Different Variables

The following Table 4.15 shows the comparison of the status of Emotional Problem of school going adolescents on the basis of different variables i.e. gender, habitat, medium of instruction, locality of school, type of family, parental educational attainment and type of school.

Table 4.15 Percentage Distribution of Emotional Problem on the basis of different Variable.

*Pro-social Problem * Gender of the Students Crosstabulation*

			Gender		Total
			Male	**Female**	
Pro-social Problem	**Closed to Average**	Count	709	875	1584
		% within Gender	44.76%	55.24%	74.68%
		% of Total	33.43%	41.25%	74.68%
	Slightly Raised	Count	82	89	171
		% within Gender	47.95%	52.05%	8.06%
		% of Total	3.87%	4.20%	8.06%
	High	Count	66	60	126
		% within Gender	52.38%	47.62%	5.94%
		% of Total	3.11%	2.83%	5.94%
	Very High	Count	128	112	240
		% within Gender	53.33%	46.67%	11.32%
		% of Total	6.03%	5.28%	11.32%
Total	**Total**	Count	985	1136	2121
		% within Gender	100%	100%	100%
		% of Total	46.44%	53.56%	100%

Pro-social Problem * Habitat of the students Crosstabulation

		Habitat			Total
		Urban	Semi-Urban	Rural	
Pro-social Problem	**Closed to Average**	Count			
		770	418	396	1584
		% within Age group			
		48.61%	26.39%	25.00%	74.68%
		% of Total			
		36.30%	19.71%	18.67%	74.68%
	Slightly Raised	Count			
		107	22	42	171
		% within Age group			
		62.57%	12.87%	24.56%	8.06%
		% of Total			
		5.04%	1.04%	1.98%	8.06%
	High	Count			
		58	44	24	126
		% within Age group			
		46.03%	34.92%	19.05%	5.94%
		% of Total			
		2.74%	2.07%	1.13%	5.94%
	Very High	Count			
		88	100	52	240
		% within Age group			
		36.67%	41.67%	21.67%	11.32%
		% of Total			
		4.15%	4.71%	2.45%	11.32%
Total	**Total**	Count			
		1023	584	514	2121
		% within Age group			
		100%	100%	100%	100%
		% of Total			
		48.23%	27.53%	24.23%	100%

Pro-social Problem * Family Type Crosstabulation

		Family Type		Total
		Nuclear	Joint	
Closed to Average	Count	1101	483	1584
	% within Age group	69.51%	30.49%	74.68%
	% of Total	51091%	22.77%	74.68%
Slightly Raised	Count	112	59	171
	% within Age group	65.50%	34.50%	8.06%
	% of Total	5.28%	2.78%	8.06%

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Pro-social Problem	**High**	Count	90	36	126
		% within Age group	71.43%	28.57%	5.94%
		% of Total	4.24%	1.70%	5.94%
	Very High	Count	187	53	240
		% within Age group	77.91%	22.08%	11.32%
		% of Total	8.81%	11.55%	11.32%
Total	**Total**	Count	1490	631	2121
		% within Age group	100%	100%	100%
		% of Total	70.25%	29.75%	100%

Pro-social Problem * Locality of School Crosstabulation

			Locality of School			Total
			Urban	**Sub-Urban**	**Rural**	
Pro-social Problem	**Closed to Average**	Count	773	351	460	1584
		% within Age group	48.80%	22.16%	29.04%	74.68%
		% of Total	36.44%	16.55%	21.69%	74.68%
	Slightly Raised	Count	107	14	50	171
		% within Age group	62.57%	8.19%	29.24%	8.06%
		% of Total	5.04%	0.66%	2.36%	8.06%
	High	Count	59	43	24	126
		% within Age group	46.83%	34.13%	19.05%	5.94%
		% of Total	2.78%	2.03%	1.13%	5.94%
	Very High	Count	89	99	52	240
		% within Age group	37.08%	41.25%	21.67%	11.32%
		% of Total	4.20%	4.67%	2.45%	11.32%
Total	**Total**	Count	1028	507	586	2121
		% within Age group	100%	100%	100%	100%
		% of Total	48.46%	23.90%	27.63%	100%

Pro-social Problem * Type of School Crosstabulation

		School Type			Total
		Govt.	**Semi-govt.**	**Private**	

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Closed to Average	**Count**	444	790	350	1584
	% within Age group	28.03%	49.87%	22.10%	74.68%
	% of Total	20.93%	37.25%	16.50%	74.68%
Slightly Raised	Count	50	64	57	171
	% within Age group	29.24%	37.43%	33.33%	8.06%
	% of Total	5.19%	3.02%	2.69%	8.06%
High	Count	40	60	26	126
	% within Age group	31.75%	47.62%	20.63%	5.94%
	% of Total	1.89%	2.83%	1.23%	5.94%
Very High	Count	39	152	49	240
	% within Age group	16.25%	63.33%	20.42%	11.32%
	% of Total	1.84%	7.17%	2.31%	11.32%
Total	Count	573	1066	482	2121
	% within Age group	100%	100%	100%	100%
	% of Total	27.02%	50.26%	22.73%	100%

Pro-social Problem appears in left margin for rows Closed to Average through Very High; *Total* in left margin for the Total row.

*Pro-social Problem * Medium of Instruction Crosstabulation*

		Medium		Total
		Bengali	**English**	
Closed to Average	Count	1473	111	1584
	% within Age group	92.99%	7.01%	74.68%
	% of Total	69.45%	5.23%	74.68%
Slightly Raised	Count	140	31	171
	% within Age group	81.87%	18.13%	8.06%
	% of Total	6.60%	1.46%	8.06%
High	Count	107	19	126
	% within Age group	84.92%	15.80%	5.94%
	% of Total	5.04%	0.90%	5.94%
Very High	Count	200	40	240
	% within Age group	83.33%	16.67%	11.32%
	% of Total	9.43%	1.89%	11.32%
	Count	1920	201	2121

Pro-social Problem appears in left margin.

Total	% within Age group	100%	100%	100%
	% of Total	90.52%	9.48%	100%

Total

*Pro-social Problem * Father's Education Level of the Students Crosstabulation*

			Father's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Pro-social Problem	**Closed to Average**	Count	118	309	412	745	1584
		% within Age group	7.45%	14.47%	22.82%	59.93%	74.68%
		% of Total	5.56%	3.68%	5.80%	15.23%	74.68%
	Slightly Raised	Count	16	39	28	88	171
		% within Age group	9.36%	18.24%	27.05%	50.50%	8.06%
		% of Total	0.75%	4.29%	6.36%	11.88%	8.06%
	High	Count	5	29	33	59	126
		% within Age group	3.97%	20.82%	26.88%	43.10%	5.94%
		% of Total	0.24%	4.05%	5.23%	8.39%	5.94%
	Very High	Count	9	37	60	134	240
		% within Age group	3.75%	19.25%	24.48%	40.75%	11.32%
		% of Total	04.2%	6.08%	7.73%	12.87%	11.32%
Total	**Total**	Count	148	414	533	1026	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.98%	19.52%	25.13%	48.37%	100%

*Pro-social Problem * Mother's Education Level of the Students Crosstabulation*

			Mother's Education Level				
			Illiterate	Primary	Secondary	Higher Study	Total
Pro-social Problem	**Closed to Average**	Count	108	314	564	598	1584
		% within Age group	6.82%	19.82%	35.61%	37.75%	74.68%
		% of Total	5.09%	14.80%	26.59%	28.19%	74.68%
	Slightly Raised	Count	16	40	46	69	171
		% within Age group	9.36%	23.39%	26.90%	40.35%	8.06%
		% of Total	0.75%	1.89%	2.17%	3.25%	8.06%
	High	Count	8	33	42	43	126
		% within Age group	6.35%	26.19%	33.33%	34.13%	5.94%
		% of Total	0.38%	1.56%	1.98%	2.03%	5.94%
	Very High	Count	12	39	88	101	240
		% within Age group	5.00%	16.25%	36.67%	42.08%	11.32%
		% of Total	0.57%	1.84%	4.15%	4.76%	11.32%
Total	**Total**	Count	144	426	740	811	2121
		% within Age group	100%	100%	100%	100%	100%
		% of Total	6.79%	20.08%	34.89%	38.24%	100%

Gender Variable - The gender wise analysis of SDQ score shown in table 4.15 indicates that out of 985 male students under study, 282 (28.63%) have Very High or Abnormal SDQ scoring indicating having definite Pro - social Problems, and out of 1136 female students. 112 (46.67%) showed Very High score. Female students have more problems than that of male students. 60(47.62%) of the female students and 66 (52.38%) males were on the borderline having High SDQ score and they are likely to be at risk. 709(44.76) % males with 875(55.24) % female students were rated close to average, and 82(47.95) % males and 89(52.5) % female students scored slightly raised. These age group may be considered as Normal. The figure 4.15 below shows how the Pro-social problems vary by gender among the students.

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Habitat Variable - Table 4.15 outlines Pro-social issues in relation to the living environment (Urban, Semi-Urban, and Rural) of the examined children. Among the total students surveyed, 48.23% (N=1023) hailed from Urban areas, 27.53% (N=584) from Semi-Urban areas, and 24.23% (N=514) from Rural areas. In Urban areas, 88 children (36.67%) exhibited a Very High SDQ score, indicating definite Pro-social problems, while 58 children (46.03%) had Borderline scores, suggesting potential issues. In comparison, fewer students from Rural areas demonstrated Pro-social problems. Specifically, 21.67% (N=52) of Rural children had Very High SDQ scores, and 19.05% (N=24) had High SDQ scores. The remaining students in all groups were likely to have minimal or no problems.

Family Type Variable - Table 4.15 provides an overview of Pro-social problems concerning the family structure (Nuclear and Joint family) of the examined children. Among the total students in the study, 1490 (70.25%) belonged to Nuclear families, while 631 (29.75%) were from Joint families. In Nuclear families, 187 children (77.91%) exhibited Very High SDQ scores, indicating clear Pro-social problems, and 90 children (71.43%) had Borderline scores, suggesting potential problems. Comparatively, a smaller proportion of students from Joint families showed Pro-social problems. Specifically, 22.08% (N=53) of children from Joint families had Very High SDQ scores, and 28.57% (N=36) had High SDQ scores. The remaining students in both groups were likely to have minimal or no problems. Figure 4.15 illustrates the Pro-social problems of students from Nuclear and Joint families.

Locality of School Variable - The provided table reveals that 27.63% (N=586) of students attended schools in rural areas, 23.90% (N=507) attended schools in suburban areas, and 48.46% (N=1028) attended schools in urban areas. The findings indicate a higher prevalence of Pro-social problems among students attending urban schools compared to those in rural and suburban areas. Specifically, 89 (37.08%) of students from urban schools displayed Very High or Abnormal SDQ scores, along with 59 (46.83%) with High or Borderline scores. In contrast, 21.67% of students from rural schools and 41.25% from suburban schools were classified as Very High, with 19.05% and 34.13% having High SDQ scores, respectively. Locality of school a detailed depiction is provided in Figure 4.15.

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School Type Variable - The provided table indicates that 27.02% (N=573) of students attended Government schools, 50.26% (N=1066) attended Semi-government schools, and 22.73% (N= 482) were enrolled in Private schools. The findings suggest a higher prevalence of mental health problems among students attending Semi-government and Government schools compared to those in Private schools. Specifically, 39 (16.25%) of students from Government schools displayed Very High or Abnormal SDQ scores, along with 40 (31.75%) with High or Borderline scores. In Semi-government schools, 152 (63.33%) students were rated Very High, with 60 (47.62%) having High SDQ scores. Among students in Private schools, 49 (20.42%) were classified as Very High, with 26 (20.63%) having High SDQ scores. A detailed depiction is presented in Figure 4.15.

Medium of Instruction Variable - Table 4.15 presents Pro-social problems concerning the medium of instruction in which children are educated. Out of the total 2121 students, 1920 (90.52%) attend Bengali medium schools, while 201 (9.48%) attend English medium schools. A significant proportion of students in Bengali medium schools, 200 (83.33%), exhibited Very High SDQ scores, indicating definite or severe mental health problems, and another 107 (84.92%) had High or Borderline scores. In contrast, a smaller number of students in English medium schools showed signs of mental health problems. Specifically, 40 (16.67%) students in English medium schools had Very High SDQ scores, with another 19 (15.80%) falling under the category of High or Borderline scores. The distribution is visually represented in Figure 4.15.

Father's Educational Level Variable - The findings presented in Table 4.15 reveal a correlation between the Prosocial problems among children and their fathers' educational attainment. Among the 2121 students examined, 6.98% had illiterate fathers, 19.52% had fathers who completed Primary school, 25.13% had fathers with Secondary school education, and 48.37% had fathers who completed Higher studies. Surprisingly, the results indicate a higher prevalence of mental health problems among students whose fathers completed higher studies compared to those with no formal education. Specifically, 3.75% of students with illiterate fathers exhibited Very High or Abnormal SDQ scores, and 3.97% had High or Borderline scores. In contrast, a significant

proportion of students with fathers who completed higher studies, 40.75%, showed Very High SDQ scores, with an additional 43.10% having High SDQ scores. This suggests a potential association between higher levels of paternal education and an increased likelihood of Prosocial problems in their children. The detailed illustration in Figure 4.15 visually represents these findings. Further research and exploration may be necessary to understand the underlying factors contributing to this unexpected relationship.

Mother's Educational Level Variable - Table 4.15 presents the overall difficulty score, indicating the Pro-social Problems, in correlation with the educational attainment of the mothers of the children under examination. Among the total 2121 students, 144 (6.79%) had mothers with no formal education, 426 (20.08%) had mothers who completed primary school, 740 (34.89%) had mothers with secondary school completion, and 811 (38.24%) had mothers with higher education. The findings reveal a higher prevalence of Pro-social problems among students whose mothers had higher education compared to those with no formal education. Specifically, 5.00% (N=12) of students with illiterate mothers exhibited Very High or Abnormal SDQ scores, with 6.38% (N=8) having High or Borderline scores. In contrast, 42.08% (N=101) of students with mothers who completed higher studies were classified as Very High, and 34.13% (N=43) had High SDQ scores. Figure 4.14 provides a detailed visualization of these results.

Figure 4.14 Variable Wise Distribution of Pro-social Problem

4.2 Analysis using Inferential Statistics

This part of the chapter deals with inferential statistics using Chi-square test to find out significant differences of or comparing the Means of variables and predictor sub-variables.

4.2.1. Hypothesis Testing

In order to test the null hypotheses H_o1 to H_o6, Chi-square test has been used. Table 4.16 and 4.17 show the result of chi-square test.

Table 4.16 Chi-square Test showing variable wise differences in Mental Health Problem (Total Difficulty)

Total Difficulty * Chi-square Test on the basis of Different Variables

	Variables	Category	N	df	X²	Level of Significant	Remarks
	Gender	Male	985	3	10.692	.014	S
		Female	1185				P>.05
	Habitat	Urban	1023	6	102.284	.000	S
		Semi-urban	584				P>.05
		Rural	514				
	Medium	Bengali	1920	3	13.998	.003	S
		English	201				P>.05
	Locality of School	Urban	1028	6	124.119	.000	S
		Sub-urban	507				P>.05
		Rural	586				
Total Difficulty	**Family Type**	Nuclear	1490	3	59.677	.000	S
		Joint	631				P>.05
	School Type	Govt.	573	6	229.483	.000	S
		Semi-govt.	1066				P>.05
		Private	482				
		Illiterate	148	9	80.055	.000	S
		Primary	414				P>.05

Father's Educational Level	Secondary	533				
	Higher Study	1026				
Mother's Educational Level	Illiterate	144	9	81.688	.000	S P>.05
	Primary	426				
	Secondary	740				
	Higher Study	811				

H₀1: *There is no significant difference in the rate of prevalence of Mental Health Problem with respect to gender, habitat, medium of instruction, locality of school, family type, school type and parental educational attainment.*

From the Table 4.16 the following have been observed

- The calculated value of x^2 with relation to **Gender** of the students in Mental Health Problem is 10.692, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to gender is rejected and it may be concluded that there is significant difference of Mental Health problem between male and female students.

- The calculated value of x^2 with relation to **Habitat** of the students in Mental Health Problem is 102.284, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of Mental Health problem between Urban, Semi-Urban and Rural.

- That the calculated value of X^2 with relation to **Medium of Instruction** of the students in Mental Health problem is 13.998, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Hence, null hypothesis with relation to medium of instruction is rejected with greater confidence and it may be concluded that there are significant differences of Mental Health problems between students studying in English and Bengali medium schools.

➕ The calculated value of x^2 with relation to **Locality of School** of the students in Mental Health Problem is 124.119, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of Mental Health problem between Urban, Sub-Urban and Rural.

➕ The calculated value of x^2 with relation to **Family Type** of the students in Mental Health Problem is 59.677, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference of Mental Health problem between nuclear and joint family.

➕ The calculated value of x^2 with relation to **School Type** of the students in Mental Health Problem is 229.483, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of Mental Health problem between Bengali and English medium school.

➕ The calculated value of x^2 with relation to **Father's Educational Level** of the students in Mental Health Problem is 80.055, which is higher than the critical value of X^2 both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to father`s education level is rejected and it may be concluded that there is significant difference of Mental Health problem between Illiterate, Primary, Secondary and Higher study.

➕ Level The calculated value of x^2 with relation to **Mother's Educational Level** of the students in Mental Health Problem is 81.688, which is higher than the critical value of X^2 both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to mother`s education level is rejected and it may be concluded that there is significant difference of Mental Health problem between Illiterate, Primary, Secondary and Higher study.

Table 4.17 Chi-square Test showing variable wise differences of Emotional Problem, Conduct Problem, Hyperactivate Problem, Peer Problem & Pro-social Problem

Emotional Problem * Chi-square Test on the basis of Different Variables

	Variables	Category	N	df	X²	Level of Significant	Remarks
Emotional Problem	**Gender**	Male	985	3	41.583	.000	S P>.05
		Female	1185				
	Habitat	Urban	1023	6	27.442	.000	S P>.05
		Semi-urban	584				
		Rural	514				
	Medium	Bengali	1920	3	0.540	.910	NS P>.05
		English	201				
	Locality of School	Urban	1028	6	60.936	.000	S P>.05
		Sub-urban	507				
		Rural	586				
	Family Type	Nuclear	1490	3	17.059	.001	S P>.05
		Joint	631				
	School Type	Govt.	573	6	41.546	.000	S P>.05
		Semi-govt.	1066				
		Private	482				
	Father's Educational Level	Illiterate	148	9	47.864	.000	S P>.05
		Primary	414				
		Secondary	533				
		Higher Study	1026				
	Mother's Educational Level	Illiterate	144	9	66.235	.000	S P>.05
		Primary	426				
		Secondary	740				
		Higher Study	811				

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H$_0$2: *There will be no significant difference in the rate of prevalence of Emotional problem with respect to gender, habitat, locality of schools, medium of instruction, family, school type and parental educational attainment of the children.*

✦ The calculated value of x^2 with relation to **Gender** of the students in **Emotional Problem** is 41.583, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to gender is rejected and it may be concluded that there is significant difference of Mental Health problem between male and female students.

✦ The calculated value of x^2 with relation to **Habitat** of the students in **Emotional Problem** is 27.442, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of Mental Health problem between Urban, Semi-Urban and Rural.

✦ But in the Casa of **Medium of Instruction** in emotional problem, though a difference is observed in percentage distribution analysis, the calculated values of X^2 of the said variables were less than the critical value of X^2 and consequently the null hypothesis is **fails to rejected.** Hence, it is concluded that there is no significant differences in emotional problem with **gender** of the adolescent school going children.

✦ The calculated value of x^2 with relation to **Locality of School** of the students in Emotional Problem is 60.936, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of emotional problem between Urban, Sub-Urban and Rural.

✦ The calculated value of x^2 with relation to **Family Type** of the students in **Emotional Problem** is 17.059, which is higher than the critical value of X^2 both at

.05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference emotional problem between Nuclear and Joint family.

+ The calculated value of x² with relation to **School Type** of the students in **Emotional Problem** is 41.546, which is higher than the critical value of X² both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of emotional problem between Govt., Semi-govt. and Private.

+ The calculated value of x² with relation to **Father's Educational Level** of the students in **Emotional Problem** is 66.235, which is higher than the critical value of X² both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to father`s education level is rejected and it may be concluded that there is significant difference of emotional problem between Illiterate, Primary, Secondary and Higher study.

+ Level The calculated value of x² with relation to **Mother's Educational Level** of the students in **Emotional Problem** is 81.688, which is higher than the critical value of X² both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to mother`s education level is rejected and it may be concluded that there is significant difference of emotional problem between Illiterate, Primary, Secondary and Higher study.

+

Conduct Problem * Chi-square Test on the basis of Different Variables

Variables	Category	N	df	X²	Level of Significant	Remarks
Gender	Male	985	3	0.511	.916	NS P>.05
	Female	1185				
	Urban	1023	6	38.319	.000	S P>.05
	Semi-urban	584				

	Habitat	Rural	514				
	Medium	Bengali	1920	3	10.084	.018	S
		English	201				P>.05
	Locality of School	Urban	1028	6	48.944	.000	S
		Sub-urban	507				P>.05
		Rural	586				
Conduct Problem	**Family Type**	Nuclear	1490	3	19.097	.000	S
		Joint	631				P>.05
	School Type	Govt.	573	6	63.386	.000	S
		Semi-govt.	1066				P>.05
		Private	482				
	Father's Educational Level	Illiterate	148	9	18.435	.030	S
		Primary	414				P>.05
		Secondary	533				
		Higher Study	1026				
	Mother's Educational Level	Illiterate	144	9	21.207	.012	S
		Primary	426				P>.05
		Secondary	740				
		Higher Study	811				

H$_0$3: *There will be no significant difference in the rate of prevalence of Conduct problem with respect to gender, habitat, locality of schools, medium of instruction, family, school type and parental educational attainment of the children.*

From the Table 4.16 it has been observed that in **Conduct Problem** the calculated value of X^2 with respect to different variables.

- But in the Casa of **Gender** in conduct problem, though a difference is observed in percentage distribution analysis, the calculated values of X^2 of the said variables were less than the critical value of X^2 and consequently the null hypothesis is **fails to rejected.** Hence, it is concluded that there are no significant differences in conduct problem with gender of the adolescent school going children.

🞡 The calculated value of x^2 with relation to **Habitat** of the students in conduct problem is 38.319, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of conduct problem between Urban, Semi-Urban and Rural.

🞡 That the calculated value of X^2 with relation to **Medium of Instruction** of the students in conduct problem is 10.084, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Hence, null hypothesis with relation to medium of instruction rejected with greater confidence and it may be concluded that there are significant differences of conduct problems between students studying in English and Bengali medium schools.

🞡 The calculated value of x^2 with relation to **Locality of School** of the students in **Conduct Problem** is 48.944, which is higher than the critical value of χ^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of conduct problem between Urban, Sub-Urban and Rural.

🞡 The calculated value of x^2 with relation to **Family Type** of the students in **Conduct Problem** is 19.097, which is higher than the critical value of χ^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference conduct problem between Nuclear and Joint family.

🞡 The calculated value of x^2 with relation to **School Type** of the students in **Conduct Problem** is 63.386, which is higher than the critical value of χ^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of conduct problem between Govt., Semi-govt. and Private.

🞡 The calculated value of x^2 with relation to **Father's Educational Level** of the students in **Conduct Problem** is 18.435, which is higher than the critical value of

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X^2 at .05 levels for 9 degree of freedom. Consequently, null hypothesis with relation to father`s education level is rejected and it may be concluded that there is significant difference of conduct problem between Illiterate, Primary, Secondary and Higher study.

- Level The calculated value of x^2 with relation to **Mother's Educational Level** of the students in Conduct Problem is 21.207, which is higher than the critical value of X^2 at .05 for 9 degree of freedom. Consequently, null hypothesis with relation to mother`s education level is rejected and it may be concluded that there is significant difference of conduct problem between Illiterate, Primary, Secondary and Higher study.

Hyperactivity Problem * Chi-square Test on the basis of Different Variables

	Variables	Category	N	df	X^2	Level of Significant	Remarks
Hyperactivity Problem	**Gender**	Male	985	3	4.342	.227	NS P>.05
		Female	1185				
	Habitat	Urban	1023	6	18.853	.004	S P>.05
		Semi-urban	584				
		Rural	514				
	Medium	Bengali	1920	3	2.936	.402	NS P>.05
		English	201				
	Locality of School	Urban	1028	6	23.645	.001	S P>.05
		Sub-urban	507				
		Rural	586				
	Family Type	Nuclear	1490	3	2.985	.394	NS P>.05
		Joint	631				
	School Type	Govt.	573	6	32.918	.000	S P>.05
		Semi-govt.	1066				
		Private	482				

		Illiterate	148	9	5.801	.760	NS
	Father's Educational Level	Primary	414				P>.05
		Secondary	533				
		Higher Study	1026				
		Illiterate	144	9	4.223	.896	NS
	Mother's Educational Level	Primary	426				P>.05
		Secondary	740				
		Higher Study	811				

H₀4: *There will be no significant difference in the rate of prevalence of Hyperactive problem with respect to gender, habitat, locality of schools, medium of instruction, family, school type and parental educational attainment of the children.*

- The calculated value of x^2 with relation to **Gender** of the students in hyperactive problem is 4.342, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of hyperactive problem between male and female students.

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- The calculated value of x^2 with relation to **Habitat** of the students in hyperactive problem is 18.853, which is higher than the critical value of X^2 at .05 level for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of hyperactive problem between Urban, Semi-Urban and Rural.

- That the calculated value of X^2 with relation to **Medium of Instruction** of the students in hyperactive problem is 2.936, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Hence, null hypothesis with relation to medium of instruction rejected with greater confidence and it may be concluded that there are significant differences of hyperactive problems between students studying in English and Bengali medium schools.

- The calculated value of x^2 with relation to **Locality of School** of the students in hyperactive Problem is 23.645, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of hyperactive problem between Urban, Sub-Urban and Rural.

- The calculated value of x^2 with relation to **Family Type** of the students in hyperactive Problem is 2.985, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference hyperactive problem between Nuclear and Joint family.

- The calculated value of x^2 with relation to **School Type** of the students in hyperactive Problem is 32.918, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of hyperactive problem between Govt., Semi-govt. and Private.

- But in the Casa of **Father's Educational Level** in hyperactive problem, though a difference is observed in percentage distribution analysis, the calculated values of X^2 of the said variables were less than the critical value of X^2 and consequently the null hypothesis is **fails to rejected.** Hence, it is concluded that there is no significant differences in hyperactive problem with gender of the adolescent school going children.

- But in the Casa of **Mother's Educational Level** in hyperactive problem, though a difference is observed in percentage distribution analysis, the calculated values of X^2 of the said variables were less than the critical value of X^2 and consequently the null hypothesis is **fails to rejected.** Hence, it is concluded that there are no

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significant differences in hyperactive problem with gender of the adolescent school going children.

Peer Problem * Chi-square Test on the basis of Different Variables

	Variables	Category	N	df	X²	Level of Significant	Remarks
Peer Problem	**Gender**	Male	985	3	7.120	.068	NS P>.05
		Female	1185				
	Habitat	Urban	1023	6	65.662	.000	S P>.05
		Semi-urban	584				
		Rural	514				
	Medium	Bengali	1920	3	34.726	.000	S P>.05
		English	201				
	Locality of School	Urban	1028	6	65.727	.000	S P>.05
		Sub-urban	507				
		Rural	586				
	Family Type	Nuclear	1490	3	17.813	.000	S P>.05
		Joint	631				
	School Type	Govt.	573	6	53.526	.000	S P>.05
		Semi-govt.	1066				
		Private	482				
	Father's Educational Level	Illiterate	148	9	26.840	.001	S P>.05
		Primary	414				
		Secondary	533				
		Higher Study	1026				
	Mother's Educational Level	Illiterate	144	9	24.652	.003	S P>.05
		Primary	426				
		Secondary	740				
		Higher Study	811				

H₀5: *There will be no significant difference in the rate of prevalence of Peer problem with respect to gender, habitat, locality of schools, medium of instruction, family, school type and parental educational attainment of the children.*

- But in the Casa of **Gender** in peer problem, though a difference is observed in percentage distribution analysis, the calculated values of χ^2 of the said variables were less than the critical value of X^2 and consequently the null hypothesis is **fails to rejected.** Hence, it is concluded that there are no significant differences in peer problem between male and female students of the adolescent school going children.

- The calculated value of x^2 with relation to **Habitat** of the students in peer problem is 65.662, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of peer problem between Urban, Semi-Urban and Rural.

- That the calculated value of X^2 with relation to **Medium of Instruction** of the students in peer problem is 34.726, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Hence, null hypothesis with relation to medium of instruction rejected with greater confidence and it may be concluded that there are significant differences of peer problems between students studying in English and Bengali medium schools.

- The calculated value of x^2 with relation to **Locality of School** of the students in Peer Problem is 65.727, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of peer problem between Urban, Sub-Urban and Rural.

- The calculated value of x^2 with relation to **Family Type** of the students in Peer Problem is 17.813, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference peer problem between Nuclear and Joint family.

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- The calculated value of x^2 with relation to **School Type** of the students in Peer Problem is 53.526, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of peer problem between Govt., Semi-govt. and Private.

- The calculated value of x^2 with relation to **Father's Educational Level** of the students in Peer Problem is 26.840, which is higher than the critical value of X^2 both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to father`s education level is rejected and it may be concluded that there is significant difference of peer problem between Illiterate, Primary, Secondary and Higher study.

- Level The calculated value of x^2 with relation to **Mother's Educational Level** of the students in Peer Problem is 24.652, which is higher than the critical value of X^2 at .05 level for 9 degree of freedom. Consequently, null hypothesis with relation to mother`s education level is rejected and it may be concluded that there is significant difference of peer problem between Illiterate, Primary, Secondary and Higher study.

Pro-social Problem * Chi-square Test on the basis of Different Variables

Variables	Category	N	df	X²	Level of Significant	Remarks
Gender	Male	985	3	8.327	.040	S P>.05
	Female	1185				
Habitat	Urban	1023	6	50.587	.000	S P>.05
	Semi-urban	584				
	Rural	514				
Medium	Bengali	1920	3	45.252	.000	S P>.05
	English	201				
	Urban	1028	6	76.700	.000	S

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Pro-social Problem	**Locality of School**	Sub-urban	507				P>.05
		Rural	586				
	Family Type	Nuclear	1490	3	9.100	.028	S P>.05
		Joint	631				
	School Type	Govt.	573	6	35.792	.000	S P>.05
		Semi-govt.	1066				
		Private	482				
	Father's Educational Level	Illiterate	148	9	20.429	.015	S P>.05
		Primary	414				
		Secondary	533				
		Higher Study	1026				
	Mother's Educational Level	Illiterate	144	9	13.359	.147	NS P>.05
		Primary	426				
		Secondary	740				
		Higher Study	811				

H₀6: *There will be no significant difference in the rate of prevalence of Pro-social problem with respect to gender, habitat, locality of schools, medium of instruction, family, school type and parental educational attainment of the children.*

+ The calculated value of x^2 with relation to **Gender** of the students in Pro-social problem is 8.327, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of Pro-social problem between male and female.

+ The calculated value of x^2 with relation to **Habitat** of the students in Pro-social problem is 50.587, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to habitat is rejected and it may be concluded that there is significant difference of Pro-social problem between Urban, Semi-Urban and Rural.

+ That the calculated value of X^2 with relation to **Medium of Instruction** of the students in Pro-social problem is 45.252, which is higher than the critical value of

X^2 both at .05 and .01 levels for 3 degree of freedom. Hence, null hypothesis with relation to medium of instruction rejected with greater confidence and it may be concluded that there are significant differences of Pro-social problems between students studying in English and Bengali medium schools.

- The calculated value of x^2 with relation to **Locality of School** of the students in Pro-social Problem is 76.700, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to locality of school is rejected and it may be concluded that there is significant difference of Pro-social problem between Urban, Sub-Urban and Rural.

- The calculated value of x^2 with relation to **Family Type** of the students in Pro-social Problem is 9.100, which is higher than the critical value of X^2 both at .05 and .01 levels for 3 degree of freedom. Consequently, null hypothesis with relation to family type is rejected and it may be concluded that there is significant difference Pro-social problem between Nuclear and Joint family.

- The calculated value of x^2 with relation to **School Type** of the students in Pro-social Problem is 35.792, which is higher than the critical value of X^2 both at .05 and .01 levels for 6 degree of freedom. Consequently, null hypothesis with relation to school type is rejected and it may be concluded that there is significant difference of Pro-social problem between Govt., Semi-govt. and Private.

- The calculated value of x^2 with relation to **Father's Educational Level** of the students in Pro-social Problem is 20.429, which is higher than the critical value of X^2 both at .05 and .01 levels for 9 degree of freedom. Consequently, null hypothesis with relation to father`s education level is rejected and it may be concluded that there is significant difference of Pro-social problem between Illiterate, Primary, Secondary and Higher study.

- But in the Casa of **Mother`s Education** in pro-social problem, though a difference is observed in percentage distribution analysis, the calculated values of X^2 of the said variables were less than the critical value of X^2 and consequently the null

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hypothesis is **fails to rejected.** Hence, it is concluded that there are no significant differences in Pro-social problem between Illiterate, Primary, Secondary and Higher study.

Hypotheses Testing Matrix

H$_0$ Number	Statement of Hypothesis	Status of Hypothesis
1.	There is no significant difference in the rate of prevalence of Mental Health problems with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.	Null Hypothesis with relation to gender, habitat, medium of instruction, locality of school, family type, school type and parental educational attainment is **Rejected.**
2fvfmmm mm 2.	There is no significant difference in the rate of prevalence of Emotional problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.	Null Hypothesis with relation to gender, habitat, locality of school, family type, school type and parental educational attainment is **Rejected** except Medium of instructions.
3.	There is no significant difference in the rate of prevalence of Conduct problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.	Null Hypothesis with relation to Medium of Instructions, Habitat, Locality of School, Family Type, School Type and Parental Educational Attainment is **Rejected** except Gender.
4.	There is no significant difference in the rate of prevalence of Hyperactivity problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.	Null Hypothesis with relation to Habitat, Locality of School and School Type is **Rejected.** Null Hypothesis with relation to Gender, Medium of Instructions, Family Type and Parental Educational Attainment is **Fails to Rejected.**
5.	There is no significant difference in the rate of prevalence of Peer problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's	Null Hypothesis with relation to Medium of Instructions, Habitat, Locality of School, Family Type, School Type and Parental Educational

	educational qualification and mother's educational qualification of the children.	Attainment is **Rejected** except Gender.
6.	There is no significant difference in the rate of prevalence of Pro-social problem with respect to gender, habitat, locality of the schools, medium of instruction, type of family, type of school, father's educational qualification and mother's educational qualification of the children.	Null Hypothesis with relation to Gender, Habitat, Medium of Instruction, locality of School, Family Type, School Type and Father's Educational Level is **Rejected** except Mother's Educational Level.

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CHAPTER - V
DISCUSSION AND CONCLUSION

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DISCUSSION AND CONCLUSION

The purpose of the study was to determine the prevalence of mental health issues among adolescent students in Bangladesh, ages 11 to 17, a sample drawn from the schools in various district to gather data. The study sample consists of students, both male and female, who attend govt., semi-govt. and private schools; who lived in rural, sub-urban and urban areas; who attend schools with English and Bengali as their medium of instruction; who are members of Nuclear and Joint families; and their parental educational attainment. Aside from determining the rate of prevalence of different dimensions of Mental Health problems, viz- Emotional Problem, Conduct Problem, Hyperactivity Problem, Peer Problem and pro-social Problem. The present chapter discuss the major findings of the study, comparison of findings with other studies, its significance and implication for further research.

5.1 Findings of the Study

The study was conducted on a total number of 2121 of students. The following are the major findings of the study:

Prevalence of overall Mental Health Problem:

Out of (N=2121) the total students, 31.59% students had Very High or Abnormal SDQ score, which means the prevalence rate of overall Mental Health problem of adolescent school going children was found to be 25.41% as Close to Average, rest of the students may have minor or no difficulty scoring 23.52% as Slightly Raised, 19.47% High or borderline, 31.59% and showed Very High in SDQ score. These children have definite and several Mental Health problems and require immediate interventions. Another 19.47% children under study were rated High and they were on the borderline. They may suffer from Mental Health problem in future, if not taken care of.

Age wise Mental Health Problem:

Out of 524 students aged 15, 34.73% exhibited Very High or Abnormal scores indicating problems, while 18.89%, aged 14 and 31.27% and 20.06% as High; aged 16, 34.43% Very High and 23.11% High; age group of 11 and within this group 26.92% were rated Very High or 13.46% as High; age group of 17 with 31.76% Very High and 19.53% High; while the age group of 12 showed the lowest scores, with 22.77% Very High and 16.83% High.

Relationship of Mental Health Problem with Gender of the Children:

Among 985 male students, 28.63% exhibited Very High or Abnormal SDQ scores, indicative of definite Mental Health Problems. In comparison, 34.15% of 1136 female students showed Very High scores, suggesting a higher prevalence among females. Additionally, 25.35% of females and 18.78% of males were on the borderline with High SDQ scores, indicating potential risks. About 27.01% of males and 24.03% of females scored close to average, while 25.58% of males and 21.74% of females scored slightly raised, suggesting these groups may be considered as normal.

Relationship of Mental Health Problem with Habitat of the Children:

Among the total students under study, 48.23% were from Urban, 27.53% from Semi-Urban, and 24.23% from Rural areas. A significant proportion, 58.36%, of Urban students exhibited Very High SDQ scores, 57.38%) High or borderline indicating definite Mental Health problems. In comparison, fewer students from Rural areas showed Mental Health problems, with 18.96% having Very High SDQ scores and 23.00% having High SDQ scores. The remaining students from all groups may have minor or no problems.

Relationship of Mental Health Problem with Family Type the Children belonged to:

In the study, 70.25% of students were from Nuclear families, with 63.43% displaying Very High SDQ scores, indicating definite Mental Health problems. Additionally, 64.89% had Borderline scores. In contrast, among the 29.75% from Joint families, 36.57% had

Very High SDQ scores and 35.11% had High SDQ scores, suggesting fewer Mental Health problems compared to Nuclear families. The remainder from both family types may have minor or no issues.

Relationship of Mental Health Problem with Medium of Instruction of the Children:

Out of a total of 2121 students, 90.52% attended Bengali medium schools, with 89.55% of them exhibiting Very High SDQ scores, indicating severe mental health problems, and 87.89% showing High or Borderline scores. In contrast, among the 9.48% of students attending English medium schools, a smaller percentage, 10.45%, had Very High SDQ scores, and 12.11% had High or Borderline scores, suggesting a lower prevalence of mental health issues in this group.

Relationship of Mental Health Problem with Location of School of the Children:

Among the students under study, 27.63% attended rural schools, 23.90% attended sub-urban schools, and 48.46% attended urban schools. The findings revealed a higher prevalence of mental health problems among students in urban schools compared to those in rural and sub-urban areas. Specifically, 58.81% of students from urban schools exhibited Very High or Abnormal SDQ scores, with 50.36% having High or Borderline scores. In contrast, 18.66% of students from rural schools and 22.54% from sub-urban schools had Very High scores, with 22.28% and 20.10% having High SDQ scores, respectively.

Relationship of Mental Health Problem with School Type the Children belonged to:

In the study, 27.02% of students attended Govt. schools, 50.26% attended Semi-govt. schools, and 22.73% were from Private schools. The findings indicate a higher prevalence of mental health problems among students in Govt. and Semi-govt. schools compared to Private schools. Specifically, 36.87% of students from Govt. schools exhibited Very High SDQ scores, with 32.93% having High scores. In Semi-govt. schools, 33.28% of students

had Very High scores, with 38.74% having High SDQ scores. For Private schools, 29.85% of students had Very High scores, with 28.33% having High SDQ scores.

Relationship of Mental Health Problem with Parental Educational attainment of the children:

Among the 2121 students, those with fathers who completed higher studies (48.37%) showed a higher prevalence of mental health problems, with 40.75% exhibiting Very High SDQ scores and 43.10% showing High SDQ scores. In comparison, students with illiterate fathers (6.98%) had 11.04% Very High and 9.20% High SDQ scores. Similarly, among students with mothers who completed higher studies (38.24%), 29.55% had Very High and 35.11% had High SDQ scores. In contrast, students with illiterate mothers (6.79%) had 11.34% Very High and 6.05% High SDQ scores. These findings suggest a potential association between parental education levels and mental health issues in students.

The study reveals a significant prevalence of various mental health problems among students, including Emotional Problems (91.43% in Bengali medium schools, 70% in male students), Conduct Problems (80.33% in Bengali medium schools, 65.57% in nuclear families), Hyperactivity Problems (100% in Bengali, government, 80% in urban, and 80% in male school students), Peer Problems (87.97% in Bengali medium school attendees, 66.80% in nuclear families), and Pro-social Problems (83.33% in Bengali medium schools, 77.91% in nuclear families). These findings underscore the necessity for targeted interventions to address the diverse emotional challenges faced by students, particularly those in Bengali medium schools and nuclear families.

Prevalence of Dimension wise Problems:

Peer Problem was found to be the most prevalent problem among adolescent school going children (31.59%). This was followed by Pro-social Problem (11.31%), Emotional Problem among 6.60% children. Rests were Conduct Problem (2.88%) and Hyperactive Problem (0.24%).

***Variable wise Prevalence of Emotional Problem*:**

Prevalence of Emotional Problem was Female students have a higher percentage of Very High or Abnormal SDQ scores (70% vs. 30%) and a higher percentage of students at risk (36.74% vs. 63.26%), indicating definite emotional problems.

Urban areas have a higher prevalence of children with Very High SDQ scores (52.14% vs 15.71%) and Borderline scores (16.57%) compared to rural areas. Children in Nuclear families have significantly higher Very High SDQ scores (61.42%) and Borderline scores (64.36%) compared to Joint families (35.64%) and 38.571%, respectively.

Urban schools have significantly higher Very High or Abnormal SDQ scores (52.14%), higher than suburban and rural schools (32.04% and 15.00%), and higher High or Borderline scores (47.17%).

A higher proportion of students from Government and Semi-Government schools exhibit Emotional Problems compared to those from Private schools. In Government schools, 35.00% have Very High or Abnormal SDQ scores, and 31.50% have High or Borderline scores. In Semi-Government schools, 35.00% have Very High SDQ scores, and 44.75% have High SDQ scores. Private schools show a lower prevalence, with 30.00% having Very High scores and 26.52% having High SDQ scores.

A significant majority Bengali medium schools have a higher percentage of students with Very High SDQ scores (91.43%) and High or Borderline SDQ scores (90.61%) compared to English medium schools (8.57%) and English medium schools (9.40%).

Students with higher education levels and higher education levels are more likely to experience emotional problems (40.06%), as well as higher rates (25.00%) among those with illiterate fathers and mothers with no formal education.

The study found significant differences in the prevalence of emotional problems based on gender, habitat, school location, family type, school type, and parental educational attainment (p< .05), but no significant differences were found in medium of instruction (p< .05)

Variable wise Prevalence of Conduct Problem:

The study revealed that 50.82% of males and 49.18% of females had Very High or Abnormal SDQ scores, indicating conduct problems. Female students faced slightly more challenges, with 54.55% showing borderline high scores. Both genders were close to average.

The study found that in urban settings, 57.38% of students had very high SDQ scores, indicating conduct problems, while 63.64% had borderline scores, while rural areas had lower prevalence (6.56% having Very High SDQ scores and 11.36% having High SDQ scores, with most having minor or no issues.

The study found that 65.57% of students from Nuclear families had Very High SDQ scores, indicating definite conduct problems, while 55.68% had Borderline scores. In Joint families, 34.43% had Very High SDQ scores and 44.32% had High SDQ scores, indicating a smaller proportion of students with conduct problems.

The study found that 59.01% of students in urban schools had Very High or Abnormal SDQ scores, while 62.50% had High or Borderline scores. In contrast, 6.56% of students in rural and 34.43% of students in suburban schools had Very High SDQ scores, and 11.36% of rural students had High scores.

The study found that 49.18% of students in Govt. and Semi-govt. schools had Very High or Abnormal SDQ scores, with 50.00% falling into the High or Borderline category. In contrast, 29.51% of students in Govt. schools had Very High scores and 30.68% had High scores. This suggests that students in Govt. and Semi-govt. schools are more likely to experience Conduct Problems.

The majority of students in Bengali medium schools, 90.52%, have Very High SDQ scores, indicating severe conduct problems. In contrast, 19.67% of English medium students have very high SDQ scores, and 10.23% fall into the high or borderline scoring category. This indicates a higher prevalence of conduct problems.

The study found a significant correlation between parents' education levels and the prevalence of mental health issues among students. Students with higher-educated fathers had higher conduct problems, with 57.38% displaying Very High SDQ scores and 45.45% falling into the High SDQ range.

Similar to the father's education trend, students with mothers who completed higher studies showed a higher prevalence of Conduct Problems: 42.62% demonstrated Very High SDQ scores, and 36.36% fell into the High SDQ score range. On the other hand, 13.11% had Very High or Abnormal SDQ scores, and 3.41% had High or Borderline scores.

The study found significant differences in the prevalence of conduct problems based on factors such as instruction medium, habitat, school location, family type, school type, and parental educational attainment (p<.05), but no significant differences were found in gender (p<.05).

Variable wise Prevalence of Hyperactivity Problem:

The study reveals gender differences in hyperactive problem prevalence and risk, with 28.63% of male students showing very high or abnormal SDQ scores, while 20.00% of females have high SDQ scores, indicating a higher prevalence of definite hyperactive problems. Additionally, 71.42% of females and 28.57% of males fall into the High SDQ score range, indicating potential risk.

The study found that children in urban areas are more susceptible to hyperactive problems, with 80.00% of them displaying Very High SDQ scores and 61.22% having Borderline scores. In contrast, only 20.00% of rural students had High SDQ scores, indicating a higher prevalence of hyperactivity problems.

The study found that 40.00% of children in Nuclear Families had Very High SDQ scores, indicating mental health issues, and 71.43% had Borderline scores, suggesting hyperactivity. In contrast, 60.00% of children from Joint Families had Very High SDQ scores and 28.57% had High SDQ scores, suggesting a lower prevalence of definite hyperactivity problems. The findings highlight the influence of family structure on hyperactivity problem occurrence.

In urban schools, 80.00% of students had Very High or Abnormal SDQ scores, indicating definite hyperactive problems, while 78.57% had High or Borderline scores. In contrast, 20.00% of students in rural schools had Very High or Abnormal SDQ scores, suggesting a lower susceptibility to hyperactive problems.

The study reveals that students in Govt. and Semi-govt. schools have a higher incidence of Hyperactive Problems compared to those in Private schools. In Govt. schools, 100% of students had Very High or Abnormal SDQ scores, while 21.43% displayed High or Borderline scores. In Semi-govt. schools, 0.00% rated Very High and 42.86% as High SDQ scores. This suggests a higher prevalence of Hyperactive Problems in these schools.

The study found that in Bengali medium schools, 100.00% of students with Very High SDQ scores have definite or severe hyperactive problems, while 78.57% have high or borderline scores. In contrast, no students in English medium schools had very high SDQ scores, and 21.43% had high or borderline scores.

The study found that children with hyperactive problems were more likely to have higher SDQ scores among students with higher education levels, compared to those with illiterate fathers. Specifically, 20% of students with higher education levels had Very High or Abnormal SDQ scores, while 50.00% had High SDQ scores. This suggests a potential link between higher paternal education levels and hyperactive problems.

The study found that children with hyperactivity problems were more likely to have higher SDQ scores among students with higher education levels compared to those with illiterate mothers. Specifically, 20% of students with illiterate mothers had very high or abnormal scores, while 40.00% of students with higher education levels had very high scores and 35.71% had high scores.

The study found significant differences in hyperactivity prevalence in habitat, school location, and school type (p<.05), but no significant differences were found in gender (p<.05), instruction medium, family type, or parental educational attainment in hyperactivity problem distribution.

Variable wise Prevalence of Peer Problem:

The study found that 54.36% of male and 45.64% female students had Very High SDQ scores, indicating definite peer problems. 52.82% of females and 47.18% of males were at the borderline, indicating a higher risk. Females had a higher prevalence of definite peer problems, while male students faced a higher risk.

The study found that 56.85% of children in urban areas had very high SDQ scores, indicating peer problems, and 64.10% had borderline scores, suggesting potential issues in peer relationships. Rural students had 17.43% very high SDQ scores and 15.90% high scores, indicating a higher prevalence of peer problems.

The study found that 66.80% of children from nuclear families have very high SDQ scores, indicating definite peer problems. 58.46% have borderline scores, indicating potential peer problems. Joint families had fewer students with peer problems, with 33.20% having very high SDQ scores and 41.54% having high scores. A higher percentage of children from nuclear families had definite peer problems.

Urban students have a higher prevalence of peer problems, with 57.26% displaying Very High or Abnormal SDQ scores and 64.62% exhibiting High or Borderline scores, compared to 16.60% and 18.46% respectively, suggesting a higher risk of peer-related challenges.

The study found that 34.02% of students in Government schools had very high or abnormal SDQ scores, while 26.67% had high or borderline scores. Semi-Government schools had 40.66% of very high and 41.72% of high scores, while private schools had lower rates. This suggests a higher prevalence of peer problems in Semi-Government and Government schools.

The study reveals that a higher percentage of students in Bengali medium schools have very high SDQ scores (87.54%) and definite or severe peer problems (81.547%) compared to 12.03% in English medium schools (12.03%) and 18.46% in high or borderline SDQ scores (18.46%). This indicates a significant difference in the percentage of students exhibiting high or borderline scores compared to those in English medium schools.

The study found that students with illiterate fathers had higher SDQ scores, with 8.30% having Very High or Abnormal scores and 14.36% having High or Borderline scores. However, students with higher studies had a higher incidence of peer problems, with 44.81% rated as Very High and 46.67% as High SDQ scores.

The study reveals that students with higher education levels face higher peer problems compared to those without formal education. 3.13% of students with illiterate fathers have very high peer problem scores, while 11.28% have high or borderline scores.

Similarly, 30.29% of students with mothers who completed higher studies have very high peer problem scores, and 34.87% have high scores. This suggests a potential association between higher parental education and increased peer problems in children.

The study found significant differences in the prevalence of peer problems based on factors such as instruction medium, habitat, school location, family type, and parental educational attainment (p< .05), but no significant differences were found in gender (p< .05).

Variable wise Prevalence of Pro-social Problem:

The study found that 46.67% of female students and 28.63% of male students had a Very High score, while 47.62% of female students and 52.38% of male students had a borderline High SDQ score, indicating potential risks for these students.

The study found that 36.67% of urban students had a Very High SDQ score, indicating definite Pro-social problems, while 46.03% had Borderline scores, suggesting potential issues. In contrast, only 21.67% of rural children had Very High SDQ scores, and 19.05% had High SDQ scores. The majority of students in both urban and rural groups likely had minimal or no problems.

The study found that 77.91% of children in nuclear families had Very High SDQ scores, indicating clear Pro-social Problems. Additionally, 71.43% had Borderline scores, suggesting potential challenges. In contrast, only 22.08% of students from joint families had Very High SDQ scores, and 28.57% had High SDQ scores. Both nuclear and joint families likely had minimal or no problems.

The study reveals a significant disparity in the prevalence of Pro-social Problems among students based on their school location. In urban schools, 37.08% of students had Very High or Abnormal SDQ scores, while 46.83% had High or Borderline scores. In rural and suburban schools, only 21.67% and 41.25% of students had Very High scores, respectively. This indicates a higher concentration of Pro-social Problems among urban students.

The study reveals a significant difference in the prevalence of Pro-social Problems among students based on their school type. In Government schools, 16.25% of students had Very

High or Abnormal SDQ scores, while 31.75% had High or Borderline scores. In Semi-government schools, 63.33% of students had Very High scores, while 20.42% of students in private schools had Very High scores. This highlights a higher concentration of Pro-social Problems among students in these schools.

The study shows a significant difference in the prevalence of Pro-social Problems among students based on the medium of instruction. In Bengali medium schools, 83.33% of students had Very High SDQ scores, indicating severe Pro-social Problems, and 84.92% had High or Borderline scores. In contrast, 16.67% of English medium students had Very High SDQ scores and 15.80% had High or Borderline scores. Bengali medium schools have more Pro-social Problems.

The study found that only 3.75% of students with illiterate fathers had very high or abnormal SDQ scores, while 40.75% of students with fathers who completed higher studies had very high or abnormal scores, suggesting a potential correlation between higher levels of paternal education and increased likelihood of pro-social problems in their children.

The study found a significant correlation between the educational background of mothers and the prevalence of Pro-social Problems in their children. Only 5% of students with illiterate mothers had Very High or Abnormal SDQ scores, while 42.08% of students with mothers who completed higher studies had Very High scores and 34.13% had High SDQ scores, suggesting a potential link between maternal education and increased Pro-social Problems in children.

The prevalence of Pro-social problem varied significantly based on medium of instruction, habitat, school location, family type, school type, father's educational level, (p<.05) but not mother's (p<.05) educational level.

5.2 Discussion

This review of literature explores the mental health issues among school-going children, a significant public health concern. Mental health conditions affect 10-20% of children globally. Schools play a unique role in improving students' mental health by teaching beyond traditional subjects and enhancing social-emotional competence. However,

reviews on school-related factors or interventions are lacking. The review aims to develop a holistic model of Play-12 education and address the alarming rate of mental disorders among children and adolescents.

A study by Karim et al. (2006) found a high prevalence of mental illness in the Dhaka district, with higher rates in females and middle and lower socio-economic classes. Izutsu et al. (2006) compared the mental health, quality of life, and nutritional status of adolescents in Dhaka, Bangladesh, revealing worse conditions in slum areas and gender differences in SRQ and YSR. Khan et al. (2008) assessed the prevalence of child behaviour issues in rural Bangladesh, finding that 14.6% of patients had behaviour impairments, mainly involving somatic complaints and associated with malnutrition and cognitive, motor, or seizure disabilities. These findings have implications for public health planning and health service delivery. Billah & Khan's (2014) cross-sectional study in Faridpur, Bangladesh, found that 49% of urban adolescent male students were depressed, with 66% being smokers. Factors such as domestic violence, familial disharmony, stressful events, and love failure also contributed to depression. Hossain et al.'s (2014) systematic review found a high prevalence of mental disorders in Bangladesh, with 6.5-31% in adults and 13.4-22.9% in children. Community awareness is limited, and treatment is often negative and not prioritized in healthcare. Mental health services are primarily concentrated in tertiary care hospitals in big cities, lacking primary care. Islam & Biswas'(2015) study aimed to investigate the prevalence of mental health and the health system in Bangladesh, finding no comprehensive mental health policy to strengthen the entire health system. Mental illness prevalence declined between 1974 and 2005, with 16.1% of adults having a disorder. Bangladesh needs to address social stigma surrounding mental illness and improve accessibility to mental health services, with a Mental Health Act needed to uphold equity and human rights. Arafat & Yasir (2016) investigated suicide rates in Bangladesh, finding 39.6 per 100,000 population per year, primarily in females, low-income individuals, married couples, and housewives, with limited research. Kabir (2017) found rural Bangladeshi intermediate college students have higher anxiety, depression, and obsessive-compulsive disorder, while Gaffar & Deeba (2017) recommend family-focused interventions for substance-dependent adolescents. Nuri et al. (2018) and Anjum et al. (2019) conducted studies in Bangladesh to identify equitable health systems and improve access to care for mental health patients. They found that 27.5% of patients consulted psychiatric care, 30% went to non-

medical providers, and 42.5% went to non-psychiatric medical care. They also found a higher prevalence of depressive symptoms among urban and semi-urban adolescents. A study by Hasan et al. (2019) revealed that female pharmacy students in Bangladesh experience higher stress levels due to various factors.Sultana & Tareque (2019) compared Bangladesh's National Adolescent Health Strategy to global strategies and proposed a tentative policy analysis to achieve Sustainable Development Goals by 2030. Jahan et al. (2019) found that emotional and behavioral disorders were prevalent in school-going children in Dhaka, Bangladesh. Moonajilin et al. (2020) conducted a cross-sectional survey to understand the relationship between overweight/obesity and mental health disorders among Bangladeshi adolescents. Khan et al. (2020) found that suicide among Bangladeshi adolescents is linked to health-risk behaviors like sexual activity and alcohol misuse. Hossain et al. (2020) highlighted the socio-psychological impact of Covid-19 on university students, Islam et al. (2020) identified a knowledge gap, and Mallik & Radwan (2020) found girls have more emotional and behavioral disorders. O'Raw's(2020) study explores mental health attitudes among students, parents, and teachers in rural and city Bangladesh, revealing a lack of understanding and stigmatization. Khan et al.'s(2020) study found 25% of adolescents in Dhaka city reported depressive symptoms, with females being more common. Factors associated with depression include female age, weight perception, school safety, sleep disturbance, low life satisfaction, sugary drink intake, and skipping breakfast. Khulna University's Islam & Rakib (2020), study found that 87.1% of students consider mental disorders a disease, 84.3% are aware, but 45.7% don't seek advice, 90% never consult psychiatrists, and 35.7% feel ashamed. Mirdha et al.'s(2021) study on Bangladeshi adolescent depression revealed high rates, influenced by age, education, household habits, and television viewing, urging the government to implement mental health programs. Mammun et al. (2021) found high depression, anxiety, and stress among Bangladeshi students during COVID-19, with risk factors including lower-class background, smoking, and less exercise. Sultana (2021) found female students at higher risk. Anjum et al. (2021) found that 30.1% of Bangladeshi adolescents experience moderate to severe depressive symptoms, with females more affected. Shohel et al. (2022) highlighted social stigma and delay in seeking professional help. Hossain et al. (2022) found over 50% of university students suffer from depression and anxiety. Sifat et al. (2022) studied the mental health impacts of COVID-19 on school-going adolescents in Dhaka, Bangladesh, revealing lockdowns, disease fear, and

digital device use negatively impacted their well-being. Rezvi et al. (2022) found moderate to severe anxiety (37%) and depression (54%) among university students. Ria et al.'s study reveals prevalent depressive symptoms among Bangladeshi adolescents, including sadness (45.3%), aggression (40.5%), confusion (27.7%) worthlessness (27.7%), fatigue and insomnia (18%), with females more affected. Rahman et al. (2022) investigated mental health conditions among university students in Bangladesh during COVID-19, finding normal depression, anxiety, and stress levels. Mahun et al. (2022) found moderate to severe depression, anxiety, and stress among students, with factors like smoking, lower-class background, and low exercise contributing to these issues. Rahman et al. (2022) investigated mental health conditions among university students in Bangladesh during COVID-19, finding normal depression (52.2%), anxiety (58.1%), and stress levels (24.9%). A study by Mamun et al. (2022) found that moderate to severe depression, anxiety, and stress were prevalent (52.2%, 58.1%, and 24.9%, respectively) among Bangladeshi university students, with factors like smoking, lower-class background, and low exercise associated. Kamruzzaman et al. (2022) found that private university students in Bangladesh experience higher rates of depression, anxiety, and stress compared to public students. Sifat et al. (2022) found that mental health knowledge and positive views of services are significant predictors of service use. Nahar et al. (2022) found high rates of loneliness, anxiety, and depressive symptoms among female university students during the COVID-19 pandemic. Islam et al.'s study found that post-interventional use disorder (PID) and depressive symptoms are prevalent among school-going adolescents in Bangladesh, influenced by factors like age, education, and living situation. Nayan et al.'s study found that women were more likely to experience severe depression76.9% aged 21-25 and anxiety (91.49% accuracy), with RF outperforming other models for depression prediction (89% accuracy). Syed et al. (2022) found that emotional and behavioral changes in children and adolescents during the COVID-19 pandemic were linked to parental depression. Hossain et al. (2022) found a high prevalence of mental health issues, with factors like age, gender, and education contributing. Siddique et al. (2022) found that while university students have higher mental health awareness, their knowledge of mental health disorders is insufficient. Rasheduzzaman et al.'s 2022 study revealed that 13.4% of Bangladeshi university students have suicidal thoughts, with females reporting higher rates than males. A study by Islam et al. (2023) found that 88.25% of Bangladeshi school-going adolescents

experienced Internet Addiction (IA) and 72.51% experienced loneliness during the COVID-19 pandemic. Factors such as English-medium education, higher classes, and high economic status contributed to higher IA levels. The study suggests an inclusive intervention approach for adolescents with IA and mental health disorders. Additionally, a study by Faruk & Rosenbaum (2023) revealed gender differences in reporting stigma among indigenous communities. Koly et al.'s study in Bangladesh found that adolescents are experiencing moderate to severe depression and anxiety (37.3% and 21.7%,) due to factors like older age, poor teacher cooperation, and quarantine challenges. The study by Sultana et al. (2023) revealed that 57.7% of school-going mothers experienced depressive symptoms, while 42.3% had no symptoms. Salma et al. (2023) found that 92.5% of Jahangirnagar University students experienced depression and anxiety during the COVID-19 pandemic, with factors like infection, sleep time, and physical activity as risk factors. Akter et al. (2023) found gaps in knowledge and practices about non-communicable diseases among secondary school students in Bangladesh, and found a significant relationship between gadget addiction and cognitive function. Jahan et al. (2023) found lower suicide literacy among young adults. Srinath et al. (2005) & Jain et al. (2014)

Studies in Bangalore and Muzaffarnagar, India, found a 12.5% prevalence of childhood and adolescent psychiatric disorders among children aged 0-16 years. Common diagnoses include breath holding spells, pica, NOS, expressive language disorder, and mental retardation. Adolescents face high prevalence of psychosocial problems, requiring holistic health approaches by Srinath et al. (2005) & Jain et al. (2014). Rasote et al.'s study in Mumbai, India, found that out of 600 children, 42% had behavior disorders, with personality (44.84%), eating (33.73%), habit (23.11%), scholastic problems (17.46%), psychosomatic problems (7.53%), and speech problems (2.77%) and sleep issues (11.9%) being the most common. Singh et al. (2015) found that 46.4% of Indian students were flourishing, with 51.2% being moderately mentally healthy. Subramani & Kadhiravan (2017) found that academic stress significantly influences mental health among high school students. Nair et al. (2017) found that girls experience more emotional issues, while boys are more affected by mental health issues. Sankar et al. (2017) found that gender and age play a significant role in mental health. Nayak & Lavania (2018) found 16.41% of school students experience psychiatric morbidity. Singh et al. (2018) and Parikh et al. (2019) conducted studies on sleep patterns, stress, and coping strategies

among adolescents in Delhi, India. Singh et al. found significant differences in sleep patterns among students aged 11-15, with older adolescents experiencing higher rates of depression and poorer academic performance. Parikh et al. (2019) suggested culturally sensitive psychosocial interventions for distressed adolescents. George et al. (2019) evaluated the emotional status of children aged 3-14. The study by Parikh et al. (2019) explores stress and coping strategies among urban school-going adolescents in India, highlighting the need for culturally sensitive psychosocial interventions. Jaiswal et al. (2019) found that 28.2% of students experienced psychiatric problems, with 20.8% experiencing them. Parikh et al. (2019) found that stakeholders agreed on the need for school-based mental health services, with adolescents prioritizing problem resolution and practical guidance. Mangal et al. (2020) highlighted the alarming rates of common mental health disorders among school-going adolescent girls in Gujarat, India. Gaiha et al. (2020) conducted a systematic review of mental health issues among young people in India, finding that 66% of studies focus on youth health professional training. However, one-third of young people have poor knowledge of mental health problems and negative attitudes towards those with them. Public education can enhance young people's understanding of mental health issues by using relatable vignettes and strategies. Dkhar & Sailo (2021) found an increasing prevalence of mental health issues among school-going adolescents in India, highlighting the need for early detection and effective intervention. Kerala's Harikrishnan & Sailo (2021) found a 24.5% prevalence of emotional and behavioral problems among school-going adolescents. Kumari & Kumar (2022) emphasized the importance of mental health in secondary school students, highlighting the need for comprehensive education and awareness. Bharati et al.'s study in Patna, India, found that 51.2% of school-going adolescents experienced depression, with female gender, late adolescence, higher classes, vegetarian diets, screen time, and mental health issues contributing to the issue. The study by Moitra & Madan (2022) examined the impact of screen time on Indian adolescents' eating habits, physical activity, sleep quality, and depression symptoms, highlighting the need for health promotion interventions. Prabhat et al. (2022) found that prolonged lockdown negatively impacted sleep-wake timings, self-esteem, depression, and anxiety in Indian college-going students. Rout & Bhihari (2023) found no significant difference in mental health scores between boys and girls in secondary schools. Khanna et al. (2023) found that depression affects 40.3% of students, with higher rates in girls, older students, higher-class students,

those without siblings, and those with Bilateral Intermittent Disorders. Factors like poor sleep quality and lifestyle choices contribute to depression.

Spitzer & Cameron's (1995) study found that school-age children's perception of mental illness is influenced by gender, with boys outperforming girls in identifying deviant behavior. Sawyer et al.'s (2001) study found 14% of children and adolescents have mental health issues, with many at increased risk for suicidal behavior. Wrigley et al.'s (2005) study found no significant correlation between symptom measures, disability, and help-seeking. Swedish schoolchildren's psychiatric health is deteriorating due to economic stress, modern society, and living conditions. Ravens-Sieberer et al. (2008) studied the mental health of children and adolescents in 12 European countries, revealing varying prevalences across countries and socio-demographic subgroups. They found that high-risk groups had poor social support and parents' mental distress, emphasizing the need for stronger social resources in prevention and interventions. P'Olak et al. (2008) found that socioeconomic position (SEP) is inversely associated with mental health dimensions, and Basirnia et al. (2009) found high mental disorder prevalence among Iranian high school students. Srinath et al. (2010) found a prevalence of child and adolescent mental health disorders (CAMH) in Asia, with socioeconomic status, academic achievement, and abnormal psychosocial situations being common factors. Reijneveld et al. (2010) found that area deprivation and urbanization affect behavioral problems in adolescents in mixed urban and rural areas. Cao et al. (2011) found a positive relationship between PIU and psychosomatic symptoms and life satisfaction in Chinese adolescents. Bergh et al. (2011) found academic orientation significantly impacts psychosomatic health in Swedish adolescents. The study by Fan et al. (2011) found that posttraumatic stress disorder, depression, and anxiety symptoms were prevalent among adolescents following the 2008 Wenchuan earthquake in China. The study by Bot et al (2011) also found that psychosocial problems were prevalent among Dutch children aged 8-12 years, with boys having a higher prevalence. A study by Zulcic-Nakic et al. (2012) found that PTSD, anxiety, and depression symptoms were more common in adolescents who aborted a pregnancy. A survey by Buhagiar & Cassar (2012) found that general practitioners in a European country had low confidence in diagnosing and managing mental health issues. A systematic review by Cortina et al. (2012) found that 14.3% of children in sub-Saharan Africa had psychopathology. A study by Foulger et al. (2013) found lower health risk behaviors among Guatemalan adolescents. Studies in Sri Lanka,

Iran, and the UK have found a correlation between chronic illness, psychological problems, and criminal outcomes in adolescents. Chronic illness leads to increased internalizing and externalizing problems, delinquency, and depression. In Iran, conduct problems are the most prevalent psychological issue, with girls experiencing more emotional issues. In the UK, family and community social capital is linked to mental health and behavioral issues, with positive parent-child relations and extended family support being significant. Jari et al.'s (2014) study in Iran found no significant association between overweight and obesity and mental distress in Iranian adolescents. Yen et al.'s (2014) study in Taiwan found both victim and perpetrator of bullying significantly associated with mental health problems, except general anxiety. Bains & Diallo (2016) found that school-based health centers offer mental health services to 20-25% of children and adolescents, but lack high-quality research on their impact. Paulus et al. (2016) found school-based interventions effective in addressing emotional and behavioral problems. Tanzil & Tanzil (2016) highlighted Pakistan's challenges in child mental health research, while Mohammedi et al. (2016) found higher psychiatric disorder prevalence in Iran. Research on mental health issues among children and adolescents in Russia, Nepal, Greece, Sweden, and Iran has shown varying levels of prevalence and correlations. In Russia (Slobod & Semenova 2016), mental health problems are prevalent in 25% of adolescents, with rural areas having a higher risk. In Nepal,Bista et al. (2016), 17.03% of adolescents are affected by psychosocial dysfunction, with males being more affected. Economic and migrant crises negatively impact psychological well-being, leading to depression, anxiety, insomnia, alcohol abuse, and suicidal behavior. Increased resources are needed to support children with mental health issues. Banstola's (2017) study found that 21.7% of school-going adolescents in Pokhara, Western Nepal, suffer from psychosocial problems, with internalizing issues being the most common. Studies by Vreeman et al. (2017) and Rasalingam et al. (2017) explored the link between peer victimization and mental health issues in early adolescents. Lee et al. (2018) found that depressive symptoms were prevalent in urban and rural female adolescents, with factors such as health perceptions, school performance stress, academic issues, and internet violations. Gutmann et al. (2019) studied mental health problems in children and adolescents from Turkish migration backgrounds in Vienna, Austria. They found significant differences in psychological issues, with native patients experiencing more externalizing problems and Turkish-speaking children experiencing higher internalizing,

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depressive, and anxiety symptoms. Idris et al. (2019) found EBD prevalence in Malaysian school children at 9.3%, 8.5%, and 3.9%. Zhao et al. (2019) found depression is linked to obesity among Chinese adolescents. Studies have shown that physical activity can improve mental wellbeing and reduce symptoms of mental health disorders in adolescents. However, there is no strong evidence linking physical activity to improved mental wellbeing or reduced symptoms. In Nepal, a scoping review found a high prevalence of mental health issues, including Post-traumatic Stress Symptoms, anxiety, and ADHD. Schools are crucial partners in the mental health system, investing 15,000 hours per child by age 18. Collaboration between schools and communities can lead to better mental health outcomes. A study by Leavey et al. (2020) found high rates of mental health problems and suicidality among Northern Irish adolescents, particularly females. Factors like atheist beliefs and private bedrooms were significant. Xu et al. (2020) found internet addiction among adolescents in Macau and mainland China, with Macau students more likely to suffer from insomnia. Pengpid & Peltzer (2020) found psychological distress in Moroccan adolescents.Research by Ojio et al. (2020) andNaveed et al. (2020) highlight the importance of school-based education in promoting mental health literacy and reducing stigma among adolescents. They also highlight the high prevalence of common mental disorders in South Asia, emphasizing the need for effective policymaking and culturally appropriate interventions. Agnafors et al.'s(2020) study explores the relationship between mental health and academic performance in children, revealing social selection mechanisms and a link between behavioral and emotional issues at age 3 and below-grade performance at age 12. Al-Zawaadi's (2020) study reveals that mental health issues among school-going adolescents in Greater London are prevalent, with over half feeling neutral, sad, or very sad, while 48% are happy. Both studies highlight the need for early intervention and treatment to ensure equal educational opportunities. Delaruelle et al. (2021) studied the link between immigration background and adolescent mental health in 29 European countries, finding that first- and second-generation immigrants experience higher life dissatisfaction and psychosomatic symptoms. Umar (2021) conducted a longitudinal study in Korea, revealing that one in four students has a diagnosable mental illness, affecting their energy levels, concentration, and performance. Mental health issues affect 20% of the global population, leading to suicidal thoughts and antenatal care. A study by Rao & Rao (2021) found that 81% of Gen Z teens experienced more intense stress during the COVID-19 pandemic. Online learning significantly impacts

mental health degradation, with race-based differences. Exercise time helps reduce this degradation, while other factors like gender, homework time, pre-existing mental health issues, and therapy did not. Wang et al. (2021) found that children with psychological stressors had a higher risk of falling into a worse mental health status. Vedøy et al. (2021) found a positive correlation between increased sedentary behaviour and mental health. Kim et al. (2021) found that parental stress, depression, sleep problems, tablet time, and behaviour issues were associated with COVID-19 closures. Research on mental health issues among adolescents in sub-Saharan Africa, Japan, and the UK has shown a high prevalence of mental health problems. In Japan, 58.1% of teachers correctly identified mental illnesses in adolescence, but life-time prevalence is lower in male teachers. In Denmark, cost-sharing affects mental health service utilization, leading to a doubled utilization of psychological treatment for depression and anxiety. In Italy, mental and alimentary disorders are the most studied factors predicting anxiety and depressive disorders among undergraduates. In the UK, factors affecting college students' mental health include academic excellence pressure, emotional stress, and genetics. A systematic review of studies on school closures during the COVID-19 pandemic found that 69% of studies identified mental health associations, with 18% to 60% scoring above risk thresholds for distress. In Australia, Kemel et al. (2022) found a strong link between physical activity and improved wellbeing outcomes. Saito et al. (2022) found disrupted sleep, eating habits, and physical activities in Japanese children during school closures. Rasalingam et al. (2022) found that loneliness, anxiety, and suicidal ideation were prevalent among Sri Lankan adolescents, suggesting an integrated approach to mental health policy. Ibbad et al. (2022) found a high prevalence of anxiety and depression among Karachi high school students, particularly females. Barican et al. (2022) found a 12.7% prevalence of childhood mental disorders in high-income countries. Angeleri (2022) explored the relationship between mental health, irregular migration, and human rights, emphasizing the need for non-discriminatory interventions. A systematic review by Roth et al. (2022) examined the impact of extreme weather events on child and adolescent mental health in Sub-Saharan Africa (SSA). The review identified protective factors like age, sex, encouragement, and shared hardship as ameliorating psychological distress. Bolton et al. (2023) developed a task-shifting framework for expanding mental health services in low- and middle-income countries, addressing shortcomings like the absence of community-based services and managing comorbid conditions. Swart et al.

(2023) studied the perspectives of children and parents on pre-adolescent inpatient psychiatric admissions. Koumoula et al. (2023) analyzed scientific evidence on child and adolescent mental health in Greece. Leijdesdorff et al. (2023) studied the impact of mental health issues on youth's health-related quality of life and cost-of-illness in Dutch youth walk-in centers. They found that Dutch youth with lower HRQoL experienced higher healthcare costs and missed school days. Kanada et al. (2023) found a high prevalence of anxiety among Japanese university students, emphasizing the need for early detection and support. Yan Ma et al. (2023) reviewed school-based interventions to improve mental health literacy and reduce stigma.

The major findings of this research can follow, the comprehensive analysis of mental health among adolescent school-going children revealed a substantial prevalence of overall mental health problems, with approximately 31.59% exhibiting Very High or Abnormal SDQ scores. These challenges were distributed across various dimensions, including age, gender, habitat, family type, medium of instruction, location of school, school type, and parental educational attainment. Notably, the prevalence of mental health problems varied significantly across these factors, emphasizing the complexity of the issue.

Age-wise disparities indicated higher prevalence rates in the 15-year-old age group and lower rates in the 12-year-old age group. Gender-related findings highlighted a higher prevalence among female students, while habitat-related disparities showcased elevated challenges in urban areas. Family type-related differences revealed higher prevalence rates in nuclear families, and medium of instruction-related outcomes underscored the prominence of Bengali medium schools. Moreover, the study unveiled location-specific variations, with urban schools exhibiting higher prevalence rates compared to rural and sub-urban counterparts. School type-related findings indicated elevated challenges in government and semi-government schools compared to private schools. Surprisingly, parental educational attainment showed a paradoxical association, with students having more educated parents demonstrating higher prevalence rates.

In parallel, the statistical analysis addressing emotional problems elucidated significant gender, habitat, locality of school, family type, school type, and parental education level-related differences. Notably, the medium of instruction emerged as a non-significant factor in influencing the prevalence of emotional problems.

In essence, these findings underscore the multifaceted nature of mental health challenges among adolescent students, necessitating targeted interventions and support mechanisms tailored to diverse demographic and environmental contexts. The nuanced insights provided by this research can inform educational policies and mental health initiatives aimed at fostering the well-being of school-going children.

The findings of the research on the prevalence of Conduct Problems among adolescent school-going children reveal several noteworthy patterns. While there is no significant difference between genders, the data suggests that female students face slightly more challenges in this regard. Urban settings exhibit a higher prevalence of Conduct Problems compared to rural areas, indicating a potential urban-rural divide. Nuclear families show a higher prevalence compared to joint families, possibly suggesting an impact of family structure on conduct-related challenges. Furthermore, the type of school attended plays a significant role, with government schools having a higher prevalence of Conduct Problems compared to private schools. The medium of instruction also stands out as a crucial factor, with students in Bengali medium schools demonstrating a considerably higher prevalence of Conduct Problems compared to their counterparts in English medium schools.

Surprisingly, students with more educated parents, both fathers and mothers, exhibit higher levels of Conduct Problems challenges compared to those with less educated parents. This unexpected finding raises questions about the intricate relationship between parental education and conduct-related difficulties among students.

The statistical analysis reinforces these observations, highlighting significant differences in Conduct Problems based on the medium of instruction, habitat, locality of school, family type, school type, and parental education levels. The concluding statement underscores that significant differences in the rate of prevalence were observed only in the medium of instruction, emphasizing its particular relevance in influencing the prevalence of Conduct Problems among the studied population.

In summary, the study provides valuable insights into the multifaceted factors associated with Conduct Problems among adolescents, offering a foundation for further exploration and targeted interventions to address these challenges in the school environment.

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The provided information presents a comprehensive analysis of the prevalence of hyperactivity and peer problems among students based on various demographic factors. The data indicates variations in the occurrence of these problems concerning gender, habitat, medium of instruction, locality of school, family type, school type, and parental educational levels.

In Hyperactivity Problems, Significant gender differences were found in the prevalence of hyperactivity problems. A higher percentage of male students exhibited very high or abnormal SDQ scores compared to females. Urban areas showed a significantly higher prevalence of hyperactivity problems compared to rural areas. There were significant differences between students in Bengali and English medium schools in terms of hyperactivity problems. Urban schools exhibited a significantly higher prevalence of hyperactivity problems compared to suburban and rural schools. Nuclear families had a higher prevalence of hyperactivity problems compared to joint families. School Type: Government and semi-government schools had a higher incidence of hyperactivity problems compared to private schools. Father's Educational Level, no significant differences were found in hyperactivity problems based on father's educational level. Mother's Educational Level, no significant differences were found in hyperactivity problems based on mother's educational level. No significant difference in peer problems between male and female students.

Urban areas showed a significantly higher prevalence of peer problems compared to rural areas. Medium of Instruction, Significant differences were observed between students in Bengali and English medium schools in terms of peer problems. Locality of School, Significant differences in peer problems were found between urban, suburban, and rural schools. Nuclear families had a higher prevalence of peer problems compared to joint families. Government and semi-government schools had a higher incidence of peer problems compared to private schools. Father's Educational Level: Significant differences were found in peer problems based on father's educational level. Mother's Educational Level, Significant differences were found in peer problems based on mother's educational level.

In the findings suggest that various demographic factors contribute to the prevalence of hyperactivity and peer problems among students. These insights can be valuable for

designing targeted interventions and support systems for students based on their specific demographic characteristics.

The investigation into the prevalence of Pro-social Problems among adolescent students yielded nuanced insights across various factors. Gender-wise disparities highlighted a higher prevalence of Pro-social Problems among female students, with 46.67% exhibiting Very High scores compared to 28.63% of males. Urban areas showed a significant concentration of Pro-social Problems, with 36.67% displaying Very High scores, while rural settings exhibited a lower prevalence of 21.67%. Family structure played a pivotal role, as students from nuclear families demonstrated a substantial 77.91% Very High score prevalence, surpassing the 22.08% in joint families. School location and type further contributed to the variations, with urban schools and government schools showing higher percentages of Pro-social Problems.

The chi-square analyses confirmed significant associations between Pro-social Problems and gender, habitat, medium of instruction, locality of the school, family type, school type, and father's educational level. The rejection of the null hypothesis in these cases indicated that these factors are influential in determining the prevalence of Pro-social Problems. However, no significant differences were found based on different levels of mother's education.

In study underscores the multifaceted nature of Pro-social Problems among students, influenced by gender, environmental factors such as habitat and school location, family structure, and institutional characteristics. These findings can inform targeted interventions and support systems tailored to specific demographics, fostering the development of pro-social behaviours in school-going children.

According to a World Health Organization (WHO) report, Bangladesh shows a notably higher prevalence of depression in comparison to the broader South Asia region, particularly among women. Women in Bangladesh also exhibit a higher suicide rate than men. A comprehensive analysis from 2013 revealed that approximately 25% of adolescents in urban schools experienced depressive symptoms, with a more pronounced impact on girls than boys. Subsequent research in 2018 among adolescents in urban and semi-urban schools indicated an increased prevalence of depressive

symptoms, affecting 36.6% of participants, with girls experiencing a higher burden than boys. Similarly, a study conducted in 2013 among Bangladeshi medical students reported a comparable depression prevalence of 38.9%. Furthermore, a 2019 study involving university students documented a 22.5% rise in depression prevalence and a 27.1% increase in anxiety prevalence over a 15-month period. These findings highlight the pressing mental health challenges faced by various demographic groups in Bangladesh, emphasizing the need for targeted interventions and support mechanisms.

It is difficult to pinpoint the exact reasons for the increase in mental health problems among male adolescents in Bangladesh. However, some possible factors could be the lack of awareness about mental health, social stigma, and limited access to mental health services[2].

Some risk factors for men developing depression or anxiety include:

- physical health problems.
- relationship problems.
- Stigma
- Domestics violence
- employment problems.
- Illiterate
- Poverty
- social isolation.
- significant change in living arrangements (e.g. separation or divorce)
- pregnancy and birth of a baby.
- drug and alcohol use etc.

Another side, three of the most pressing issues which affect young people in Bangladesh, in relation to their sexual and reproductive health and rights are gender-based violence, child marriage and associated teenage pregnancy and fertility.

Bangladesh faces numerous mental health issues, including mixed anxiety and depression 8 in 100 people, generalized anxiety disorder (GAD) 6 in 100 people, Post-

traumatic stress disorder (PTSD),4 in 100 people, depression: 3 in 100 people, phobias2 in 100 people, and Obsessive-compulsive disorder (OCD): 1 in 100 people. These issues are largely due to childhood trauma, social isolation, discrimination, and social disadvantages. Adolescent mental health issues, exacerbated by adversity, peer pressure, identity exploration, media influence, and gender norms, significantly impact a teenager's life, impacting school performance, decision-making, and overall health.

One study has found that the prevalence of depressive (57.9%), stress (59.7%) and anxiety (33.7%) symptoms in the adult population is now much higher than pre-pandemic rates. Another study found that 28.5%, 33.3% and 46.92% of home-quarantined students had stress, anxiety and depressive symptoms respectively.

The urban population of Bangladesh faces a critical health burden due to the association between chronic diseases (NCDs) and physical inactivity.

The "education for all" campaign faces numerous challenges, including education inequality, unemployment, childhood marriage, and a shortage of education materials, despite the country's recovery from poverty.

Implementing measures to streamline diagnostic tests, increase doctor-patient counseling hours, ensure primary healthcare for urban poor, and subsidize healthcare is crucial for raising mental health awareness and providing access to mental health services.

5.3 Conclusion

Each research question was validated in respect to the study's findings.

1. ***Research Question 1:*** What is the existing status of Mental Health related problems of school going children in Bangladesh?

   Out of 2121 students, 31.59% scored Very High in total difficulty, indicating significant problems in daily life. 19.47% scored High, borderline, indicating need for attention and preventive measures. 23.52% had slightly raised scores, indicating normal or minor difficulties.

2. ***Research Question 2:*** What are the common types or different dimensions of Mental Health problems among them?

The study reveals a high prevalence of mental health issues among students, including emotional problems (91.43% in Bengali medium schools, 70% in male students), conduct problems (80.33% in Bengali medium schools, 65.57% in nuclear families), hyperactivity problems (100% in Bengali, government, 80% in urban, and 80% in male students), peer problems (8.97% in Bengali medium schools, 66.80% in nuclear families), and pro-social problems (83.33% in Bengali medium schools, 77.91% in nuclear families).

3.*Research Question 3:* What are the prevalence rates of Mental Health problems of school going children in terms of different variables, viz. gender, age, locality of school?

Mental health problems among school-going children vary based on demographic factors. Approximately 34.15% of students experience these issues, with 16-year-olds at 34.43%. Urban schools have a higher prevalence (59.01%) than rural ones (40.99%). Nuclear families have higher rates (63.43%). Fathers with higher education contribute to 40.75%, while mothers with secondary education have 34.18%. Urban schools have a higher prevalence (58.81%) than non-urban schools (41.19%). Bengali medium schools have a higher prevalence (89.55%).

5.4 Limitations of the Study

The present study is delimited to the following areas:

1. The study is limited only to Bangladesh and its surrounding/specific districts.
2. The students studying in classes 6 to 8 will be considered as the sample for the study.
3. The demographic variables under study are limited to only gender, age, habitat, family type, locality of the schools, type of school, medium of school, father`s education and mothers' educational level.
4. The age limits of the students are limited to only 11-17 years.

5. For evaluating the hypothesis, the researcher employed only a 5% level of significance.

6. The researcher acknowledged that the responses provided by the participants are not all accurate and may contains error and biases which could not be identified and reduced.

5.5 Scope for further study

The scope of the study encompasses a comprehensive exploration of mental health issues among 2121 school-going students. It investigates the prevalence of overall mental health problems and analyses the impact of various factors such as age, gender, habitat, family type, school type, medium of instruction, and parental education levels on mental health outcomes. The study delves into dimension-wise problems, specifically focusing on emotional problems, providing a nuanced understanding of the intricate relationship between these factors and mental health challenges in adolescents.

The study provides a comprehensive understanding of the prevalence and correlates of mental health problems among school-going adolescents. It underscores the multifaceted nature of these issues, emphasizing the importance of tailored interventions targeting specific age groups, genders, and sociodemographic contexts. The findings contribute valuable insights for policymakers, educators, and mental health professionals in developing targeted strategies to address the mental health challenges faced by school-going students.

Longitudinal Analysis: Conduct a longitudinal study to track mental health changes over time and identify patterns of development.

Cultural Factors: Investigate cultural influences on mental health to develop culturally sensitive interventions.

Intervention Efficacy: Assess the effectiveness of existing mental health interventions and identify areas for improvement.

Teacher and Parental Perceptions: Explore how teacher and parental perceptions align with students' self-reported mental health, providing a comprehensive understanding.

Digital Engagement: Investigate the impact of digital technology and social media on adolescent mental health.

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APPENDIX INDEX

Appendix - I

প্রত্যেকটি প্রশ্নের জন্য সত্য নয়, কিছুটা সত্য বা নিশ্চিতভাবে সত্য ঘরে টিক চিহ্ন দাও। সবকটি প্রশ্নের উত্তর দিলে আমাদের যাচাই করতে সুবিধা হবে। গত ছয় মাসে অথবা স্কুলের এই বছরে প্রশ্নগুলো তোমার ওপর যেভাবে খাটে সেই ভিত্তিতে উত্তর দাও।

তোমার নাম .... ছেলে / মেয়ে

জন্ম তারিখ ....

	সত্য নয়	কিছুটা সত্য	নিশ্চিতভাবে সত্য
আমি অন্যদের অনুভূতিকে মূল্য দিই	☐	☐	☐
আমি অস্থির বোধ করি, বেশিক্ষণ চুপ করে থাকতে পারি না	☐	☐	☐
আমার প্রায়ই মাথাধরা, পেটব্যথা বা বমি বমি ভাব হয়	☐	☐	☐
সাধারণতঃ অন্য ছেলেমেয়েদের সাথে খাবার, খেলনা, পেন্সিল ইত্যাদি সহজেই ভাগাভাগি করে নিই	☐	☐	☐
আমি খুব রাগ হয়ে যাই, প্রায়ই মেজাজ খারাপ করি	☐	☐	☐
আমি বেশ একা, সাধারণতঃ এক একা খেলি বা নিজের মধ্যে থাকি	☐	☐	☐
বড়রা আমাকে যা করতে বলে, সাধারণতঃ তা করি	☐	☐	☐
আমি অনেক দুশ্চিন্তা করি	☐	☐	☐
কেউ ব্যথা পেলে, মন খারাপ করলে বা অসুস্থবোধ করলে সাহায্য করি	☐	☐	☐
আমি সারাক্ষণ উস্খুস করি বা পা-হাত মোড়ামুড়ি করি	☐	☐	☐
আমার অন্ততঃ একজন ভালো বন্ধু আছে	☐	☐	☐
আমি খুব মারামারি করি। আমি যা চাই অন্যদেরকে দিয়ে তা করিয়ে নিতে পারি	☐	☐	☐
আমি প্রায়ই বিষণ্ণ, মনমরা ও কাঁদো কাঁদো থাকি	☐	☐	☐
আমার বয়সী ছেলেমেয়েরা সাধারণতঃ আমাকে পছন্দ করে	☐	☐	☐
আমি সহজেই অন্যমনস্ক হয়ে পড়ি, মনোযোগ ধরে রাখতে আমার কষ্ট হয়	☐	☐	☐
অচেন পরিবেশে আমি ঘাবড়ে যাই, সহজেই সাহস হারাই	☐	☐	☐
ছোটদের প্রতি আমার মায়া মমতা আছে	☐	☐	☐
আমি প্রায়ই মিথ্যা বলা বা ধাপ্পা দেবার দায়ে অভিযুক্ত হই	☐	☐	☐
অন্য ছেলেমেয়েরা আমার পেছনে লাগে ও আমার ওপর গায়ের জোর দেখায়	☐	☐	☐
আমি অপরকে সাহায্য করতে প্রায়ই এগিয়ে যাই (বাবা-মা, শিক্ষক, অন্য ছেলেমেয়েদের)	☐	☐	☐
আমি ভেবে চিন্তে কাজ করি	☐	☐	☐
বাড়ি, স্কুল বা অন্য জায়গা থেকে আমি না বলে অন্যের জিনিস নিয়ে থাকি	☐	☐	☐
আমার বয়সী ছেলেমেয়েদের চাইতে বড়দের সাথে ভালো মিশতে পারি	☐	☐	☐
আমি অনেক ভয় পাই, একটুতেই চমকে যাই	☐	☐	☐
আমি কোন কাজ ধরলে শেষ করি, আমার মনোযোগ ভালো	☐	☐	☐

তোমার সাক্ষর ....   আজকের তারিখ ....

তোমার সাহায্যের জন্য অনেক ধন্যবাদ

Appendix – II

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 worry 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	☐	☐	☐

Your signature _____   **Today's date**_____

Thank you very much for your help

Appendix – III

Demographic Data Sheet

All the information in this schedule is strictly confidential and your information will be
anonymously processed. Please answer all of the following questions as accurately as possible.

এই ফর্মের সকল তথ্য অত্যন্ত গোপনীয় এবং আপনের পরিচয় গোপন রেখে তা ব্যবহৃত হবে। অনুগ্রহ করে নিম্নোক্ত প্রশ্নগুলোর যথাসম্ভব

উত্তর প্রদান করুন।

1. Gender: **Male/Female/Others**
2. Age: ……………………….. **(Years)**
3. Habitat: **Rural / Semi-Urban / Urban**
4. Locality of School: **Rural / Sub-Urban / Urban**
5. Family Type: **Joint / Nuclear**
6. Father's Educational Level: **Illiterate / Primary / Secondary / Higher Study**
7. Mother's Educational Level: **Illiterate / Primary / Secondary / Higher Study**
8. Medium of Instruction: **Bengali / English**
9. Type of School: **Government / Private**

MENTAL HEALTH PROBLEM AMONG SCHOOL- GOING CHILDREN IN BANGLADESH

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