

**EFFECT OF TEACHER'S AWARENESS OF MENTAL ILLNESS
ON MENTAL HEALTH OF THEIR STUDENT**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
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PHILOSOPHY**

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ON MENTAL HEALTH OF THEIR STUDENT**

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Submitted
In partial fulfillment of the requirement of the Degree of
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CERTIFICATE

This is to certify that the present research work titled, **“Effect of Teacher’s Awareness of Mental Illness on Mental Health of Their Student”** is the original research work carried out by Ms. Lalrinhlui under my supervision. The work done is being submitted for the Award of the degree of Doctor of Philosophy in Nursing under Department of Nursing, Mizoram University.

This is to further certify that the research conducted by Ms. Lalrinhlui has not been submitted in support of an application to this or any other University or an Institute of Learning.

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DECLARATION
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I **LALRINHLUI**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University or Institute.

This is being submitted to the Mizoram University for the **Degree of Doctor of Philosophy in Nursing**.

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CHAPTER – I
INTRODUCTION

Human existence and human beings' activity are directed towards a single goal, that is, the pursuit and attainment of happiness, a state of satiation and fulfillment. One of the most important aspects of every individual's life is 'Health', which is defined by W.H.O. as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". The perceived means of attaining it, however, are varied. In this struggle for constant attainment of these goals, one has to face many obstacles, frustration and disillusionment. Hence, it is no wonder that learned philosophers have concluded that "happiness is a state of mind". This concept is supported especially by mental health professionals and is invariably experienced by every individual.

Mental health is "a state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his or her community" (WHO, 2022). It is a fundamental and vital part of the overall health, which can be described in three different ways: as the absence of disease, as an organism's condition that permits it to perform all of its functions, or as a state of balance both inside oneself and with one's physical and social surroundings (Sartorius, 2002). There is a close link between physical health and mental health, as they affect each other directly and indirectly. It has a mutual relationship with the well-being and productivity of a society and its members, and is essential for the well-being and functioning of individuals too (GOI, 2002). The definition of mental health is also influenced by the culture that defines it. However, as also advocated by Vaillant (2012), common sense should prevail and certain elements that have universal importance for mental health might be identified. For example, despite cultural differences in eating habits, the acknowledgement of the importance of vitamins and the four basic food groups is universal.

Mental health has been often conceptualized as a purely positive effect, marked by feelings of happiness and a sense of mastery over the environment (Diener et al., 1993; Waterman, 1993). The ability to enjoy life and strike a balance between life activities and efforts to achieve psychological resilience can be

considered mental health from the standpoint of positive psychology or holism (Snyder et al., 2011).

Keyes (2014) identifies three components of mental health: (i) emotional well-being - happiness, interest in life, and satisfaction; (ii) psychological well-being - liking most parts of one's personality, being good at managing the responsibilities of daily life, having good relationships with others, and being satisfied with one's own life; and (iii) social well-being - positive functioning and involve having something to contribute to society (social contribution), feeling part of a community (social integration), believing that society is becoming a better place for all people (social actualization) and that the way society works makes sense to them (social coherence). A trans-domain model of health built on three domains - physical domain, mental domain and social domain, each of which would be defined in terms of a basic standard of functioning and adaptation, was put forth by W.H.O. (2015) and Huber and associates (2011). Jahoda (1958) subdivided mental health into three domains: self-realization, in that, individuals can fully exploit their potential; a sense of mastery over the environment; and a sense of autonomy, i.e. ability to identify, confront, and solve problems.

The concept that mental health is not merely the absence of mental illness (Deci & Ryan, 2008) includes a variety of emotional states and allows for “imperfect functioning”. It proposed that, ‘Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills, ability to recognize, express and modulate one's own emotions, as well as empathize with others, flexibility and ability to cope with adverse life events and function in social roles, and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium (Galderisi et al., 2015). Ultimately, mental health is a basic human right and a person's ability to maintain their mental health is fundamental to their personal, familial, community and socioeconomic development.

Mental health is important at every stage of life, from childhood and

adolescence through adulthood to old age (mental health.gov., 2020). Mental health during childhood means reaching developmental and emotional milestones and learning healthy social skills and how to cope when there are problems. Mentally healthy children have a positive quality of life and can function well at home, in school, and in their communities (CDC, 2021). A child's mental health is the complete well-being and optimal development of a child in the emotional, behavioral, social, and cognitive domains (Britannica, 2020).

In the National 'No Health without Mental Health' Policy, mental health was defined as “a positive state of mind and body, feeling safe and able to cope, with a sense of connection with people, communities and the wider environment” (NHS, 2015). Mental health encompasses how one thinks, feels, and acts which ultimately influences a person's personal and social relationships. Just as we care for our physical health, everyone should care for their mental health as well. Mental health exists on a continuum and can range from good to poor. Good mental health can help you to think positively, feel confident and act calmly (mind.org.uk, 2022). Mental health, like mental illness, is influenced by biological, psychological, social, and environmental factors. The Mental Health Foundation (MHF, 2008) notes that, mental health is defined by how individuals think and feel about themselves and their life, and that it affects how an individual copes and manages in times of adversity. Thus, mental health is fundamental to our collective and individual ability, as humans, to think, emote, interact with each other, earn a living and enjoy life. On this basis, the promotion, protection and restoration of mental health can be regarded as a vital concern of individuals, communities and societies throughout the world (WHO, 2019).

Mental Illness has been an enigma to the general public all through history. It is very difficult for a lay person to understand why a person suddenly behaves in an abnormal manner. The scientific community has, due to developments in the understanding of brain and behaviour, been able to better explain and provide intervention for mental illness.

A mental disorder can be characterized by a clinically significant disruption in an individual's cognition, emotional regulation, or behaviour and it is usually associated with distress or impairment in important areas of functioning (WHO, 2022). Mental disorders can be referred as those health conditions that impact and change cognitive functioning, emotional reactions, and behaviour linked to distress and/or impaired functioning (Manderscheid, 2010).

In 2019, 970 million people worldwide or one in every eight persons, suffered from a mental illness with anxiety and depressive disorders being the most prevalent types (WHO, 2022). Due to the COVID-19 epidemic, the number of individuals suffering from anxiety and depression increased dramatically in 2020, anxiety and major depressive disorders have increased by 26% and 28%, respectively, in just a single year (WHO, 2022).

Mental illness affects almost half of the world's population, negatively affecting their relationships, sense of self, and capacity to go about their daily lives (Storrie et al., 2010). According to a World Health Organization (WHO) assessment, the cost of mental illness worldwide was estimated to be close to \$2.5 trillion in 2010 (including two-thirds of indirect expenses), and by 2030, it is expected to have increased to over \$6 trillion. These evidences suggest that mental illness is pervasive and is on the rise in every part of the world.

In fact, the prevalence of mental disorders was significantly higher than that of any other category of chronic illnesses (Murray & Lopez, 1996; Kessler et al., 2001). This was surprising considering studies authenticating that mental disorders have greater effects on role functioning than many serious chronic physical illnesses (Wells et al., 1989; Ormel et al., 1994; Kessler et al., 2001). Treatment-specific survey questions also consistently indicated that the majority of mental illnesses went untreated (Alegría et al., 2000; Bijl et al., 2003) and thereby increasing the morbidity, disability and burden on the family, society and the country as a whole.

Adolescence

The term ‘adolescence’ is derived from the Latin verb ‘adolescere’, meaning to grow up or to grow to adulthood; therefore, it refers to a development phase in the human life cycle that intervenes between childhood and adulthood (Kruger & Eldrie, 1994). It is the phase of life between childhood and adulthood, from ages 10 to 19, marked by rapid physical, cognitive and psychosocial development (UNICEF, 2024; WHO, 2024). In addition, these adolescents are school going children where they have to cope with the stresses of school work and develop relationship with their peers.

The adolescent developmental stage includes puberty, a complicated sequence of processes that are influenced by environmental, hormonal, and genetic factors and lead to maturity (Chulani & Gordon, 2014). Puberty is a gradual process occurring between childhood and adolescence and one that takes many years to complete (Dorn & Biro, 2011). The biological process of puberty entails a series of intricate changes at the brain and endocrine levels over a prolonged period of time, which lead to modifications in body shape, including development of primary and secondary sex traits, followed by the attainment of reproductive maturity during the late childhood and early adolescence (Dorn & Biro, 2011; Natsuaki et al., 2014). These include a growth spurt, changes in skin and in body odor, the growth of axillary and pubic hair, the accumulation of body fat, the appearance of breast budding and the onset of the first period or menarche in girls, enlargement of testes, increased penis size and the growth of facial hair in boys (Backes & Bonnie, 2019).

The adolescent period is a time for the foundation of self-identity, finding an answer to the question, “Who am I?” is often viewed as their primary task (Backes & Bonnie, 2019). During adolescence, youth take on the challenge of developing a coherent, integrated, and stable sense of themselves, and that failing to do so may make the transition to adult roles and responsibilities more difficult (Erikson, 1968). According to studies conducted on adolescents, young people's sense of self and identity become more integrated, consistent, and stable over time (Klimstra et al., 2010; Meeus et al., 2010; Harter, 2012). Theories and empirical evidences support

the idea that achieving identity and integrated sense of self relates to positive well-being in adulthood and even throughout the life course (Kroger & Marcia, 2011; Schwartz et al., 2011; Meca et al., 2015). The emergence of maturity offers more chances to explore career possibilities, make new acquaintances and friendships, develop romantic relationships, and exercise greater autonomy in decision-making (Schwartz et al., 2005; Harter, 2012; Arnett, 2015). Some youths may mostly rely on peer appraisal for self-evaluation due to the normal development of increased sensitivity to social information. Nonetheless, parents continue to be crucial in helping their children develop a positive sense of self, particularly when they are sensitive to their needs and combine support with their high expectations (Harter, 2012). In fact, safe and nurturing parent-child relationships can assist early and middle-aged adolescents develop a solid understanding of self (Becht et al., 2017) as well as safeguard socially anxious children from harsh self-criticism (Peter & Gazelle, 2017).

Adolescence is also a period for establishing a level of independence and self-sufficiency. However, gaining a sense of autonomy does not mean that adolescents strive to become detached from their family, rather, their developmental task is about establishing a balance between autonomy and connection (McElhaney et al., 2009). Most youth report having enough autonomy when it comes to making moral decisions, but younger adolescents tend to desire more autonomy for personal matters (e.g., hairstyle and clothing choices) and conventional matters (e.g., cursing/swearing) than older teens (Daddis, 2011; Smetana, 2011).

Adolescents also develop a sense of purpose and they are oriented towards life aims that are self-focused or towards aims that surpass the self (Sumner et al., 2018; Yeager et al., 2012). This sense of purpose is also positively correlated with religiosity and spirituality, and is generally associated with more positive psychological wellbeing, a more consolidated identity, a deeper sense of meaning, and less health-compromising behaviour (Burrow & Hill, 2011; Sumner et al., 2018). An adolescent needs support from the family, school personnel and the community in order to have a well-directed purposeful future.

During adolescence, maturing individuals show increasing capacity to attend selectively to information and to control their behaviour (Adleman et al., 2002; Luna et al., 2004). This period of growth is marked by an increased ability to read social and emotional cues and an increased appreciation and dependence on interpersonal relationships (Herba & Phillips, 2004). Risk taking behaviour is heightened during adolescence and is strongly associated with reward sensitivity and drive (Sanci et al., 2018). Reniers and colleagues (2016) considered risk taking behaviour to be influenced by personality characteristics and gender. In contrast to their female counterparts, male adolescents perceived behaviours as less dangerous reportedly took greater risks, were less sensitive to unfavourable outcomes and less socially anxious. Risk-taking can be driven by a predisposition for sensation-seeking, in which individuals demonstrate an elevated attraction to unique and strong sensations and experiences despite the potential risks (Zuckerman & Kuhlman, 2000; Steinberg et al., 2008).

Ultimately, in the context of increasingly complex cognitive abilities and social demands, the youths may be more likely to contest, negotiate, elaborate upon, and internalize the meaning of membership in racial/ethnic, gender, sexual, and other social identity groups (Umaña-Taylor et al., 2014). It is critical to provide these teenagers with assistance and an understanding attitude during this confusing stage of growing up.

Contemporary Adolescents

The teenagers of today are growing up in extraordinary times; they have to deal with a world that is becoming more modernized where young people's prospects and expectations are shifting (Modell, 1991). Adolescents in the twenty-first century are often facing dramatic changes in their social, cultural, economic and technological environments. For example, today's youth population in India is more culturally and ethnically diverse than ever before, school children from different social, cultural and economic background studies together. The digital revolution may have the biggest influence on the lives and general well-being of teenagers in this current era.

Demographic Trends - Adolescents currently represent 16 per cent of the world's population and there are 1.3 billion adolescents in the world today (UNICEF, 2024; WHO, 2024). This figure is anticipated to increase through 2050, especially in low- and middle-income nations where over 90% of children, aged 10 to 19 reside (WHO, 2024). In India, the current population is 1,438,069,596 as of 2023 with a projected increase of 17% to reach 1,679,589,259 by 2050 (WHO Data-India, 2024). India has the largest adolescent population in the world, approximately 253 million, constituted nearly 21% of India's population, and every fifth person is between 10 to 19 years (NHM-MoHFW, 2024; UNICEF, 2024; WHO, 2024). These demographic trends influence several other key aspects of adolescents' lives such as the socioeconomic status of their families and their own status, how and where they live, urbanization and migration, family and institutional structures they live in, social and personal relationship, and their education and employment opportunities. Keeping in mind the expected increase in adolescent population, if they are given safety, security, education, good health, equipped with knowledge and life skills to support the nation's ongoing development, India stands to gain socially, politically and economically.

Technology and the Digital Revolution - The digital and technological revolution has become a significant part of adolescent development, influencing almost every part of their lives. Every new technology raises questions about how it might affect the wellbeing of young people (Orben, 2020). Nowadays, the majority of the digital technology utilized by teenagers is on mobile devices (Livingstone et al., 2014; Anderson & Jiang, 2018). Given that the majority of teenagers use mobile devices these days, it is critical to comprehend both the possible threats and the ways in which this involvement may offer chances for beneficial growth. For instance, using digital media and the internet can help teenagers develop a healthy degree of independence by giving them the chance to interact with people from different cultures and backgrounds and introducing them to new hobbies (like writing, music, sports) that may help them in their future (Ito et al., 2008; Boyd, 2014). In addition to this, adolescents also stated that social media and internet helps in connecting with friends, obtaining information and helps in finding like-minded people. Research

indicates that young people's current social networks' online interactions strengthen their offline relationships, increasing their sense of belonging and feeling supported by their families and friends (Uhls et al., 2017).

The negative aspects of digital media are that it increases the risks of bullying, neglecting face-to-face contacts and obtaining unrealistic impressions of other people's lives (Anderson & Jiang, 2018). Excessive use of technology can lead to the development of mental problems, for example, early evidence of negative psychological effects was provided by Kraut and colleagues (1998), while Young and Rodgers (1998) discovered that regular internet use increased the likelihood of depressed symptoms. Studies have also shown that online activity by adolescents have correlations with loneliness (Clayton et. al. 2013), low self-esteem (Caplan, 2002), deliberate self-harm (Lam et al., 2009) and autistic traits (Finkenauer et al., 2012). On the other hand, Wu and associates, (2016), have suggested that the development of supportive social bonds and belongingness through digital media can protect against adversities such as loneliness and bullying. Therefore, the rise in technology and digital media can result in the development of mental illness in an adolescent.

Although many people consider adolescence to be a time of upheaval and danger for young people, it should actually be seen as a developmental stage full of opportunities for learning and growth. Normal processes of growth and maturity can help young people build positive relationships with their families and friends, establish a sense of self and identity, and have memorable and interesting experiences with the outside world if they are given the right safety and support. Thus, adolescence serves as a vital transitional period between childhood and maturity and offers a significant chance for constructive, transformative growth.

Psychiatric epidemiology

Psychiatric epidemiology is a field that studies the causes (aetiology) of mental disorders in society, as well as the conceptualization and prevalence of mental illness. Major mental disorders are mostly seen in mental hospitals whereas minor

mental disorders are in the community. The sub-clinical/non-clinical/sub-syndromal level is usually related to the behaviour of an individual and difficult to recognize, define and diagnose, and are often called 'Invisible Mental Health Problems', and mostly ignore on its difficulty in defining and identifying the case (Math & Srinivasaraju, 2010). There are two approaches to measure the disease frequency in a given population (i) hospital catchment population and (ii) community survey (Silman & Macfarlane, 2002).

Psychiatric epidemiology of mental disorders encounters with difficulties in conceptualizing, defining a case and diagnosing, sampling technique, lack of trained manpower, poor knowledge, data collection from a single informant, systematic under-reporting, stigma, lack of adequate funding and low priority of mental health in the health policy (Kessler, 2000; Math et al., 2007). With all challenges, there have been some descriptive psychiatric epidemiological studies done but a very minimal couple with varying prevalence due to methodological differences (Regier et al., 1998). On all these counts, psychiatric disorders are varying within the same population and across populations at the same time and thus, providing accurate data about the prevalence of mental disorders is essential in policy-making. Hence, this study attempts to critically evaluate the (overall) awareness level of mental disorders among the high school teachers.

Prevalence of Adolescence Mental Illness - Global

Adolescence is a period of transition, including changes to the body and hormones, the mind and brain and the social environment. Considering the numerous physiological, sexual, intellectual and social challenges associated with this developmental stage, the adolescent brain can adapt remarkably. While the majority of young people grow up to be healthy adults, the trials and tribulations encountered during adolescence increases susceptibility to mental health problems. Studies have demonstrated that the majority of mental diseases have their peak clinical onset during adolescence (Paus et al., 2008), one in five adolescents have a mental illness that will persist into adulthood (Kessler et al., 2005), and that mental health

conditions are the foremost contributors to the economic burden of Non-Communicable Diseases in the world (Bloom et. al, 2012).

Depression, anxiety and behavioural disorders such as Attention Deficit Hyperactivity Disorders (ADHD) are among the leading causes of illness and disability among adolescents. According to the National Institute of Mental Health (2017), anxiety disorders are the most prevalent type of disorders among teenagers, affecting roughly 25% of children and adolescents between the ages of 13 and 18 across their lifetime, with 6% of those instances classified as severe followed by mood disorders and Attention Deficit Hyperactivity Disorders. Anxiety and depressive disorders account for about 40% of mental illnesses in adolescents aged 10 to 19, with conduct disorders (20.1%) and Attention Deficit Hyperactivity Disorders (19.5%) coming in second and third, respectively (UNICEF, 2021).

The WHO World Mental Health Survey Consortium (2004), reported that the overall prevalence of mental disorders varies widely, from 4.3% in Shanghai to 26.4% in the United States. Anxiety disorders were the most common disorders with prevalence in the range of 2.4% to 18.2%, mood disorders with 0.8% to 9.6% while substance disorders and impulse-control disorders are consistently less prevalent across the surveys. Lifetime prevalence estimates for mental disorders, as highlighted by Kessler and others, in 2005 was, anxiety disorders (28.8%), followed by impulse-control disorders (24.8%), mood disorders (20.8%), substance use disorders (14.6%) and any disorder was 46.4%. The median age of onset for both anxiety and impulse-control disorder were as young as 11 years, which was much earlier compared to the other common mental disorders.

The mean global coverage of prevalence data for mental disorders in ages 5 – 17 years was 6.7% (Conduct Disorders - 5.0%, Attention Deficit Hyperactivity Disorder - 5.5%, ASDs - 16.1%, Eating Disorders - 4.4%, Depression - 6.2%, Anxiety - 3.2%). Out of 187 countries involved in this particular study, 124 had no data for any disorder (Erskine et al., 2017). This demonstrates that the global coverage of prevalence statistics for mental disorders among children and adolescents was very limited. Despite the limited studies related to prevalence of

mental disorders, it is clear that the prevalence of mental illness is high among youths throughout the world and increases as the year goes on.

Prevalence of Adolescence Mental Illness - India

Adolescents make up over a fifth of the population of India, making it the country with the most adolescents worldwide (Cappa et al., 2012). Approximately 50 million Indian children suffer from mental problems at any given time, and if the adolescent population is taken into account as well, this figure will increase (Shastri, 2009). The literature currently in publication reveals significant differences in the prevalence of several Child and Adolescents Mental Health disorders. In India, although numerous researchers have studied the prevalence of mental disorders in children, the rate of prevalence varies greatly, ranging from 0.48% to 29.40% (Singh et al., 1983; Nandi et al., 1986).

The National Mental Health Survey (2016) reported that the prevalence of mental disorders is 7.3% among children aged 13–17 years and it is similar in both genders (Gururaj et al., 2016). The major mental disorders include depressive disorders (2.6%), agoraphobia (2.3%), disabilities affecting intellectual status (1.7%), autism spectrum disorders (1.6%), psychotic disorders (1.3%), and anxiety disorders (1.3%). The survey also estimated the prevalence of depression as 6.9%, anxiety as 15.5%, tobacco as 7.6%, and alcohol consumption as 7.2% in a study conducted in Himachal state. Furthermore, it is estimated that about 9.8 million of Indian aged 13–17 years suffer from serious mental illness which would be greater in number if the entire age spectrum of childhood and adolescence is considered (Ministry of Health and Family Welfare, Government of India, 2016).

A meta-analysis conducted by Malhotra and Patra, (2014) reports that 6.46% of the community and 23.33% of school children and adolescents have psychiatric disorders. India has the highest youth suicide rate in the world and suicide is the leading cause of mortality amongst the adolescents (Patel et al., 2012). Senapati and colleagues (2024) determined from the data on adolescent suicide trends that the rate of youth suicide has alarmingly increased in recent years and the most commonly

reported risk factors were mental health problems (54.28%), negative or traumatic familiar issues (34.28%), academic stress (22.85%), social/lifestyle factors (20%), violence (22.85%), economic distresses (8.75%), relationship factor (8.75%). These evinced the wide disparity in the reported Indian studies regarding the prevalence rates of children and adolescents' mental disorders (Sharan & Sagar, 2008). This further enhanced the importance of addressing the mental health issues among the school going children in India.

Prevalence of Adolescence Mental Illness - Mizoram

Mizoram is a small state located in the North Eastern part of India, sharing an international border with Myanmar and Bangladesh as well as an inter-state border with Assam, Tripura and Manipur. According to the 2011 Census, Mizoram have a population of 10, 97,206 with 5,55,339 representing the male population and 5,41,867 representing the female population. The total population in the 10 – 19 age group was 2, 27,324 (male = 1, 15,433 and female = 1,11,891) which accounts for 20.72% of the total population of Mizoram. Aizawl is the State Capital, located in the northern part of Mizoram, with a total population of 2, 93,416, having the male population of 1,44,913 and female of 1,48,503. According to the Mizoram Statistical Abstract -2021 compiled by Directorate of Economics and Statistics, Government of Mizoram in 2022, there were 712 recognized high schools in Mizoram covering all the eleven districts of the state in the year 2020-2021. Among these, 198 was governed by the State Government and 228 by private enterprises. The total number of students was 40,037 (male = 19,262 and female = 20,775) and there were 4,306 teachers (male = 2,841 and female = 1,465) which makes the teacher student ratio at 1:9 (Directorate of Economics and Statistics, Government of Mizoram, 2022). This evidence shows that there are more female high school students at 52% than male students at 48%. It may be beneficial for the government and institutional authorities to pay more attention to those mental disorders where females are more vulnerable.

The youth comprise a significant portion of the population and constitute our nation's future development which makes research towards adolescent mental and physical health a priority in today's world. But there is a dearth of research studies concerning adolescence with an objective to study the prevalence, causes or risk factors, clinical manifestations, prognosis and treatment modalities. Neither are there much studies for the prevention of mental illness or promotion of mental health among the youths of Mizoram. In a study on mental health of middle school students in Aizawl city, it was revealed that 22% of the samples were at moderate level of mental health, 11.5% at Poor level and 3.5% scored Very Poor and 0.5% scored Extremely Poor level (Lalventluanga et al., 2023). In another study, the awareness of high school students, both from rural and urban areas of Mizoram, was assessed and the study revealed that there was a high level of awareness about the impacts of risky adolescent behaviour such as consuming tobacco, alcohol and drugs; being involved in sexuality; and being infected by HIV/AIDS, irrespective of gender or locality (Zothangpuii & Mishra, 2018). Undergraduate students in Aizawl in the post-Covid period have poor mental health, with the female students scoring lower than their male counterparts which may be due to the changing trends in the society and females still being perceived as the weaker sex (Ramhmachhuani & Lalchhuanmawii, 2024). The researcher could not find any research studies performed in Mizoram concerning the prevalence of mental problems in adolescents or on the awareness of mental disease or mental health among the school teachers. These highlights the necessity of carrying out scientific researches involving epidemiology of mental illness among adolescents and its related contents, the teacher's awareness level with their possible effect on the promotion of mental health.

Overall, a conclusion can be drawn that mental disorders affect a significant number of children and adolescents worldwide. The years spent in school are a special time when a person goes through a lot of important psychological and physical development. It is also a time when they are more susceptible to the emergence of mental health issues. The onset of mental health disorders occurs far more commonly in school age than in early childhood or maturity, with over half of

all cases beginning before a child turns 20. Many such cases go undetected and untreated (Mental Health Foundation, 2015; WHO, 2021; McGrath et al., 2023; Orben et al., 2024). The high prevalence with the projected increase of mental disorders and their associated negative consequences, render them major health priorities (Halfon et al., 2012; Whiteford et al., 2013). The adolescent school- going children need to be protected, given safety and security for their mental health; at the same time, preventing the development of mental disorders and providing with appropriate treatment when required is crucial. School-going children suffer from a variety of mental illnesses that have a debilitating effect on their personal and academic development; hence, this study selected the more prevalent mental disorders which include eating disorder, substance abuse, anxiety, depression, attention deficit hyperactivity disorder and conduct disorder as its main focus of mental illnesses.

Theories of Mental Illness

Throughout history, attitudes and beliefs about the origin and causes of psychopathology have changed dramatically (Lebowitz & Appelbaum, 2018). This leads to the development of theories and models to explain the concept of human behaviour, normal and abnormal behaviour, and to plan the appropriate actions. These theories and models are utilized by the mental health professionals to determine the basis of behaviours with a view to help in the affective management of mental disorders (Taylor & Ballard, 2013). However, it should be noted that many of these theories are still under development and have been supported by a limited number of studies.

Explanations of the causes of mental health and illness can be broadly divided into three paradigms: Biomedical or Biological/Physical Theory, Psychological Theory including Psychoanalytic, Behavioural, Cognitive and Humanistic Approaches, and Sociological Theory. Within these paradigms, the following are the major viewpoints to offer a theory of personality development or an explanation of human behaviour:

1. **Biomedical Theory:** This model proposes that behaviour is influenced by physiology, with normal behaviour occurring when the body is in a state of equilibrium, and abnormal behaviour being a consequence of physical pathology. In the last few years, the biomedical theory, which views mental illnesses as illnesses with hereditary and neurological roots, has gained more traction (Lebowitz & Appelbaum, 2018). The fundamental tenets of the biomedical model, which bases mental illnesses on biological brain ailments, include: (a) Biological anomalies located in the brain are the root cause of mental illnesses, (b) There are no relevant distinctions between mental and physical diseases, and (c) The emphasis is on biological treatment (Andreasen, 1985).

In recent times, advances in technology have led to increased understanding of organic determinants of behaviour. Research and treatment have focused on four main areas:

1) Central Nervous System Disorders - Deviant behavior is a manifestation of a disorder of the central nervous system, mental disorders involve an abnormality in the transmission of neural impulses, difficulty at the synaptic level, and neurochemicals such as acetylcholine (Alzheimer's disease), dopamine (schizophrenia), norepinephrine (mood disorder) and serotonin (mood disorder) (Sreevani, 2004).

2) Structural Changes to the Brain - This can include behavioural changes following trauma or in degenerative disorders such as Huntington's disease.

3) Endocrine or Gland Dysfunction, as in hypothyroidism, which has a similar presentation to clinical depression, and hormonal changes are considered to be a contributing factor in postnatal depression.

4) Familial (Genetic) Transmission - Mental Illness can be inherited through genetic disposition. Twin studies reviewed by Gottesman found the following lifetime risks of developing schizophrenia: general population 1%, one parent 13%, sibling 9%, dizygotic twin 17%, two parents 46%, monozygotic twin 48% (Cando & Gottesman, 2000; Alloy et al., 2005). Although genetic studies demonstrate a correlation between having a close relation with schizophrenia and the likelihood of developing the disorder, a shared genetic history alone is

not sufficient. Another widely held explanation for the development of mental disorder is the diathesis - stress model, which proposes that constitutional predisposition combined with environmental stress will lead to mental illness (Alloy et al., 2005).

2. Psychoanalytic Theory – This theory asserts that behaviour is driven by unconscious processes, and influenced by childhood/developmental conflicts that have either been resolved or remain unresolved. Sigmund Freud developed the first psychological explanation of human behaviour called psychoanalytic theory, in the late nineteenth century (Graf, 1942; Westen, 1988). He placed strong emphasis on the role of unconscious processes in determining human behaviour. According to Freud, the mind is composed of three forces: the Id-which operates on the pleasure principle and seeks to satisfy life-sustaining needs such as food, love and creativity, in addition to sexual gratification; the Ego-the cognitive component of personality which attempts to use realistic means (the reality principle) to achieve the desires of the id; the superego-the internalized moral standards of the society in which one lives (Jackson & Hogg, 2010). The central tenets of the theory are that intra-psychic (generally unconscious) forces, developmental factors and family relationships determine human behaviour. Mental illness is seen as a consequence of fixation at a particular developmental stage or conflict that has not been resolved.

Freud's theory proposes that personality development progresses through different stages throughout childhood. At each stage, the child's behaviour is driven by the need to satisfy sexual and aggressive drives via the mouth, anus or genitals (Lantz & Ray, 2022). Failure of the child to satisfy these needs at any one of the stages will result in psychological difficulties that are carried into adulthood (Sauerteig, 2012).

An important contribution of psychoanalytic theory to the understanding of behaviour has been the identification of defence mechanisms and the role they play in mediating anxiety (Bond & McConkey, 2001). They are the unconscious processes whereby anxiety experienced by the ego is reduced.

3. Behavioural Theory – According to this theory, behaviour is influenced by factors external to the individual. Behaviours are learned, depending on whether they are rewarded or not, by association with another event or by imitation. The foundation of behavioral theories explaining the causes of mental illnesses is learning theory, which was largely derived from studying animal behavior in laboratory settings. The most important theorist in this area are Russian physiologist Ivan Pavlov and several American psychologists, such as Edward L. Thorndike, Clark L. Hull, John B. Watson, Edward C. Tolman, and B.F. Skinner. Most behavioral theories explaining the causation of mental illnesses operate under the premise that the symptomatic behavior or symptoms present in individuals with different neuroses are learned behaviors that have developed into conditioned responses (Shepphird et al., 2024).

The behavioural model to abnormality assumes that all maladaptive behaviour is essentially acquired through one's environment. The focus is on observable behaviour and conditions that elicit and maintain the behaviour (classical conditioning) or factors that reinforce behaviour (operant conditioning) or vicarious learning through watching and imitating the behaviour of others (modelling) as advocated by Skinner (1953). There are three basic assumptions under behaviour theory - that personality is determined by prior learning, that human behaviour is changeable throughout the lifespan and that changes in behaviour are generally caused by changes in the environment. Therefore, professionals practicing the beliefs of this theory would prioritize changing the behaviour over identifying the cause of the dysfunctional behaviour.

4. Cognitive Theory – This theory acknowledges the role of perception and thoughts about oneself; one's individual experience and the environment in influencing behaviour. Cognitive theory proposes that people actively interpret their environment and cognitively construct their world. Human behaviour results from the interaction of the environment with the individual's perception and thinking, learning can occur vicariously through the process of modelling or learning by imitation (Bandura, 2001; Santrock, 2007). Problem behaviour results from cognitive distortions or faulty thinking. For example, a depressed person will selectively

choose information that maintains a sad perspective and depression is experienced when one has a negative schema about oneself or one's situation (Beck, 1972). According to Seligman (1974 & 1994), if an individual experiences adversity and attempts to alleviate the situation are unsuccessful, then depression follows. Seligman later expanded his model to include learned optimism, a process of challenging negative cognitions to change from a position of passivity to one of control.

Therefore, behaviour is a result of the interplay of external and internal events. External events are the stimuli and reinforcements that regulate behaviour, and internal events are one's perceptions and thoughts about the world, as well as one's behaviour in the world. In other words, how one thinks about a situation will influence how one behaves in that situation.

5. **Humanistic Theory** - focuses on the development of a concept of self and the striving of the individual to achieve personal goals. Humanistic theories focused on the intrinsic human qualities of the individual, such as free will, altruism, freedom and self-actualization, qualities which, they asserted, distinguished humans from other animals.

Throughout the lifespan, individuals strove to achieve four basic human tendencies, which were to: satisfy one's need for sex, love and recognition; engage in self-limiting adaptation in order to fit in, belong and feel secure; express oneself through creative achievements to uphold and restore order so as to be true to one's values and conscience (Bühler & Allen, 1972; Ragsdale, 2003). According to Rogers (1951 & 1961), the failure to achieve one's potential resulted from constricting and distorting influences of poor parenting, education or other social pressures. Client-centered therapy is the counselling model that Rogers developed to assist the individual to overcome these harmful effects and take responsibility for their life. Maslow, like Bühler and Rogers, prefaced his theory on the notion that human beings are intrinsically good and that human behaviour is motivated by a drive for self-actualization. Maslow identifies five categories of human need: physiological needs, safety, love and belonging, esteem and self-actualization (Gething et al., 2004; Maslow, 1968).

Thus, humanistic theory emphasizes on the whole person, human emotions, experience and the meaning of experience, the creative potential of the individual, choice, self-realization and self-actualization.

6. **Sociological Theories** – This theory shift the emphasis from the individual to the broader social forces that influence people. Sociological theories differ from psychological theories in that they do not seek explanations for individual behaviour; rather, they examine societal factors for their influence on the behaviour of its members (Cheek et al., 1996). The supporter of this theory proposed that the causes of abnormal behaviour lie not in the individual's mind, but in the broader social forces of the society in which the individual lives (Wilkinson & Marmot, 2003). Demographic factors for which patterns of mental illness are observed include: age-the elderly are more likely to suffer from depression; gender-the suicide rate for men is higher than for women, although the rate for attempted suicide is higher for women than for men; socioeconomic status-poverty is associated with poorer physical and mental health outcomes; marital status-depression and alcohol problems are two to three times more prevalent in people who have never married or are divorced, than among people who are married (NZHIS, 2003; AIHW, 2006).

Multiple factors may be involved in the development and persistence of mental disorders - biological, social, and psychological factors together causes disruption or disturbance in the psychological processes and it is the conjoint impact of these interacting factors that leads to mental disorder (Kinderman, 2005). The biopsychosocial (BPS) model described by Engel is the most well-known example of such a comprehensive explanation (Engel, 1980; Engel, 1977). The BPS model believes that mental illnesses are due to a combination of biological (genetic), psychological (personality traits) and social factors (upbringing and current stressors) as specified by e Haan (2020).

Each of these seemingly disparate theories and perspectives makes a substantial contribution to the understanding of how and why humans think, feel and behave as they do, and thereby identifies opportunities for promotion of mental health and aid in the prevention, early diagnosis and intervention for mental illness.

Common Mental Disorders of adolescents

It is a normal part of adolescent development to experience a wide range of emotions; it is a time for the formation of social and emotional habits important for mental well-being. However, mental disorders are prevalent among the adolescent throughout the world. Globally, it was estimated that one in seven (14%) of 10–19-year-olds experience mental health conditions (WHO, 2024) and an estimated 49.5 percent of adolescents has had a mental health disorder at some point in their lives (U.S. Department of Health and Human Services, 2021). In India, there are more than 434 million children and adolescents which is the highest in the world (UNICEF, 2013). At any given point of time, nearly 50 million Indian children suffer from mental disorders, and this number will increase if the adolescent population is considered as well (Shastri, 2009).

The Common Mental Disorders for adolescent are Eating Disorder, Substance Use Disorder, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct Disorder (Michaud & Fombonne, 2005; WHO, 2024; WHO, 2017). These disorders are debilitating illnesses which can affect the lives of the adolescents and their future. The present study selected these Common Mental Disorders so that the teachers of these adolescents will have better awareness and thus, prevents mental illness and promotes mental health among the youths of Mizoram.

Eating Disorder

Anorexia nervosa and bulimia nervosa, the two most common eating disorders, are considered as grave mental illnesses that is significantly heritable, there can be impaired cognitive function, judgment, and emotional stability; and limit the activities of life for those suffering from these diseases (Klump et al., 2009). A chronic disruption of eating or eating-related behavior that leads to changed food consumption or absorption and severely compromises physical or psychosocial functioning is known as eating disorders (American Psychiatric Association, 2022). Severe electrolyte imbalance, weight loss or malnutrition, other comorbid physical and mental illness can cause extensive damage to vital organs and causes premature

death including suicide, unless the disorders are managed with effective intervention (van Hoeken & Hoek, 2020).

People of all ages can be affected by eating disorders but they are mainly seen among adolescents and students (Klump et al., 2009). Eating disorders, which were once believed to be exclusively a Western issue, are increasingly observed in teenagers from all racial and socioeconomic backgrounds, and over 75% of these cases start during adolescence (Rohde et al., 2017). In college students, increased stress, body shape concerns, peer pressure, excessive exercise and use of laxatives and diet pills were found to be high risk factors for eating disorders (Iyer & Shriraam, 2021).

Due to cultural and economic causes, the prevalence of eating disorders is on the rise in many countries (Hoek, 2006; Hay et al., 2008), with higher incidence in young girls (Neumark-Sztainer & Hannan, 2000; Favaro et al., 2003) and high-income countries often having greater rates of occurrence (Makino et al., 2004; Chisuwa & O'Dea, 2010). Over the years, eating disorders have long been believed to occur primarily in women, however, several studies have suggested that men represent 10–20% of cases of anorexia nervosa and bulimia nervosa and up to 40% of cases of binge eating disorder (Muisse et. al, 2003), and a ratio of 1:3 for both anorexia nervosa and bulimia nervosa (Braun et al., 1999; Hoek & van Hoeken, 2003; Hudson et al., 2007). These evidences suggest that men and women are both affected by eating disorders.

Due to the fact that people with eating disorders are at higher risk for suicide, medical complications and comorbidity with other mental disorders such as depression, anxiety or substance use, it is vital to diagnose and treat the condition early for complete recovery. Treatment plans for eating disorders are tailored to individual requirements and may include one or a combination of individual, group, and/or family psychotherapy; Medical care and monitoring; Nutritional counseling and Medications (National Institute of Mental Health, 2024).

Even though eating disorders are considered to be a debilitating illness, information and studies related to these disorders is very limited in India (Khandelwal et al., 1995; Srinivasan et al., 1995; Mammen et al., 2007; Lal et al., 2015).

Substance Abuse

Substance use disorders and maladaptive substance use are among the most major public health issues, and they are highly prevalent all over the world (Ali et al., 2011; Kalin, 2020). The World Health Organization defined substance abuse as ‘the harmful or hazardous use of psychoactive substance, including alcohol and illicit drugs’ (WHO, 2004).

The prevalence of substance use disorders (SUDs) varies across national borders and is influenced by cultural norms and policies that affect substance availability and acceptability (McHugh et al., 2018). According to data from the 2018 National Survey on Drug Use and Health, 20.3 million people, aged 12 or older, had substance use disorders, and 14.8 million of these cases were attributed to alcohol, over the preceding year (McCance-Katz, 2018). Men are generally more likely than women to have access to substances, though there is a considerable variance across cultures; this disparity in access seems to be largely responsible for the gender differences in the prevalence of substance use (McHugh et al., 2018).

Reports of substance abuse are frequent and have long been a feature of Indian society, religious texts make references to alcohol, cannabis, and opium, and these substances are used in several religious rites and customs across the nation (Sharma, 1996). According to the report titled, “Magnitude of Substance Use in India, 2019”, published by the Ministry of Social Justice and Empowerment, Government of India, alcohol is the most common substance used followed by cannabis and opioids, whereby the prevalence of alcohol use is 4.6%, with male: female ratio being 17:1, followed by cannabis at 2.8% and opioids at 2.1%, there are major variations in different states in the extent and prevalence of use of various substances (Ambekar et al., 2019).

The state of Mizoram is particularly vulnerable due to its extensive borders with other countries and its proximity to the well-known Golden Triangle, which is known for producing and supplying illegal drugs to the states of North East India. In a study conducted by Sarkar (2020) on drug addiction and abuses in Mizoram, the average age of substance use started at 7 to 14 years and amongst the respondents, 86% are male and 14% are female, while a total of 36.66% comprises of 18 years and below. Although Mizoram is declared a dry state, there are illegal liquor shops and brewing local alcohol is still practiced all over the state. Due to its low cost, easy accessibility and the government's relative inability to check underage drinking, local alcohol consumption starts among teenagers (Alee et al., 2018). These indicated the high prevalence of substance abuse in the adolescence and the need of addressing this issue at a younger age group.

The consequences of substance abuse are substantial especially in the school children. Substance abuse is associated with a range of physical, psychological, social and occupational problems, affecting the individual, family and society. Adolescents suffering from substance abuse experiences academic difficulties, health-related problems including both physiological and psychological, poor peer relationships and immersion in the juvenile activities (Vanrozama & Gobalakrishnan, 2020).

Anxiety

Anxiety can be defined as an unpleasant emotional state for which the cause is either difficult to determine or is thought to be uncontrollable or inevitable. It usually involves a persistent feeling of anxiety or dread, which can interfere with daily life and people living with anxiety experience frequent anxiety for months, if not years (NIMH, 2024). Anxiety and fear-related disorders are characterized by excessive fear and anxiety and related behavioural disturbances, with symptoms that are severe enough to result in significant distress or significant impairment in personal, family, social, educational, occupational, or other important areas of functioning (WHO, 2024). Generally speaking, the main characteristic of all the

anxiety disorders is a recurrent emotional and physiologic arousal in response to excessive perceptions of perceived threat or danger.

According to the epidemiological surveys, the lifetime prevalence of anxiety disorders has been estimated as 14.5–33.7%, approximately one-third of individuals are affected by any types of anxiety disorders at least once in their life (Bandelow & Michaelis, 2015). Anxiety disorders are among the most common disorders in youth, affecting 10 to 20 percent of children and adolescents (Boland & Verduin, 2022). Anxiety is the ninth leading cause for adolescents aged 15-19 years and sixth for those aged 10-14 years (WHO, 2021).

Throughout their lives, women are much more likely than males to experience anxiety disorders, according to one of the most extensively studied findings in mental illness epidemiology (Angst & Dobler-Mikola, 1985; Regier et al., 1990; Bruce et al., 2005). The rates of prevalence for different anxiety disorders as revealed by Kessler and colleagues in 1994 were also higher in women than men - generalized anxiety disorder (6.6% vs. 3.6%), panic disorder (5.0% vs. 2.0%), agoraphobia (7.0% vs. 3.5%), specific phobia (15.7% vs. 6.7%), social anxiety disorder (15.5% vs. 11.1%). Throughout their lives, one in three women fulfilled the criteria for an anxiety condition, whereas only 22% of males did and women with anxiety disorders had a higher burden of illness compared to men (McLean et al., 2011).

The different types of anxiety disorders are generalized anxiety disorder, hypochondriasis, specific phobia, social anxiety disorder, separation anxiety disorder, agoraphobia, panic disorder, and selective mutism (American Psychiatric Association, 2022). Among these, the anxiety disorders most commonly found in youth include generalized anxiety disorder, separation anxiety disorder, social anxiety disorder, and selective mutism (Boland & Verduin, 2022). Generalized Anxiety Disorder is an excessive anxiety and worry, occurring more days than not for at least 6 months, about a number of events or activities such as work or school performance (American Psychiatric Association, 2022). Academic performance and attendance can be significantly impacted by emotional disorders, and social

withdrawal can worsen feelings of loneliness and isolation, which can result in suicide.

Depression

Depression is a negative affective state, ranging from unhappiness and discontent to an extreme feeling of sadness, pessimism, and despondency, that interferes with daily life (APA, 2022). It is characterized by a loss of pleasure, sadness of mood and/or having no interest in activities for long periods of time (WHO, 2017). A person's thoughts, actions, emotions, and general sense of wellbeing are all impacted by depression (de Zwart et al., 2019). People who are depressed frequently loses motivation, become disinterested in, or experience less pleasure or delight from activities that would ordinarily make them happy (Gilbert, 2007). Depression is a disorder with multiple factors that involves behavioural or motor symptoms, cognitive symptoms, social symptoms, and biological symptoms. The disorder makes the sufferer feel less supported by their surroundings, which makes it difficult for them to go about their daily lives (Bernard, 2018).

Globally an estimated 3.8% of the population experience depression, including 5% of adults and it was found that it is 50% more common among women than among men (WHO, 2017). Depressive disorder in adolescents has become increasingly prevalent than adult depression (Miller, 2021). Depression is estimated to occur among 1.1% of adolescents aged 10–14 years, and 2.8% of 15–19-year-olds (WHO, 2021).

Childhood and adolescents' depression are similar to major depressive disorder in adults, albeit symptoms in younger patients may include increased irritability or uncontrolled behaviour rather than the more typical adult symptoms of sadness, hopelessness, or empty feeling (Birmaher, 1996). A significant percentage of adolescents suffering from depression had feelings of apathy, loneliness, and lethargy, making it difficult for them to learn, work, and lead regular lives; some of them even turned to self-harm or tried suicide (Zhang, 2023).

Family history of medication use, history of medication uses among adolescents, history of family dispute, presence of learning disability, chronic physical illness and mother's occupation were found to be significantly associated with depression among adolescents (Paul & Usha, 2021).

Gender with higher prevalence in girls, urban or rural areas, academic performance, poor monthly family income, and parental education were significantly associated with depression, conduct disorder, hyperactivity, peer-relationship issues (Al-Mamun, 2024). There are actual gender disparities in depressive illnesses, even though artefactual factors may somewhat contribute to a female predominance (Piccinelli & Wilkinson, 2000). Prepubescent children's depression rates are gender-neutral, but after the age of 15, girls and women are around twice as likely as boys and men to experience depression (Nolen-Hoeksema & Girgus, 1994). The difference in depressive symptoms across genders was mediated by chronic strain, low mastery, and rumination, which were all more prevalent in women than in men (Nolen-Hoeksema et al., 1999).

Attention Deficit Hyperactive Disorders

ADHD is a neurodevelopmental disorder characterized by impairment in the levels of disorganization, inattention, and/or hyperactivity-impulsivity that are inconsistent with age or developmental level. When there is inattention and disorganization, the individual will be unable to concentrate on a given task, not listening, and losing materials necessary for tasks; hyperactivity-impulsivity involves overactivity, fidgeting, inability to stay seated, intruding into other people's activities, and inability to wait (American Psychiatric Association, 2022; WHO, 2024). The symptoms have a persistent pattern of inattention symptoms and/or a combination of hyperactivity and impulsivity symptoms and the symptoms vary according to age and severity of the disorder (WHO, 2024).

Studies that examined gender disparities discovered a higher incidence among men that is very consistent across national populations (Bauermeister et al., 1995; Kessler, 2004; Fayyad et al., 2007). In examining possible gender differences in

ADHD among children aged 4 to 17, ADHD was 2.3 times more common in boys than girls, and it was found that school suspension was more common among boys than girls (Bauermeister et al., 2007). Some research, however, did not find a gender effect (Murphy & Barkley, 1996; DuPaul et al., 2001; Biederman et al., 2005); in fact, some even discovered a marginally higher frequency among adult females (Kooij et al., 2005; Serra-Pinheiro et al., 2008).

Most of the time, the exact etiology of ADHD is unknown (National Institute of Mental Health, 2021). Numerous genetic and environmental risk factors combined for the development of ADHD in the majority of affected individuals (Faraone et al., 2015). In a cross-sectional study to determine the prevalence of ADHD in children, 7.6% children aged 3 to 12 years and 5.6% of teenagers aged 12 to 18 years have ADHD (Salari, 2023). ADHD have a number of comorbid disorders, particularly oppositional defiant disorder, autism spectrum disorder, and personality and substance use disorders. ADHD may also co-occur with other neurodevelopmental disorders, including specific learning disorder, autism spectrum disorder, intellectual developmental disorder, language disorders, developmental coordination disorder, and tic disorders (American Psychiatric Association, 2022). These literatures indicate the high prevalence of attention deficit hyperactivity disorder in children and adolescents and highlight the importance of early diagnosis and appropriate psychological intervention for ADHD.

Conduct Disorder

Conduct Disorder can be defined as consistent and persistent behaviours that violates the rights of others including aggression, vandalism, theft or that violates major age-appropriate societal norms or rules such as deceitfulness, truancy, running away from home in children and adolescents aged under 18 (Tonyalı et al., 2019; Kohls et al., 2021; American Psychiatric Association, 2022, as cited in Ozbay et al., 2023). Extreme behaviours, such as angry outbursts, starting fires, and hurting animals or other children, might be seen in more severe cases (Yücel, 2020; Mohamed, 2022, as cited in Ozbay et al., 2023). This illness makes it extremely difficult for children to follow rules, respect others' rights, be empathetic, and behave

in a way that is acceptable in society (The American Academy of Child and Adolescent Psychiatry, 2018).

Ersine and associates in 2013 estimated the prevalence rates of 3.6% in males and 1.5% in females globally for conduct disorder according to their systematic review of 21 world regions. The worldwide prevalence of conduct disorder is estimated to be 2–2.5%, with a prevalence of 3–4% in boys and 1–2% in girls (Polanczyk et al., 2015). The prevalence of conduct disorder in school children in Kanke was found to be 4.58%, it was more common in boys, the majority had childhood onset, and one-third had comorbid ADHD (Sarkhel et al., 2006).

According to DSM-5-TR, there are three subtypes of conduct disorder based on the age at onset of the disorder - childhood-onset, adolescent-onset and unspecified-onset. Both childhood-onset and adolescent-onset subtypes can occur in a mild, moderate, or severe form. An unspecified-onset subtype is when there is insufficient information to determine age at onset. The behavioral patterns are classified into four categories: 1) aggression towards people or animals, 2) destruction of property, 3) theft or aggression, and 4) serious violation of rules (APA, 2022). In the International Statistical Classification of Diseases and Related Health Problems 11th edition (ICD-11), it is defined as "Conduct and Dissocial Disorder" under the main heading of "Disruptive Behavior or Dissocial Disorders" (WHO, 2022).

Conduct disorder has a complicated etiology that resulted from the interaction between several biological and psychological factors. According to Kring and associates (2017), social, psychological, neurobiological, and genetic factors interact among themselves to contribute to the aetiology of conduct disorder. The risk factors for conduct disorder are considered to be low socio-economic status, disjointed family, antisocial parents, parents with two or more children, unwarranted punishment, inadequate parental supervision, constant exposure to physical and sexual abuse, unemployment, and schools and high crime rate neighbourhoods (Lillig, 2018; Masroor et al., 2019; Salmanian et al., 2020). Furthermore, the risk of

having conduct disorder is increased by two and four times, respectively, if one witnesses or experiences social violence (Chan et al., 2022).

Conduct disorder is often associated with problem in academic performance, poor peer relationship, other mental and substance use disorders, physical illnesses, unplanned early pregnancy, criminality, higher rates of vehicular accidents and injury (Barry et al., 2013; Erskine et al., 2016). Adolescents suffering from conduct disorder frequently have both oppositional defiant disorder and ADHD. Conduct disorder may also co-occur with specific learning disorder, anxiety disorders, depressive or bipolar disorders, and substance-related disorders (APA, 2022). This indicates that attention needs to be given to school-going children having conduct disorder and the problems that they face so that they can be a valuable member of the community and not a burden.

Despite research studies and evidence-based practices, no definitive conclusion has been reached on the treatment of conduct disorder. However, it has been said that interdisciplinary collaboration can lead to better outcomes over time (Sagar et al., 2019). These multidisciplinary treatments include Cognitive Behavioural Therapy (CBT), social skills training, parent-parent training or therapies, and psychopharmacological methods, and that targets the school, family, and society where problematic behaviours occur alongside children and adolescents can produce positive outcomes (Çıkılı 2015, as cited in Ozbay et al., 2023; Mohamed et al., 2022).

Association between the selected mental disorders

Various researches have indicated the association between depression and one or more anxiety disorders (Frances et al., 1992; Brawman-Mintzer, 1993; Fava et al., 2004; Kessler et al., 2015; Li et al., 2023), depression and substance abuse (Deykin et al., 1987; Fergusson et al., 1993; Kandel et al., 1997; Costello et al., 1999; Armstrong & Costello, 2002), depression and attention deficit hyperactivity disorder (Gundel et al., 2018; Riglin et al., 2021; Mayer et al., 2022; Kaiser et al., 2023), depression and conduct disorder (Kovacs et al., 1988; Loeber & Keenan, 1994;

Marmorstein & Iacono, 2001; Beyers & Loeber, 2003), depression and eating disorder (Hudson et al., 1983; Marmorstein et al., 2008; Presnell et al., 2009).

Anxiety and substance abuse are also closely associated as shown by the studies conducted by Kordlar & Tavacioglu, (2024), Melkam and colleagues (2024) and Wu and associates (2010). There are also evidences which indicate the comorbidity between anxiety and attention deficit hyperactivity disorder (Gokce et al., 2015; Fuller-Thomson et al., 2022; León-Barriera et al., 2023), anxiety and conduct disorder (Sheilagh et al., 2011; Ghandour et al., 2019; Ehlers et al., 2023), anxiety and eating disorder (Bulik, 1995; Chavira et al., 2004; Swinbourne et al., 2007; Fehm et al., 2008; Sparti et al., 2019)

Studies have demonstrated the connection between substance abuse and attention deficit hyperactivity disorder (Harstad et al., 2014; Mochrie et al., 2020; Van de Glind et al., 2020; Luderer et al., 2021; Rohner et al., 2023), substance abuse and conduct disorder (Blair, 2020; Carpentier, 2014; Dalwani et al., 2014; Wymbs et al., 2014), Substance abuse and eating disorder (Bulik et al., 2004; Hudson et al., 2007; Castro-Fornieles et al., 2010; Mann et al., 2014).

There is also significant morbidity linkage between attention deficit hyperactivity disorder and conduct disorder (Fischer et al., 2002; Barkley et al., 2004; Satterfield et al., 2007; Erskine et al., 2014). Some research studies have shown the relationship between attention deficit hyperactivity disorder, conduct disorder and eating disorder. Even though there are studies related to the association between the mental disorders globally, the researcher has not found any research done in the area of depression, anxiety, substance abuse, attention deficit hyperactivity disorder, conduct disorder and eating disorder among school-going children in Mizoram, which is one of the reasons this particular study is selected.

Mental Health and Educational Institutions

An educational institution refers to an organization or establishment dedicated to providing formal instruction and learning experiences to students of various age groups. It includes schools, colleges, universities, technical schools, and

other centers of learning. Schools are places where students gather and spend the majority of their time with their peers and teachers. Mental health and mental illness have become a significant concern, particularly among the younger generation. The increasing pressure to succeed, parental and societal expectations, and the lack of awareness and resources has led to a rise in mental health problems. Therefore, it is essential to address mental health in Indian schools to support the well-being of students.

Schools and early education settings have a key role in promoting mental health in all children and young people, and to assist those who may be at risk of developing mental illness. Peer connections and social interactions, academic achievement and cognitive development, emotional regulation and behavioral expectations, and physical and moral development are all areas in which schools have a significant impact on childhood development (Fazel et al., 2014); mental health has a reciprocal impact on all of these domains.

School-based mental health can be defined as “any mental health or substance abuse service or programme that can be delivered in a school setting” (Boudreau et al., 2009). In high-income nations, school-based mental health interventions have become more widespread as a result of growing awareness of the impact that mental health issues have on academic performance as well as the special opportunity that schools present for children and adolescents experiencing psychological challenges to receive support and access (Evans et al., 2000). In low and middle-income countries, mental health interventions delivered in the school environment were effective in reducing mental health problems among children and adolescents (Grande et al., 2023), implementation of psychoeducation and psychotherapy seemed to have the highest proportion of positive results (Ribeiro et al., 2023). Thus, schools present significant opportunities for delivering mental health promotion, prevention and support efforts to students. Educational institutions, therefore, offer a wealth of opportunity for delivering education and intervention for promotion of mental health, prevention of mental illness and initiate support activities (Patel et al., 2013).

Research and evidenced based practices on mental health in schools have grown significantly over the past few decades. The results indicated that the most successful initiatives are those that implement a "whole school approach" to mental health, taking into account the school's philosophy, policy, and environment as well as collaborations with external organizations and staff professional development, rather than merely providing classroom-focused activities. (Kidger et al., 2009).

Mental Health and National Education Policy 2020

The National Education Policy (NEP) 2020 put forth by the Ministry of Education, Government of India, recognizes the importance of mental health in the overall well-being and development of students and emphasizes the need for a holistic approach to education that includes attention to mental health. The policy states that mental health and emotional well-being are critical components of holistic development, and schools should ensure that they are integrated into the curriculum. “The development of capacities that promote student wellness such as fitness, good health, psycho-social well-being and sound ethical grounding are also critical for high-quality learning” (NEP, 2020).

The policy emphasizes on “basic training in health, including preventive health, mental health, good nutrition, personal and public hygiene, disaster response and first-aid will also be included in the curriculum, as well as scientific explanations of the detrimental and damaging effects of alcohol, tobacco, and other drugs” (NEP-2020); the need for early identification and intervention for mental health issues in students. It also stresses the importance of promoting positive mental health practices and creating a safe and supportive school environment that encourages students to seek help when needed.

NEP 2020 recommends that schools should provide access to mental health professionals, including counsellors and psychologists, and ensure that they are trained to provide effective support to students. Schools should also develop and implement mental health promotion programs, including awareness campaigns and mental health literacy programs for students, teachers, and parents. It further

emphasizes the need for collaboration between schools and other stakeholders, including parents, community organizations, and healthcare providers, to address mental health issues effectively.

Some of the significant clauses concerning Mental Health in the NEP 2020 include:

- a) *Awareness and sensitization*: The policy emphasizes the need to create awareness about mental health among students, teachers, and parents. It also calls for programs to address stigma and discrimination associated with mental health. Sensitization programs for raising awareness are also recommended in order to combat the stigma and discrimination related to mental health.
- b) *Counseling services*: The policy recommends the establishment of counselling services in all educational institutions to provide students with emotional support and guidance.
- c) *Mental health curriculum*: The policy stipulates for the inclusion of mental health education in the school curriculum to promote mental health literacy among students.
- d) *Support for special needs students*: The policy recognizes the specific mental health needs of children with special needs and advocates for the provision of appropriate support and accommodations.
- e) *Capacity building*: The policy emphasizes the need for capacity building of teachers and other educational personnel to address mental health issues in students. “Basic training in health, including preventive health, mental health, good nutrition, personal and public hygiene, disaster response and first-aid will also be included in the curriculum, as well as scientific explanations of the detrimental and damaging effects of alcohol, tobacco, and other drugs” (NEP-2020).

Overall, the National Education Policy 2020 acknowledges the critical importance of mental health in the education system and stresses the necessity of outlining a comprehensive approach to promoting positive mental health practices and addressing to the mental health needs and concerns of every student. In the

education system, teachers and school staff can play a crucial role in identifying mental health problems early and referring learners to appropriate services. In addition to integrating mental health education into the curriculum, the policy emphasizes the need for providing mental health services in schools. This includes providing counseling services to learners who may be experiencing mental health problems and creating a supportive and inclusive school environment that promotes the well-being of all learners.

Mental Health and Mental Illness Awareness

Exploration of the paradigm of mental health awareness is a means of combating stigma, enhancing prevention, ensuring early recognition, and stimulating practical interventions to the community to have a positive outcome. Some effective strategies of mental awareness in addressing the stigmatization of mental illness are participation by family members, sensitization to treatment and social inclusion (Patel & Saxena, 2014; Rebello et al., 2014). Lack of knowledge about mental illnesses poses a challenge to the mental health care delivery system (Brown et al., 2010) whereas the role of community-based systems in low-income countries has a positive result in creating awareness (Trani et al., 2016). Stigmatization and discrimination of mental patients and their family are negative consequences of ignorance and misinformation (Pinfold, 2003).

There are a few studies that have measured mental health literacy in the Indian context, one study highlighted that only 29.04% identified depression, 1.31% recognized schizophrenia/psychosis (Ogorchukwu et al., 2016). Mental health literacy is an “ability to access, understand, and use the information to promote and maintain good health”. It includes mental illness recognition, causes, self-help, facilitation of professional intervention, and navigating the information (Nutbeam et al., 1993). Mental health awareness programs have had a favourable impact and can produce positive changes in people's views of mental illnesses (Kolappa et al., 2013). It is expected that rising awareness will enhance early recognition and access to treatment will follow, as will the adoption of preventive measures in addition to

policy decision including advocacy, leveraging of political will, funding, and cross-synergies.

Teachers Awareness of Mental Health and Mental Illness

Mental health problems during childhood and adolescence, to a great extent, can be prevented by early identification and intervention before it can develop into mental health disorders in adulthood. Teachers can see changes in students' social relationships and academic achievement from a proximal and possibly helpful longitudinal perspective. These might be signs and symptoms of developing depression or other mental illnesses that are treatable. Therefore, the awareness of teachers about common mental illness of childhood and adolescent is imperative for the promotion of mental health, prevention of mental illness and to ensure appropriate intervention.

Teachers are more likely to recommend self-help techniques to students than professional help when they have low awareness of mental health issues and their symptoms and prioritize self-help over professional help (Fathima & Milu, 2022). This could discourage or postpone students from seeking professional help. Teachers' recognition of mental health problems in students and the threshold for reporting their concerns depends on the individual and not based on any formal knowledge of how to identify anxiety or depression risk factors in students (Trudgen & Lawn, 2011).

When teaching students who have anxiety issues, the awareness levels of teachers are inconsistent and they were more consistent in identifying students with external behavioural issues rather than students with internal mental-health issues (Figueroa, 2013). Furthermore, the teachers used same strategies in addressing students with anxiety issues and those having behavioral and attitudinal issues, irrespective of their differences. Most teachers are aware and recognized that adolescents with very severe anxiety symptoms need to be referred for professional help but they are less likely to correctly identify and refer students with moderate or mild anxiety symptoms (Missenden & Campbell, 2019).

School teachers are generally aware about the prevalence of substance abuse in adolescence. However, there is lack of awareness about the specific symptoms and complications of the different substances abused (Jailaxmi, 2016).

The awareness level and knowledge of the teachers about ADHD are insufficient, ranging from poor to adequate; teaching experience and previous training had a positive bearing on knowledge which indicates that creating an awareness on ADHD is necessary (Shetty & Rai, 2014). According to Safaan and associates (2017), 59% of teachers had poor knowledge and only 10.2% had adequate knowledge about attention deficit hyperactivity disorder. Furthermore, there was a significant relationship between teachers' knowledge about attention deficit hyperactivity disorder and their age, marital status, education qualification, years of teaching experience, receiving training courses during college and attending an in-service workshop about attention deficit hyperactivity disorder (Safaan et al., 2017).

Progress in mental health service delivery has been slow in most low- and middle-income countries and the barriers include the existing public-health priorities, delivery of mental health care, the low numbers of trained personnel, lack of mental health leadership (Saraceno et al., 2007). There is a dearth of studies pertaining to awareness of school teachers on the common mental illness suffered by children and adolescence and its effect on the mental health of their students. Moreover, there were no studies available whereby a teachers' high or low awareness about common mental problems might have an effect on the mental health of their students. Therefore, this study will contribute to the body of knowledge on childhood and adolescent mental disorders and enhance the necessity of creating an awareness amongst school teachers.

The Review of Literature related to the present study will be presented in the next chapter.

CHAPTER – II
REVIEW OF LITERATURE

This chapter deals with the review of existing literature on the effects of teacher's awareness of mental illness on the mental health of their students.

Teachers' awareness of adolescent's mental illness

Mental problems among children and adolescents are common and may have significant long-term health biopsychosocial consequences (Hossain et al., 2022). Early adolescence (11-14 years old) is a critical period for the development and onset of mental health issues, which may develop as diseases later in life if not managed early on (Solmi et al., 2022) and more than one-third of mental problems appear before the age of 14 years (Scheiner et al., 2022). Mental illnesses are often accompanied by stigma and are neglected unless the symptoms are severe (Chatmon, 2020; Öri et al., 2021). This causes a delayed diagnosis, which can lead to a poor prognosis or numerous complications like suicide or self-harm that could have been prevented with early treatment (Colizzi et. al, 2020). The majority of these children are school-aged and students who spent most of their waking hours under the observation and guidance of their teachers. The teacher who has high awareness about mental illness will be able to identify the symptoms when they occur in their students and advocate for prompt treatment or referral to appropriate health facilities.

Several studies have concluded that teachers often underestimate the prevalence of mental problems, they also have difficulty in recognizing the symptoms of mental disorders in their class (Rothì et al., 2008; Daniszewski, 2013; Ibn Auf, 2023). This is a reflection of lack of awareness regarding the signs and symptoms of mental disorders. Ibn Auf and colleagues (2023) found a significant association between teachers' awareness and the average number of pupils estimated by the teacher to have psychiatric problems. Those teachers who referred pupils to mental health professionals were found to have a better awareness of childhood mental disorders (Kamel et al., 2020; Ibn Auf, 2023). This demonstrated that a lack of awareness about mental illness was one of the things that decreased teachers' propensity to offer assistance or recommend that students get professional help (Kamel et al., 2020; Ma & Anto, 2022).

Lack of awareness and stigma towards mental health problems among teachers leads to negative attitudes towards students with mental health problems, thereby reducing their inclination to provide help or direct students towards help (Parikh et al., 2016). Mental health awareness among teachers reduces their stigma towards mental health disorders and increases their confidence in their ability to identify a student struggling with a mental disorder (Langeveld et al., 2011).

Studies have highlighted the prevalence of depression, anxiety, and stress among secondary and senior secondary students in India primarily due to academic related (Porwal & Kumar, 2014; Prabu, 2015; Kumar & Akoijam, 2017). In such circumstances, teachers are in a unique position to recognize such children, provide assistance, and assist them in receiving timely and appropriate interventions. However, lacunae in their knowledge and awareness, in addition to negative beliefs they have about mental illness can adversely affect their role, and a perfect opportunity to identify such students at an early stage may be overlooked.

Teachers who participated in a Mental Health First Aid training course had improved mental health knowledge, decreased stigmatized beliefs, and increased confidence to offer help to students and colleagues compared to those who did not receive the training (Jorm et al., 2010). In another study, teachers who received educator training prior to implementing a mental health school-based intervention also had improvement in mental health knowledge and decreased stigma (Kutcher et al., 2013). Improving teacher mental health knowledge and decreasing stigma can have a long-lasting positive impact on students (Kutcher et al., 2013).

Teacher's beliefs and awareness about mental illness affects their behavior toward students in the classroom. High-aware teachers have favourable attitude towards their student's mental health issues (Kamel, 2020). There are very few studies conducted in the Indian context, that too have reported inadequate knowledge about mental illnesses and high levels of stigma among the teachers in India (Parikh et al., 2016; Zieger et al., 2016) which emphasizes the need to study the mental health beliefs among teachers in India.

Teachers' Awareness and Eating Disorders

Understanding eating disorder risk factors allows for the early identification of high-risk populations and, consequently, a prompt and customized response through channels like the creation of public policies or the start of focused prevention initiatives (Bailey et al., 2014). The majority focus on body image such as weight/shape issues and body dissatisfaction are a strong risk factor for eating disorders (Jacobi et.al., 2010).

The studies have supported teacher distribution of interventions which targets body image among students in schools (Sharpe et al., 2013; Diedrichs et al., 2021), but the inadequate impact as compared to professionally trained facilitators and selective intervention approaches young adolescent girls with body image concerns which delivers motivation for filtering universal interventions (Atkinson et.al., 2024).

Systematic evaluations and meta-analyses of eating disorder prevention programs have repeatedly found that inducing cognitive dissonance is the most effective selective prevention strategy (Watson et.al., 2016; Le et.al., 2017). Dissonance-based interventions (DBIs) foster a voluntary counter-attitudinal position against socially dictated standards for beauty, producing a conflict with, and thereby reducing internalization of ideals and resultant body dissatisfaction (Stice et al., 2008). Whereas Robust interventions are implemented on small groups of adolescent girls with body image issues, it shows strong therapeutic results, such as decreased occurrence of eating disorders and important risk variables (Stice et.al., 2019). The goal of mindfulness-based therapies (MBIs) is to improve the ability to avoid negative emotional and behavioral automatic reactions to beauty standards and associated social constraints, as well as lessen the severity and impact of those reactions when they do occur (Wade, 2017).

The study found that teachers were unaware of the connections between the themes and eating disorder prevention, in addition to their perceptions of each thematic axis. The research identifies a number of potentially helpful techniques such as communication skills, leadership, problem solving and decision making,

confidence and self-esteem, time management, empathy, etc. that might be taught in physical education programs to help prevent such diseases (Cronin et.al., 2023). Physical Education sessions can be used to improve life skills, like those necessary to prevent eating disorders, in addition to fundamental sports instruction and physical fitness. In order to accomplish the health goals of each educational level, subsequent interventions should adapt to the changed attitudes and dangers that instructors observe in their classroom practices following the adoption of the P-NAF program (Monserrat et.al., 2024). When the P-NAF program informed the teachers about the relevance of eating habits as a weapon in the prevention of eating disorders, they recognized opportunities for interventions that they might use in their schools (Álvaro et.al., 2022).

Teachers' Awareness and Substance Abuse

According to the World Health Organization (WHO), Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (World Health Organization, 2014). More than 2.6 million young people aged 10 to 24 die each year in the world and not less than 14% of adolescent girls and 18% of boys aged 13–15 years in low- and middle-income countries are reported to have been taking alcoholic drinks (World Health Organization, 2012). In fact, these deaths are mostly due to preventable causes such as substance abuse. Teachers are among the most crucial individuals to assist in preventing substance usage among school-age children and the level of awareness have to be raised amongst the teachers so that they can actively and efficiently take part in imparting health teaching to the students.

Research on drug prevention has been attempting to comprehend the causes and effects of teachers' involvement for a number of decades (Djigic & Stojiljkovic, 2011; Formby et al., 2011). According to several studies, schools that respect the duties of instructors and acknowledge the significance of the school environment stand to benefit in terms of students' commitment to abstaining from drug use and their general sense of well-being. (Moreira et al., 2015; Chan et al., 2016; Razali & Madon, 2016).

Jailaxmi and colleagues (2016) investigated teachers' awareness on early recognition and prevention of teen substance abuse at school and concluded that the teachers have a severely low awareness level about those related to substance-specific symptoms and complications even though they do have some knowledge regarding teen substance abuse. For many teachers the level of awareness depends on the availability of a training program on substance abuse (Soman & Kiran, 2014), while for others, their awareness comes from the internet, social, media, information leaflet and the like.

Teachers' teaching competency in drug prevention includes both subject-matter expertise and pedagogical skills to effectively communicate to pupils the risks of drug abuse and the schools need to integrate drug prevention program in their curriculum (Handrianto, et al., 2020). Moreover, teachers who are highly aware and believe in their own abilities are more likely to embrace innovation and pay more attention to helping students who struggle with drug usage.

Given that adolescents spend the majority of their active time in school, school-based interventions would be extremely helpful in the early detection, prevention, and treatment of youth substance misuse. (Ali et al., 2011; Foxcroft & Tsertsvadze, 2011). School teachers are primarily responsible for ensuring that adolescents who exhibit maladaptive behaviour are appropriately identified and that there is no substance abuse in the school environment (Olumide et. al, 2014). Health professionals could assist school teachers in identifying the teenagers' symptoms specific to substance misuse, exploring effective management strategies, and deciding best strategies in specific situations (Bharath & Kumar, 2008). Assessing school teachers' awareness regarding early identification and prevention of substance abuse among teenagers is a preliminary step towards empowering them to create a substance-free school milieu.

Teachers' Awareness and Anxiety

Anxiety refers to multiple mental and physiological phenomena, including a person's conscious state of worry over a future unwanted event, or fear of an actual

situation (Foa et al., 2017). Anxiety disorders affect 6-18% of youth aged 6-17 years, thus being the most common psychiatric disorder in this age group (Copeland et al., 2011). One of the most prevalent and reliable findings has been that females endorse anxiety symptoms more than males (La Greca & Lopez, 1998; Compton et al., 2000; Rudolph, 2002). A longitudinal study conducted by Costello and colleagues, (2003) reported that between children aged 9 to 13 years, majority are girls with higher three months prevalence rates for the following disorders: generalized anxiety disorder, panic disorder, social phobia and agoraphobia. Lewinsohn and colleagues (1998) found that among 1,709 participants, females had considerably greater anxiety symptom scores than males and added that females are twice as likely as males to have an anxiety condition by the age of six. Excessive anxiety is connected with academic impairment both currently (de Lijster et al., 2018) as well as prospectively (Essau et al., 2014; Suldo et al., 2014).

In the context of age, the most generally reported distinction between children and teenagers is the decrease in separation anxiety symptoms with increase in age. (Westenberg et al., 1999; Compton et al., 2000; Costello et al., 2003). Another observation is that there is an increase in social anxiety with age (Compton et al., 2000). According to Costello and associates (2003), adolescence was associated with an increase in social phobia. The findings of these research show that anxiety symptom presentation varies according to child gender and age.

School factors including teachers, peers, academic performance expectations, classroom interactions, extracurricular activities, and school violence can all contribute to and maintain anxiety symptoms (Compton et al., 2019). Few studies have focused on teachers' understanding of student anxiety and their use of anxiety reduction tactics. Headley & Campbell (2013) assessed 315 elementary school teachers' understanding of anxiety symptoms in children and found that teachers were able to recognize anxiety symptoms, but lack of understanding of the distinction between adaptive (protective) and maladaptive (excessive) worry. Cunningham and Suldo (2014) analyzed teachers' understanding of anxiety and their ability to identify kids with excessive anxiety among 4th and 5th graders, students

completed two questionnaires that is the MASC and the Children's Depression Inventory and found that teachers identified just 40.7% of kids with higher anxiety, indicating a significant miss rate and the need for more training in identifying these students. Splett and others (2019) studied teachers' abilities to assess the severity of internalizing and externalizing symptoms and the need for intervention after reading case vignettes and found that teachers correctly detected significant internalizing difficulties, but were less accurate and less likely to diagnose. These findings suggest that teachers may overlook early signs of anxiousness and fail to intervene, leading to worsening and severe difficulties. Finally, according to Ginsburg and associates (2022), teachers' knowledge of anxiety was limited and did not correlate with their use of anxiety reduction measures in the classroom which indicated that teachers' own sense of accomplishment at work was the strongest predictor of both teacher knowledge and the use of anxiety-reduction methods.

Teachers' Awareness and Depression

Being the main environments in which kids live and learn, schools are ideal places to identify and treat mental health issues in kids and teenagers early on. Teachers play a crucial role in identifying students with mental health concerns who have clinical or subclinical symptoms (Kamel et al., 2020).

A teacher who has a high awareness about depression will contribute to the prevention of mental illness in their students. In fact, the quality of education in a country is heavily influenced by its teachers. The quality of education in a country is mostly determined by the productivity of educators, specifically instructors in schools. Programs like this one, which put emphasis on increased collaboration across academic communities, mental health practitioners, and professionals in school settings, may help to improve access to necessary health care for children and adolescents (Kirchner et al., 2000).

A study was conducted by Chieshe and Kwaghegbah (2022) where the main objective of the study was to assess the awareness of teachers about depression and it was evinced that majority of the teachers have lack of awareness pertaining to depression; a structured teaching plan on depression awareness was implemented

among the teachers and there was a significant improvement in their awareness after the teaching.

Teachers' Awareness and Attention Deficit Hyperactivity Disorder (ADHD)

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common neurodevelopmental disorders in childhood and adolescence. It is usually diagnosed in childhood and often lasts into adulthood. It is one of the most common reasons why adolescents are taken to psychological and psychiatric clinics. (Do Austerman, 2015; Sadock, 2015).

Teachers' awareness and attitudes towards students with mental health disorders frequently influence their daily role in delivering efficient support to these children (Kamel et al., 2020). Teachers' awareness of ADHD is significant since they are frequently the first to discover ADHD symptoms in children, can supply information useful for ADHD diagnosis, and have an impact on student school performance and overall learning ability. Many teachers, however, continue to hold misconceptions regarding ADHD. (Tsiplakides et al., 2010; Alkahtani et al., 2013; Giannopoulou et al., 2017)

In the United Kingdom (UK), only 18.3% of trained teachers and 20% of student instructors correctly responded to items concerning ADHD medication (Akram et al., 2009). In Sri Lanka, 80.1% of primary school teachers with an average of 15 years of teaching experience stated that ADHD symptoms were caused by a terrible upbringing. Only 19.8% agreed that ADHD may be treated with medicines (Rodrigo et al., 2011). In Iran, 21.9% of preschool teachers incorrectly believed that ADHD is an outcome of a terrible upbringing, while only slightly more than half (55.6%) properly understood that ADHD is a chromosomal condition. (Amiri et al., 2017)

A study was conducted by Akdağ in 2023 in which the main aim was to explore Teachers' Knowledge and Attitudes Toward Attention Deficit Hyperactivity Disorder and Its Treatment, 57.7% accurately identified that ADHD is more commonly present in boys. Furthermore, the majority of instructors (60.8%) correctly answered the question about the comorbidity of ADHD and learning

difficulties. However, 20.3% of instructors thought ADHD drugs were addictive, and 9.7% were hesitant to employ such treatment for their children if necessary. The findings indicate the importance of updating existing training curriculum for novice instructors and offering additional training for experienced teachers. Such programs should try to correct any unfavourable impressions and attitudes teachers may have about ADHD.

Al-Sharbati and colleagues (2012) recommended an intensive continuous education program to raise awareness of attention deficit hyperactivity disorder (ADHD) among educators, facilitate the development of a supportive learning environment for students with the disorder, lessen the impact of the disorder on their social and emotional development, and strengthen the bond between educators, parents, and healthcare providers. Moreover, teacher's awareness about ADHD increases their openness and support to the different treatment interventions (Elliott, 1988; Ohan et al., 2008).

Teachers' Awareness and Conduct Disorders (CD)

Conduct disorder (CD) is a childhood behaviour disorder marked by persistent disdain for others and a repeating pattern of antisocial behaviour that includes theft, deception, and physical aggression (APA, 2013). Conduct disorders (CD) are among the most frequent psychiatric problems in children and adolescents, with an estimated global incidence in the community of 2-4% (Ayano et al., 2024).

Teachers play an important role in the early detection, diagnosis, and treatment of children with CD. Teachers may be the first to observe children in a setting with demands that test students' attentional abilities (for example, if children are required to remain seated at their desks). As a result, teachers are frequently among the first ones to discover aberrant levels of attention abilities in their students and recommend additional inquiry into these concerns (Singh et al., 2024).

A study conducted by Singh and associates (2024) found that teachers typically have an average degree of awareness on the characteristics, symptoms, and

diagnostic processes linked with CD. According to Al Noimi's (2022) findings, 63.3% of teachers accurately identified the indications and symptoms of behaviour disorders while 32.7% only provided right responses for kinds of conduct disorders. Teachers have some intermediate understanding on conduct disorders, which agrees with Kiran and Kaur (2020), who concluded that most school teachers lack knowledge about conduct disorders. Furthermore, consistent with the findings of Alfred and Yasmin (2020), experienced instructors have a good understanding of conduct disorder on both the rural and urban sides, but the majority of rural teachers do not have adequate awareness.

Role of Teachers in the Promotion of Mental Health

Globally, it is estimated that one in seven (14%) of 10-19-year-olds have mental health problems (Institute of health Metrics and Evaluation, Global Health Data Exchange (GHDx)). Out of this, the prevalence of various psychiatric disorders among school-aged adolescents was as follows: 13.7% for major depressive disorder, 4.0% for obsessive-compulsive disorder, 1.4% for panic disorder, 2.5% for self-harming behaviour, 2.5% for generalized anxiety disorder, 2.2% for social anxiety disorder, 1.7% for dysthymia, and 0.8% for adjustment disorder (Shafi, 2023).

Mental health is a major concern in children's life; for example, one study in Chile revealed a 27.8% prevalence of psychiatric disorders combined with psychosocial handicap in children aged 4 to 11 years old (De La Barra et al., 2012). More specifically, clinical depression is one of the most widespread mental health conditions in the world, with a high prevalence among young people and the potential for it to last into adulthood (Martin & Cohen, 2000).

Why should this be an issue in educational practices? According to a viewpoint that views children as holistic and multidimensional human beings, mental health and wellbeing difficulties among young people are critical development components. Low mental health can lead to problematic behaviors and unsatisfactory outcomes for students and their families, as well as in educational institutions affecting both boys and girls (Weist, 2003; Feinstein, 2015). Students engage in

school dynamics with emotional issues as a result of the social relationships between teachers and students, as well as among classmates (Weist, 2003). Their social relationships can also disrupt the school climate and the overall class process (Rothi et al., 2008; Vieira et al., 2014).

Educators can spot children with mental health issues in the classroom, where deviant behaviour is generally the first sign. Furthermore, children have greater opportunity to be referred to mental health care, particularly when these services are provided inside the school context, because they are more easily available (Farmer et al., 2003). Each teacher in the school has a commitment to contribute to the ideal realization of students' cognitive, emotive, behavioural, attitudinal, and social sides (Dumitru, 2015).

According to Moor and team (2007), one of the traits that distinguish teachers' roles is that they have daily interaction with their students, as opposed to other professionals. Furthermore, while the relationship between students and professors is the most evident and immediately noticeable, these professionals frequently communicate with their parents, who assist in their lessons. This allows them to provide and receive firsthand information on students' well-being and mental health (House of Commons, 2017).

Aside from the relationships that teachers can form, they have always been associated with their primary function: to teach. This is an important truth when discussing new frontiers in school aims and how to incorporate them into students' life in educational institutions. Also, teachers spend a significant amount of time with pupils in their classrooms, where they can visualize children's daily progress (House of Commons, 2017).

Therefore, when we reconsider role of schools in children's and young people's mental health, we must also reconsider the role, repercussions, and opportunities that teachers provide to their pupils in terms of academic support (Díaz et al., 2020).

Role of Teachers in the Prevention of Mental Illness

Mental, neurological, and substance use disorders account for more than 10% of the global disease burden, although around 85% of people in low- and middle-income countries lack access to treatment (World Health Organization, 2019). Over the past few decades, there has been an increase in mental health illnesses. In Greece, between 10% to 20% of children were struggle with psychosocial integration (Hatzihristou et al., 2004). In India, the total prevalence of common mental disorders (CMDs), which include depression and anxiety disorders, was 5.1%, according to the 2016 National Mental Health Survey, with an 80.4% treatment gap (Jayasankar et al., 2022). The increase in the prevalence of mental health issues has placed an unprecedented strain on healthcare systems, showing the shortcomings of traditional paradigms of mental health care (Wainberg et al., 2017; Qin & Hsieh, 2020).

Research data indicates that 10% of youngsters experiencing mental health issues satisfy the threshold for a mental disorder and teachers often lack the necessary knowledge and skills to adapt to today's educational environment (Koller & Bertel, 2006). Schools can boost students' mental health and resilience by providing resources to help them cope with pressures in challenging situations (Gross, 2008). The rise in mental health issues among youngsters emphasizes the need for prevention.

Rothi and associates (2008) identified that children who are mentally healthy exhibit emotional and mental growth, the ability to initiate and maintain relationships, express empathy, play and learn, develop a sense of right and wrong, and overcome obstacles. Emotional and behavioural issues are characterized by inappropriate behaviour that disrupts learning. Emotional distress symptoms include retreat from social situations and difficulty maintaining constructive connections such as isolation and hostility (Nikolaou & Markogiannakis, 2017).

Mental health disorders are divided into two categories: externalizing and internalizing disorders (Egger & Angold, 2006). Externalizing disorders involve aggressive and disruptive behaviour, while internalizing disorders are linked to

anxiety disorders and depression. Externalizing behaviours are aimed at others, while internalizing illnesses cause anguish inside themselves (Achenbach & Edelbrock, 1981). Several cases show comorbidity between externalizing and internalizing diseases (Lilienfeld, 2003). Internalizing illnesses cause difficulty managing negative emotions, resulting in shyness, social isolation, frequent anxieties, and low self-esteem (Graber, 2004). A child's temperament, namely inhibition (defined by irritability in infancy and fear and shyness in school age), has been linked to the development of anxiety disorders (Biederman et al., 1993). Inhibitory behavior throughout preschool and school age is a risk factor for developing anxiety and depression later in life (Bernstein et al., 1996).

Teachers and parents frequently misread signals of depression and anxiety disorders in children who appear to be compliant with teacher instructions and do not disrupt class (Holmes et al., 2001). According to Clauss-Ehlers and Levi (2002), psychiatric issues in children and adolescents are commonly overlooked and minimized by adults. Therefore, teachers' role in preventing mental illness is crucial, as children's mental health issues have become more prevalent in schools and teachers lack the necessary training to identify them.

Research indicates that many mental health issues go unnoticed, preventing children from receiving necessary care (Kataoka et al., 2002). Early detection of mental health problems in children and adolescents in schools can be achieved through whole-school methods that target all students (Levitt et al., 2007). Educators can identify children with mental health issues through deviant actions in the school setting. According to Farmer and others (2003), children are more likely to be referred to mental health services at schools due to their ease of access. The stigma around mental health issues often prevents children and families from seeking treatment. Weist (1999) found that offering treatment services in a familiar setting, such as school, increases acceptance.

Parents interact with instructors to address issues about their children's behaviour and development. Recognizing a child's issues is crucial for referring them to mental health care. Teachers have a crucial role in initiating help-seeking for

children with mental health issues (Burke et al., 2016). Thus, training teachers in early detection of mental problems is crucial. Implementing counselling treatments in schools can help prevent and address mental health issues early on.

There are three types of preventive treatments in mental health: general, selective, and suggested (Nastasi et al., 2004). Universal preventive measures are aimed at the general population. Universal therapies typically emphasize social and emotional skills, as well as problem-solving. They are easily integrated into curricula and more likely to be utilized in school settings. Selective therapies target those with a higher risk of developing mental disorders. Selective therapies, such as support groups, try to help youngsters cope with bereavement. Indicated interventions focus on children who exhibit subclinical symptoms or indicators of mental illnesses but do not meet diagnostic criteria. For instance, social skills training can benefit youngsters who demonstrate certain behaviours.

Weare & Nind (2011) suggest several interventions to prevent mental health problems in schools, including teaching skills, multi-level interventions, improved school climate, teacher training, parent education, and collaboration with community-based mental health services. Wells, Barlow, and Stewart-Brown (2003) found that implementing universal interventions for a year to avoid mental health issues is successful.

Prevention involves enhancing protective factors. Protective factors lower the risk of negative consequences on children development. According to Luthar and Zigler (1992), cognitive capabilities, socio-cognitive and social skills, and temperament traits fall within the first category of protective factors. The second category concerns the quality of children's interactions with their environment. The third category covers the link between school and family, as well as the quality of the school environment. Prevention involves enhancing protective factors and modifying risk factors. According to Severson and associates (2007), child development is influenced by family, neighbourhood, and school environments.

Prevention promotes psychological resilience, allowing children to adjust to harsh environments (Luthar et al., 2000). Psychological resilience emerges gradually. Developing individual adaptability abilities and a supportive environment during early childhood can reduce the impact of unfavourable life events (Friedman & Chase-Lansdale, 2002).

Implementing socio-emotional learning interventions in schools is crucial for building children's resilience (Kay-Lambkin et al., 2007). Teaching social and emotional skills and behavioural control fosters the development of relationships by allowing students to communicate tough feelings and events in a safe and supportive setting. Socio-emotional education programs improve school atmosphere and relationships by providing students with a greater understanding of emotions. Greenberg and associates (1995) found that students gain confidence in their abilities to manage their emotions while also learning to recognize emotional signals. These variables contribute to healthy student-teacher relationships. Building supportive ties between teachers and students fosters a strong school community. Teachers have a crucial role in providing care and support to their pupils (Battistich et al., 1997; Hatzihristou, 2015).

Close interactions between teachers and students lead to improved academic performance and favourable peer relationships (Nikolaou & Markogiannakis, 2017). According to Hamre and Pianta (2001), positive relationships with teachers help children who are in risk of behavioural issues develop adaptive behaviours. Research suggests that a supportive relationship between children and teachers can reduce aggressive behaviour (Meehan et al., 2003). According to Cadima and partners (2010), negative interactions with teachers are a predictor of psychiatric illnesses and school failure. Teachers play a crucial role in supporting children who lack parental support (Harter, 1996).

Positive relationships between teachers and students can be influenced by the larger school community. According to Crosnoe and research team (2004), the school climate has a direct impact on healthy relationship building. Teachers' nonverbal behaviour is crucial for creating a positive emotional climate in the classroom.

Prevention activities that improve school climate and student-teacher interactions can help achieve this goal. Teachers also serve as counsellors in the discipline area, helping pupils solve problems and boost their self-esteem. They simultaneously offer psychological support and improve pupils' mental health.

Educators must develop empathy to understand their students' subjective world, including feelings, experiences, personal meaning, and behaviour, and communicate this understanding (Brouzos, 2004).

Educators also play a crucial role in communicating and cooperating with parents. Collaboration with parents may create a supportive and stable atmosphere that prioritizes students. Research shows that teachers value it (Stamatis & Nikolaou, 2016; Nikolaou et al., 2017). Focusing on children's strengths, rather than their deficiencies, fosters learning and promotes resilience and well-being in later life (Alvord & Grados, 2005).

Effective classroom management training can lessen children's behaviour problems and avert significant emotional and behavioural issues. According to McCaslin and Good (1998), teachers should help students develop self-regulation and problem-solving skills to achieve academic and social goals.

Relationship between Eating Disorder and Substance Abuse

Negative eating behaviours with detrimental repercussions on the body and mind are recognized as eating disorders, it typically affects young women usually diagnosed in their early teens and adulthood while only 10% of all cases of eating disorders are among men (Lilenfeld & Kaye, 1996). Lifetime prevalence estimates of anorexia nervosa, bulimia nervosa, and binge eating disorder are .9%, 1.5%, and 3.5% among women, and .3% .5%, and 2.0% among men (Hudson et al., 2007). Substance abuse is prevalent among people with eating disorders; up to half of them report having co-occurring substance use disorders (Bulik et al., 2004). The prevalence of comorbid alcohol use disorders is higher than that of illicit substance use disorders (Hudson et al., 2007).

Lifetime prevalence of any substance use in adolescents was found to be 24.6% in those with anorexia nervosa, 48.7% in bulimia nervosa, and 28.6% in eating disorders not otherwise specified (Mann et al., 2014). Castro-Fornieles and partners (2010) studied the prevalence of regular or risky substance use and substance use disorder in adolescents with eating disorders and found that 14.7% presented substance use disorder related to tobacco, 3.2% to cannabis, 1.1% to alcohol, and 1.1% to other substances. Adolescents having regular or risky substance use have higher academic failure rates, more school recurrences, issues with family dynamics, social interactions as well as externalizing issues and delinquent behaviour (Castro-Fornieles et al., 2010). Approximately one third of adolescents with bulimia nervosa had used tobacco products at least once and two thirds have history of alcohol use (Wiederman & Pryor, 1996; Fischer & Le Grange, 2007). A further one-third reported having taken illicit drugs at least once, the most popular being marijuana, cocaine and amphetamines respectively (Fischer & Le Grange, 2007). In general, the most frequently consumed substance among adolescents was alcohol, which was followed by cocaine, tobacco, and cannabis (Mann et al., 2014).

According to the National Centre on Addiction and Substance Abuse, about half of women who suffer from eating disorders also struggle with substance use problems (Killeen et al., 2015). The greatest association between substance use disorders and eating disorders is shown in females with bulimia nervosa and anorexia nervosa, and this correlation is present for both alcohol and illicit drug disorders. Compared to women with anorexia nervosa alone, women with anorexia nervosa with binge eating disorder and bulimia nervosa had significantly higher rates of alcohol use disorders (Bulik et al., 2004).

Several researchers had attempted to explain the striking relationship between Eating Disorder and Substance Use Disorders. Pearlstein (2002) and Peveler & Fairburn (1990) have implicated the possibility of heritable factors leading to the comorbidity of SUDs and EDs. Pearlstein (2002) suggested that development of each disorder can be traced back to these physical abnormalities and the root causes of comorbidity are the shared biological factors. Disturbances in the dopaminergic

system and endocrine system were a salient aspect of SUDs and EDs (Pearlstein, 2002; Rothman et al., 2008). Prolonged substance use and ED behaviours produce similar physical symptoms such as weight loss, increased or decreased appetite, increased or decreased heart rate, amenorrhea, fatigue, muscle weakness, insomnia, vomiting, diarrhoea, anxiety, sexual dysfunction, constipation, nausea, restlessness, and difficulty concentrating (APA, 1994). Thompson-Brenner and associates (2008) investigated the personality traits associated with comorbid substance abuse, and found that different personality traits appear to support the development of EDs and SUDs; avoidant insecure and obsessional sensitive traits predicted Eds while behavioural dysregulation traits predicted SUDs. Despite the fact that SUDs and EDs seem to share many personality traits, other factors—like past drug use—were more reliable predictors of future symptoms.

Gadalla and Piran (2007) highlighted that, in addition to improving treatment options for comorbid individuals, prevention interventions should target both SUDs and EDs simultaneously. In light of the fact that these diseases typically manifest in adolescents, Measelle and colleagues (2006) recommended that intervention start with students in elementary and middle school. The development of resilience in students who are at risk, particularly those who come from families with a history of these diseases, should be the primary emphasis of prevention programs.

Very few studies have assessed substance use in adolescents with eating disorders, particularly in India and Mizoram. Taking into consideration the seriousness of substance abuse, eating disorders and its close association with each other, this study is selected to enhance the well-being of school going adolescents in their transition to adulthood.

Relationship between Eating Disorder and Anxiety

According to the DSM-IV, the lifetime prevalence of binge eating disorder, bulimia nervosa, and anorexia nervosa is 2.0%, 1.5%, and 3.5% in males and 9%, 1.5%, and 3.5% in women, respectively (Hudson et al., 2007).

It is proposed that eating disorders and anxiety disorders may share common aetiological variables, and that these characteristics can increase an individual's susceptibility to both diseases (Emma et al., 2008).

Swinbourne and team (2012) conducted a study among the inpatient and outpatient women investigating the prevalence of comorbid eating and anxiety disorder. Of women seeking treatment for an eating problem, 65% met the criteria for at least one comorbid anxiety condition; 69% said that the anxiety disorder began before the eating disorder. Social phobia was the most common anxiety disorder (42%), followed by post-traumatic stress disorder (26%), generalised anxiety disorder (23%), obsessive-compulsive disorder (5%), panic/agoraphobia (3%), and particular phobia (2%). In addition, 13.5% of women seeking anxiety treatment satisfied the criteria for a comorbid eating problem.

Individuals with an eating disorder, like those with anxiety disorders, apply dysfunctional techniques to cope with their feelings (De Young et al., 2016). Furthermore, persistent concomitant anxiety symptoms following eating disorder remission enhance the chance of relapse (Bardone et al., 2010) as individuals resort to previous eating disorder-related coping behaviours (Fitzsimmons et al., 2011). Female adolescents and young adults with comorbid anxiety disorders have higher levels of eating disorder psychopathology (Vall et al., 2015; Smith et al., 2018).

Relationship between eating disorder and depression

There is a positive association between depressive symptoms and eating disorders, and when disordered eating attitudes rise, so do depressive symptoms. There is considerable continuity in both eating disorders and depressive symptoms that are prevalent over time (Marmorstein et al., 2008). Comorbid symptomatology was discovered after assessing the comorbidity between eating attitudes and depressive symptoms. It was also determined that females were more likely than males to experience comorbidity (Santos et al., 2007).

When earlier levels of symptoms were taken into account for each outcome, future increases in bulimic symptoms were predicted by depressed symptoms, and

vice versa for bulimic symptoms. This suggests that there is a reciprocal relationship between the two conditions and that treating or preventing one condition successfully may have an impact on the other (Presnell et al., 2009). The most important symptoms connecting depression and eating disorders are irritability, social eating and depression in a community sample of adolescents (Kenny et al., 2021).

A study conducted by Hudson and colleagues (1993) revealed that 77% of the patients with eating disorders had a lifetime diagnosis of major affective disorder, a rate significantly higher than that found in comparison groups of other mental disorders. Family history, long-term outcome, response to biological tests, and treatment response in addition to the above findings indicates that anorexia nervosa and bulimia may be closely related to major affective disorder (Hudson et al., 1993).

When evaluating patients diagnosed as having bulimia, bulimarexia and anorexia nervosa were evaluated for depression and suicidality; 80% of patient have major depression, 20% had attempted suicide in their life and 40% of those suicidal attempts were potentially lethal (Viesselman & Roig, 1985). When eating disorders is associated with other psychiatric disorders like depression and anxiety which is quite common, it makes them more harmful and possibly fatal (Chavez & Insel, 2007; Clark et al., 2017).

Relationship between Eating Disorder and Attention Deficit Hyperactivity Disorder

ADHD is the most prevalent neurodevelopmental disorder among children and has a global frequency of 5% among school-age children (Polanczyk et al., 2007). Research suggests that eating behaviours range from excessive over-control to lack of control and binge eating (Lowe et al., 1996; Wierenga et al., 2014). Even if disordered eating patterns do not match clinical criteria, they are commonly linked to psychopathology and can lead to an eating disorder diagnosis (Tanofsky-Kraff et al., 2013).

Specifically, 11 studies found a link between ADHD and eating disorders, but did not specify the type of eating disorder. Case-control design was found in two

studies (Sobanski et al., 2007; Bijlenga et al., 2013), one study was a two-part longitudinal study with a one-year timeframe (Viborg et al., 2014), a longitudinal study with a two-year follow-up (Rojo-Moreno et al., 2015), a cohort study (Yoshimasu et al., 2012), an epidemiological study (Lewinsohn et al., 2004), cross-sectional studies were comprised of three (Stulz et al., 2013; Hirschtritt et al., 2015; Karjalainen et al., 2016) and secondary analysis of data from the US National Longitudinal Study of Adolescents Health (Bleck & DeBate, 2013; Bleck et al., 2015). All studies, except two that included exclusively females (Stulz et al., 2013; Viborg et al., 2014), included both sexes. So, it can be said that eight of the eleven studies indicated substantial and positive links between ADHD and eating disorders.

ADHD and anorexia nervosa (AN/restrictive eating): Symptoms of restrictive eating in some studies included using weight-loss pills, fasting, food supplements, failure to gain weight, fear of obesity, drive for thinness and restraint eating. Research studies found a positive correlation between ADHD and AN/Restrictive eating while three of these studies found a significant connection solely among males (Grabarek & Cooper, 2008; Rastam et al., 2013; Welch et al., 2015). Grabarek and Cooper (2008), Rastam and colleagues (2013), Slane and team (2010) revealed a link between specific ADHD symptoms (hyperactivity and hyperactivity/impulsivity) and restrictive eating habits. Most studies that identified significant connections were of low quality, with only two categorized as intermediate quality (Slane et al., 2010; Bleck et al., 2015).

ADHD and bulimia nervosa (BN): Prospective research indicates a significant positive association between ADHD and bulimia nervosa symptoms (Biederman et al., 2007; Biederman et al., 2010). Case-control studies found a substantial link between ADHD and BN in adult females (Surman et al., 2006; Seitz et al., 2013). Similarly, cross-sectional research found positive association between ADHD and BN symptoms (Neumark-Sztainer et al., 1995; Cortese et al., 2007; Hudson et al., 2007; Rosler et al., 2009; de Zwaan et al., 2011; Swanson et al., 2011; Nazar et al., 2012).

ADHD and binge eating disorder (BED): Goldschmidt and partners (2015); Slane and team (2010); Sonnevile and associates (2015) found significant associations between ADHD specific symptoms such as hyperactivity, hyperactivity/inattention and hyperactivity/impulsivity with binge eating. A study of obese individuals seeking treatment found that those classified as "emotionally dysregulated/under-controlled" had higher levels of ADHD symptoms compared to those classified as "resilient/high functioning" and also states that BED was more prevalent in the "emotionally dysregulated/under-controlled" group compared to the "resilient/high functioning" group (55.9% vs. 27.3%), indicating a link between ADHD and BED among obese "emotionally dysregulated/under-controlled" individuals (Muller et al., 2014).

ADHD and loss of control over eating (LOC-eating): The study examined the relationship between ADHD symptoms and perceived self-efficacy to control eating among obese individuals completing a 16-week clinic-based behavioural weight loss program, rather than measuring LOC-eating directly (Pagoto et al., 2010).

ADHD and overeating behaviour: A study found that ADHD was significantly associated with unhealthy food consumption, the number of overeating episodes per week, and diet speed (Woo et al., 2014). ADHD symptoms were correlated with emotional, external, and binge eating behaviours, as well as greater BMI. A study of healthy adult males found a link between ADHD symptoms and overeating behaviour, which was positively connected with BMI (Strimas et al., 2008). Another finding confirmed that binge eating, emotional eating, and hedonic eating all contribute significantly to the link between ADHD symptoms and BMI (Patte et al., 2020).

Relationship between Eating Disorder and Conduct Disorder

The Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM-IV) specifies two eating disorders: anorexia nervosa (AN) and bulimia nervosa (BN). A thorough meta-analysis of 125 research reveals that 'eating disorder not otherwise specified' (EDNOS) is associated with significant psychological and

physiological morbidity, comparable to the defined eating disorders (Thomas et al., 2009). Binge eating disorder (BED) is frequently observed in obese people, but it differs from obesity in terms of psychopathology, weight- and shape concerns, and quality of life (Wonderlich et al., 2009). Pre-teenagers and adolescents frequently struggle with eating disorders and related behaviours and a study of 9 to 14-year-olds in the US indicated that 34% of boys and 43.5% of girls had eating disorders (Ackard et al., 2007).

Conduct disorder (CD) is a mental disorder characterized by aggressive and antisocial behaviours in which the person violates the basic rights of other people, shows a damaging attitude towards animals and objects, and constantly and repeatedly defies the values of society and established laws (Tonyalı et al., 2019; Kohls et al., 2021). Bulimia Nervosa and Binge Eating Disorder were found to be significantly associated with Conduct Disorders according to the study by Swanson and colleagues (2011) using a large sample of adolescents. Bulimia symptoms were strongly associated with other psychiatric disorder symptoms including anxiety and depression. In a population-based sample of female twins aged 8-17 years, a significant association between Bulimia symptoms and conduct disorders was found (Rowe et al., 2002). Cucchi and associates (2016) conducted a comprehensive review and meta-analysis and found that among patients with diverse EDs, the prevalence of a lifetime history of non-suicidal self-injury (NSSI) was 27.3% (95% CI 23.8-31.0%) for ED.

Relationship between substance abuse and Anxiety

In order to examine the relationship between substance abuse and the prevalence of anxiety in maritime workers, Generalized Anxiety Disorder (GAD-7) and the Addiction Severity Index (ASI) was employed, the findings revealed that there was a significant relationship between addiction intensity and anxiety levels among the samples (Kordlar & Tavacioglu, 2024). The prevalence of anxiety disorders with substance use was 48.1% among the samples - male sex, low educational status of the father, and the presence of stress were significantly associated factors with anxiety disorders and substances use (Melkam et al., 2024).

Adolescents with social anxiety disorders often abstain from substance use, but if they are vulnerable, they could give in to peer pressure and begin taking drugs. Parents, teachers, and concerned authorities should be aware of this susceptibility to give in to peer pressure which can lead to drug abuse (Blöte et al., 2016). A study investigating the relationship between academic anxiety and substance abuse among undergraduate students revealed that a positive relationship between them enhance the responsibility of teachers and school management to take measures to reduce stress and prevent substance abuse (Omeje et al., 2023).

According to Wu and others (2010), the associations between anxiety disorders and substance use differed according to the particular anxiety disorders, the types of substance use being examined and gender. Social phobia was associated with cigarette smoking among boys only. For girls, social phobia appeared to be negatively associated with drug use while the associations between other anxiety disorders and substance abuse are stronger among girls (Wu et al., 2010). Anxiety was associated with reduced substance use in adolescent girls and increased substance use in adult women. In contrast, there was no significant correlation found between substance use and anxiety in males or boys (Rieselbach et al., 2023). It was revealed from studying the relationship between anxiety symptomatology and substance use (alcohol use and drug use) during adolescence, higher levels of generalized anxiety disorder and panic disorder were associated with more substance use for boys; race/ethnicity also plays a part in its comorbidity (Ohannessian, 2014). Subsequent research may provide possible explanations for these contrasting results and additional insights on the connections between anxiety disorders, gender, and substance abuse. For successful treatment of comorbid anxiety and substance abuse disorders, prompt diagnosis and treatment initiation are essential (Hellwig & Domschke, 2023); raising awareness among the school administration can help with this.

Relationship between substance abuse and depression

Adolescent substance abuse and depressive disorder often co-occur, both concurrently and throughout lifetime, according to several epidemiologic researches

(Deykin et al., 1987; Fergusson et al., 1993; Kandel et al., 1997; Costello, 1999; Armstrong & Costello, 2002). Some research suggests that comorbidity of depression and substance abuse in adolescents are closely associated and this is accompanied by an increased likelihood of alcohol dependence, greater risk for suicide attempts and impairment in social interaction (Wagner et al., 1996; Grella et al., 2001; Becker & Curry, 2007). Adolescence and early adulthood see a steady rise in problematic alcohol usage (Center for Behavioural Health Statistics and Quality, 2015). The prevalence of mood disturbances and alcohol use during adolescence (12–17) and young adulthood (18–25) is considered high, these conditions also often co-occur in the above age groups and it has been hypothesized that they may be associated (Cooper et al, 1995).

Mason and colleagues (2008) examined the extent to which four different adolescent alcohol dimensions namely frequency of alcohol use, quantity of consumption, frequency of heavy episodic drinking, and frequency of problem use, can predict the occurrence of depression among young-adult. Participants in this longitudinal study were from age 11 to age 22, 429 belongs to rural areas along with their families. Self-reports of each dimension of adolescent alcohol involvement were obtained; adolescent problem use of alcohol was a significant positive predictor of depression among young-adult (Mason et al., 2008). In adolescents undergoing treatment for substance use disorders, depression was found to be associated with relapse, indicating that depression exerts a negative influence on abstinence in the short term (Crowley et al., 1998; White et al., 2004).

Relationship between Substance Abuse and Attention Deficit Hyperactivity Disorder (ADHD)

Attention deficit hyperactivity disorder (ADHD) is characterized by a persistent pattern of age-inappropriate levels of inattention and/or hyperactivity/impulsivity that results in functional impairment at work, education, or hobbies and affects family life, social contacts, and self-confidence (Rohner et al., 2023). ADHD is a common comorbidity among SUD individuals (Daigre et al., 2013) with a more severe form of substance abuse (Moura et al., 2013).

ADHD was also associated with the prognosis of severe substance use disorder (SUD) and the early onset of such problems (Rohner et al., 2023); ADHD patients are more likely to acquire substance-use disorders at a younger age (Lee et al., 2011; Bassiony et al., 2022). Furthermore, a major population-based epidemiological investigation found that ADHD symptoms were related with considerably higher chances of alcohol use disorder, illicit drug use and multiple substance use (Capusan et al., 2019).

Investigations into several SUD populations addicted to various substances have revealed an increased prevalence of ADHD in practically every SUD population. ADHD patients appear to regularly abuse stimulant and sedative substances and studies in populations of cocaine users suggest ADHD prevalence between 14.5% and 20.5% (Vergara et al., 2011; de Los Cobos et al., 2011). In populations of patients with alcohol addiction research, an estimated ADHD prevalence ranges from 7.7% to 62%, and among opioid users, ADHD prevalence of 16.8% was found (King et al., 1999; Kumar et al., 2018; Reyes et al., 2019). According to a meta-analysis by Rohner and colleagues in 2023, every fifth patient with SUD has comorbid ADHD.

Relationship between Substance Abuse and Conduct Disorder

Substance usage begins as the initial stage in a multi-step process that may eventually lead to the development of substance use disorders (SUD). Early initiation of substance use has been related with a higher chance of developing an SUD for alcohol, tobacco, and illegal drugs (Hopfer et al., 2013).

These researchers have studied the strong correlations between early substance use, novelty seeking, and antisocial behaviours in adolescents. They have also highlighted the fact that early substance use is a sign of correlated externalising behaviours that increase the risk of developing SUD (Young et al., 2000; Hicks et al., 2010; Cosgrove et al., 2011).

Population-based epidemiologic surveys of teenagers have showed that by 12th grade, 71%, 42%, 43%, and 25% have tried alcohol, cigarettes, marijuana, or

other illicit substances during their lifetime, respectively (Johnston et al., 2002). Although CD has been linked to early substance initiation, it is unknown whether the effect of CD on initiation varies by substance type. In particular, because CD is associated with a habit of breaching social norms, we hypothesised that youth with CD are substantially more likely to initiate illegal substance use. Although alcohol and tobacco are illegal substances for underage teenagers, they are commonly used by adolescents and become lawful once they reach the ages of 21 and 18, respectively. Marijuana, however previously deemed illegal for all ages, is also extensively used. In 18 states, marijuana is currently available through a medical referral (Salomonsen-Sautel, et al., 2012). At age 15, CD increases the likelihood of substance beginning across all substance classes, with illegal substances having a higher relative risk than licit substances. This effect persists until the age of 18, with alcohol having the least effect. It decreases further for other substances by 21; nonetheless, the likelihood of commencing cocaine, amphetamines, inhalants, and club drugs among individuals who have not yet began remains high at 21 (Hopfer et al., 2013).

Relationship between anxiety and depression

A global survey about major depression revealed that 45.7% of people with a lifetime history of major depressive disorder also had a history of one or more anxiety disorders (Kessler et al, 2015). This is consistent with the study conducted by Fava and colleagues (2004) in which individuals with depression were significantly more likely to have symptoms related to generalize anxiety and somatoform disorders. Descriptive, longitudinal, genetic, biochemical, and treatment response data were reviewed by Frances and associates (1992), and they showed an overlap between anxiety and depression. There are a variety of discrete and coexisting syndromes in anxiety and depression, these symptoms are two distinct outward expressions of a more fundamental underlying reason, one condition may predispose to the other and that the association may be caused by an overlap of definition, especially considering how many components are shared by the instruments used to measure anxiety and depression (Frances et al., 1992).

Depression and anxiety also commonly coexist during the same time frame, as 41.6% of individuals with 12-month major depression also had one or more anxiety disorder over the same 12-month period. The lifetime comorbidity with depression is estimated to range from 20% to 70% for patients with social anxiety disorder (Dunner, 2001)), 50% for patients with panic disorder (Dunner, 2001), and 43% for patients with generalized anxiety disorder (Brawman-Mintzer, 1993). College students experience symptoms of anxiety and depression which are frequently co-occurring and closely associated (Li et al., 2023).

In children and adolescents, anxiety disorders and depression are often co-occurring, about 25–50% of adolescents suffering from depression also have anxiety disorders, while 10-15% of anxious youth also have depression and there can be a shared genetic influence that may result in these disorders (Axelson & Birmaher, 2001).

Relationship between Anxiety and Attention Deficit Hyperactivity Disorder

Compared to adults without attention deficit hyperactivity disorder (ADHD), those with ADHD had four times the likelihood of having generalized anxiety disorder and the factors associated with GAD among those with ADHD include being female, few close relationships, and a history of depression (Fuller-Thomson et al., 2022). In children and adolescents, the incidence of comorbidity between attention-deficit hyperactivity disorder (ADHD) and anxiety disorders can reach as high as 25% to 50% (León-Barriera et al., 2023). The rate of comorbidity of anxiety disorders with ADHD was 24% and the findings agreed with the association between attention deficit symptoms and anxiety symptoms (Gokce et al., 2015).

Anxiety symptoms did not predict later ADHD symptoms, while ADHD symptoms did predict later anxiety symptoms which indicate that ADHD-anxiety comorbidity may develop in part because early symptoms of ADHD contribute to the development of anxiety symptoms (Gair et al., 2021). The combination of ADHD and anxiety is associated with a very high risk of other mental disorders particularly bipolar disorder (Meier et al., 2018). Pharmacological and psychosocial interventions

are an important treatment to improve anxiety symptoms and also to improve outcomes (León-Barriera et al., 2023) which will help prevent the occurrence of other mental disorders in anxiety and ADHD comorbidity.

Relationship between Anxiety and Conduct Disorder

Child and adult general population studies of mental illnesses were thoroughly reviewed for information on the co-occurrence of conduct disorder and its adult consequences with depressive and anxiety disorders (Zoccolillo, 1992). Conduct disorder develops as regular or severe antisocial behaviour lasting at least 6 months and in more serious situations, excessive actions, such as outbursts of wrath, setting fires, and injuring animals or other children, might be noted (Mohamed et al., 2022; Yücel, 2022).

In childhood, adolescence, and adulthood, depressive and anxiety disorders co-occurred with conduct disorder (and its adult sequelae) considerably more frequently than expected by chance for both sexes (Zoccolillo, 1992). In logistic regression analyses, suicidal ideation was substantially associated with lifetime diagnoses of affective disorder, CD, and ADHD in adolescents, as well as anxiety disorder, affective disorder, and ASPD/CD in adults (Ehlers et al., 2023). By early adulthood, the majority of women with conduct disorder and antisocial adult outcomes had developed a depressive or anxiety condition and for both genders, increasing the severity of antisocial behaviour increased the likelihood of developing an emotional disorder and thus, the rates of co-occurrence varied depending on age and gender (Zoccolillo, 1992).

Relationship between depression and attention deficit hyperactivity disorder

Attention-deficit hyperactivity disorder (ADHD) is closely associated with a higher risk of several comorbid disorders, among them is depression. In particular, compared to people without ADHD, those with ADHD are more likely to have depressive episodes, suffer worse from depression, and support higher levels of suicidal ideas and behaviours (Kaiser et al., 2023). The correlation between ADHD and depression, which usually manifests later in life, is becoming increasingly

apparent. Within the first year following an ADHD diagnosis, there is an estimated 6.5-fold increase in the likelihood of developing depression (Gundel et al., 2018).

A longitudinal cohort design was used to assess the association between childhood ADHD (age 7 years) and recurrent depression in young-adulthood (age 18–25 years) in 8310 individuals and the relationships between genetic liability for ADHD and depression was examined. Childhood ADHD was associated with an increased risk of recurrent depression in young-adulthood and further analysis revealed a link between major depression and the genetic susceptibility to ADHD. Based on these findings, it can be suggested that there is a hereditary propensity for ADHD and indicate that ADHD raises the risk of depression later in life (Riglin et al., 2021).

In 2020, Powell and colleagues revealed that childhood ADHD symptoms were associated with higher depressive symptoms and an increased odds of clinically significant depressive symptoms in adolescence; peer issues and academic achievement mediated some of the relationship of ADHD with depressive symptoms, accounting for 14.68% and 20.13% of the total effect, respectively. This emphasizes peer interactions and academic achievement as possible goals for depression prevention and treatment in ADHD individuals.

A comparative assessment of cognitive emotion regulation in youth with ADHD with demographically matched healthy controls and determination of its association with depressive symptomatology using explicit and implicit measures was studied. Cognitive emotion regulation strategies via self-report were utilized to assess the explicit measure; performance in an ambiguous cue-conditioning task was assessed as an implicit measure of affective bias in the processing of information. The result of this study suggested that in young people with ADHD, depression may have an impact on how they employ cognitive emotion management techniques (Mayer et al., 2022).

Relationship between depression and conduct disorder

Major depressive disorder (MDD) and conduct disorder (CD) commonly co-occur in teenagers, although little is known about the traits and functioning of young people. Depression and conduct disorders symptoms were found to be closely related and associated with impaired functioning after examination of some domains including measures of academic success, personality, quality of peer relationships, and high-risk behaviour. Furthermore, interaction effects were discovered in the domains of unpleasant school-related experiences, personality-based tendency not to feel happy emotions, and indications of substance abuse, suggesting that individuals with both illnesses were particularly compromised (Marmorstein & Iacono, 2001).

According to the longitudinal study conducted by Kovacs and partners (1988), 16% of the patients had comorbid conduct disorder during the depressive episodes, 23% had conduct disorder during the full study observation and by the age of 19, the predicted time-dependent probability of acquiring a conduct disorder was 36%. The majority of the time, comorbid conduct disorder was a consequence of depression that lasted even after the depression subsided (Kovacs et al., 1988).

Although researchers inclined to have a difference of opinion regarding the order in which conduct issues and depression first appear, both disorders tend to become more common in adolescence (Cohen et al, 1993). In general, research studies indicate that the prevalence of comorbidity between depression and conduct disorder peaks in the middle of adolescence (Loeber & Keenan, 1994; Beyers & Loeber, 2003). The incidence of adolescents suffering from conduct disorder or depressive disorder was related to the presence of depressive disorder in the mother and antisocial behaviour exhibited by their father; it was also directly associated with high parent–child conflict (Marmorstein & Iacono, 2004).

Relationship between Attention Deficit Hyperactivity Disorder (ADHD) and Conduct Disorder

Attention deficit hyperactivity disorder and conduct disorder have a considerable global burden, especially among male children, which indicates that

resources must be allocated appropriately to address the significant morbidity linked with CD and ADHD to lessen the global burden on the world (Erskine et al., 2014). While nearly 80% of trait impulsivity, a predisposing sensitivity to both ADHD and CD, is heritable, environmental risk factors including whether or not young children with ADHD subsequently acquire CD, have a significant impact on how impulsivity is exhibited (Beauchaine et al., 2010).

In a study that explored the association between adult delinquency and diagnoses of attention deficit hyperactivity disorder and conduct disorder during childhood, conduct disorder and hyperkinetic conduct disorder significantly increased the risk of future criminal behaviour. Prolonged family problems and male gender were both predicted with future criminality (Mordre et al., 2011). Thus far, long-term follow-up studies have indicated that conduct disorder in conjunction with attention-deficit/hyperactivity disorder is a predisposing factor for subsequent antisocial behaviour (Satterfield et al., Fischer et al., 20072002; Barkley et al., 2004 & Fischer; Satterfield et al., 20022007). The combination of at-risk adolescents in treatment environments frequently exposes them to peers who are deviant, which heightens their antisocial conduct- (Dishion et al., 1999).

Gender Difference in Eating Disorders

Eating Disorders (EDs) have traditionally been regarded as a disorder that mostly affects women (Strother et al., 2012; Murray et al., 2017; Coelho et al., 2021). The overall gender ratio for eating disorders may be as high as 10 women for every man, though the ratio may be smaller than, perhaps as low as 3:1 in childhood and adolescence (Watkins, 2012). Women-centred perspectives on eating disorders can nevertheless have harmful effects on certain individuals depending on their gender (Strother et al., 2012; Murray et al., 2017; Hartman-Munick et al., 2021; Romito et al., 2021; Uniacke et al., 2021). Thus, sex and gender are closely connected factors that play an important but understudied role in the development of eating disorders.

Eating disorder symptoms are prevalent in the general population such as body dissatisfaction and binge eating behaviours (Zeiler et al., 2016). The prevalence of EDs in the general population ranges between 1% and 5%, with men accounting for 17% to 43% of cases seen in ED clinics (American Psychiatric Association, 2013; Murray et al., 2017). As a result, women are often thought to have a higher prevalence of eating disorders than men. These disparities in prevalence rates show that specific risk factors such as minority stress, sociocultural norms, and expectations may significantly affect risk for eating disorder behaviours in relation to gender and sex (Bankoff & Pantalone, 2014; Dotan et al., 2021).

A U.S. study with a nationally representative sample of nearly 3,000 people found a lifetime prevalence rate for Anorexia Nervosa of 0.3% in men and 0.9% in women (Hudson, Hiripi, Pope, & Kessler, 2007). Bulimia Nervosa may be more common among men than Anorexia Nervosa is, but it is still remarkably more common among women. Hudson and associates (2007) reported a Bulimia Nervosa lifetime prevalence of 0.5% among men and 1.5% among women in the United States, while Preti and colleagues (2009) reported approximately eight times the number of Bulimia Nervosa cases among European women than men. A study by Striegel-Moore and colleagues (2009) also reported that women were more likely than men to report bulimic symptomology, which indicates that women were more likely to report loss of control over eating, as well as more binge eating, vomiting, and fasting. In Binge Eating Disorder, there may be a smaller gender difference compared to Anorexia Nervosa and Bulimia Nervosa. Preti and team (2009) reported that about 15% of the Binge Eating Disorder cases they identified occurred among men, whereas Hudson and partners (2007) reported lifetime prevalence rates of Binge Eating Disorder as 2.0% of men and 3.5% of women.

Biological risk factors are increasingly being used as explanations for the development and maintenance of eating disorders. Both neurodevelopment and growth are linked to an increased incidence of ED symptoms (Watson et al., 2019; Herle et al., 2020; Marion et al., 2020). Another factor for the gender differences in the risk of EDs are the sex hormones, they have an influence in critical periods of

neurodevelopment including menstruation when signs and symptoms of EDs frequently arise; they also promote behavioural, cognitive, and emotional differences between boys and men as well as girls and women (McCarthy et al., 2017; VanRyzin et al., 2020; Culbert et al., 2021; Mikhail et al., 2021).

There is an underlying assumption that women's brains are more susceptible to EDs than men's brains and such vulnerability would account for gender differences in the disorders. Limited studies indicate that women's serotonin systems are more responsive to calorie-restrictive dieting (Cowen et al., 1996). It has also been hypothesized that hormones, which impact brain function, are associated with disordered eating. Racine and colleagues (2012) found that oestradiol was negatively associated and progesterone levels positively associated with body dissatisfaction and drive for thinness, and they were highest in the premenstrual phase of the menstrual cycle. Similarly, a study by Klump and colleagues (2013) found that emotional eating was highest in the midluteal phase and was associated with an interaction of oestradiol and progesterone. Changes in emotional eating were predicted by hormonal fluctuations, but not the other way around (Edler et al., 2007).

Klump and others (2010) have found that, Eating Disorder symptoms showed little heritability prior to puberty but the situation was reversed post-pubertally in girls while this shift did not occur in boys (Klump et al., 2012). This gender difference, together with previous research indicating links between ovarian hormones and some disordered eating behaviours, has led Klump and her colleagues to propose that ovarian hormones influence the onset of genetically based components of eating disorders.

Media exposure to the thin, sexualized, and objectified ideal has been linked directly with the experience of body dissatisfaction in women (Grabe et al., 2008; Hausenblaus et al., 2013). The few longitudinal studies suggested that the amount of media exposure predicts subsequent increases in negative body image and disordered eating in children (Levine & Murnen, 2009). The media's role in defining the value of women in terms of their appearance, a thin ideal body, and judging women as

inadequate if they fail to meet the ideal are other risk factors for gender differences in the development of eating disorders.

In addition, girls are likely to experience societal pressure about the body from many sources other than the media such as from the family, friends and peers. Girls conversing with their friends about appearances, making social comparisons to friends, increased dieting and peer teasing have all been prospectively related to body dissatisfaction among adolescent girls (Paxton, Eisenberg, & Neumark-Sztainer, 2006).

Body image challenges faced by men frequently relate to muscularity, (Lavender et al., 2017; Murray et al., 2017; Coelho et al., 2021; Ridout et al., 2021). Thus, the clinical presentation of EDs varies based on gender/sex diversity (Nagata et al., 2020; Roberts et al., 2021). Overtraining is more common in men than in women (Lavender et al., 2017; Murray et al., 2017; Ridout et al., 2021; Coelho et al., 2021). Men may also be less likely to seek professional care for an ED, and when they do, symptoms are generally more severe and comorbidities are more common than in women (Murray et al., 2017; Ridout et al., 2021).

The gender difference in the role of internalization in body-related attitudes and behaviors is likely due to the fact that females are sexually objectified to a greater extent than males, and attention to physical appearance (especially maintaining thinness) is tied directly to feminine gender role prescriptions. Overall, girls and women may face more pressure to conform to unrealistic body standards and this difference may contribute to the gender differences in ED.

Several studies have found increased predictability of eating problems with multiple forms of abuse experienced during childhood (Messman-Moore & Garrigus, 2007; Mitchell et al., 2012). Sexual harassment has also been associated with disordered eating (Harned, 2000; Harned & Fitzgerald, 2002); an experience with “everyday” sexist events, such as being treated like a sexual object, has been linked with eating-disordered attitudes (Sabik & Tylka, 2006), likely through encouraging self-objectification (Kozee et al., 2007). Therefore, violations of the body in the form

of harassment, rape, and abuse that occur more often among girls and women than boys and men are related to the development of eating problems.

In contrast, there are emerging evidences indicating that the rates of Eating Disorders in males are increasing at a faster rate than for females although there was no significant difference in clinical severity of symptoms across the sexes (Mitchison et al., 2014; Mitchison & Mond, 2015). Some population-based data suggest that there are no sex differences in the age of presentation of Eating Disorders (Woodside et al., 2001), including for early-onset, that is, less than 14 years old cases (Madden et al., 2009). Eating disorders were found to be prevalent almost equally in both males and females (Iyer & Shriraam, 2021).

However, given the conflicting evidence for the prevalence, age of onset, causative factors and symptomatology for Eating Disorders, further study is critical, particularly in population-based, primary care, and community settings (Mitchison, & Mond, 2015; Murray et al., 2018).

Gender difference in Substance Abuse

According to the American Psychiatric Association DSM-IV (1994), psychoactive substance use refers to the non-medical self-administration of licit or illicit substances to achieve mood-altering effects, drunkenness, or altered self-image.

The ICD-10 Classification of Mental and Behavioural Disorders (1992) identifies substances such as alcohol, opioids, cannabis, sedatives and hypnotics, cocaine, caffeine, hallucinogens, nicotine, and volatile solvents. Adolescent alcohol use and binge drinking have generally decreased in the Nordic countries over the past decade, while the level of drug use, mainly cannabis have remained unchanged (European Monitoring Centre on Drugs and Drug Addiction [EMCDDA], 2016).

The historical discrepancy in SUD prevalence between men and women is reducing worldwide, with men having a larger prevalence (Keyes et al., 2008; Seedat et al., 2009; Steingrimsson et al., 2012). The epidemiology of substance use disorders

varies globally and is influenced by culture and legislation that influence substance access and acceptability. Data from the World Health Organization, World Mental Health Surveys revealed that reduced gender role traditionality (defined by characteristics such as women's presence in the workforce, access to contraception, etc.) is associated with a smaller male to female disparity in SUDs (Seedat et al., 2009). Although there is a significant variance among cultures, men are more likely to have access to substances than women; this difference in availability appears to account for a large portion of the gender gap in substance use prevalence. In other words, when adjusting for access, men and women's chance of substance use does not differ (Delva et al., 1999; Van Etten & Anthony, 1999; Caris et al., 2009).

There are several biological distinctions between males and females in the acute and long-term effects of alcohol and other substances. These distinctions represent sexual dimorphisms in the brain, endocrine such as ovarian hormones, and metabolic systems, among others. One of the most consistent discoveries in this area is that girls and males metabolize alcohol differently. Females have lower amounts of alcohol dehydrogenase (an enzyme that metabolizes ethanol) activity in the stomach mucosa than males. Women have higher blood alcohol concentrations than men, even after consuming the same amount of alcohol (Baraona et al., 2001; Chrostek et al., 2003). This metabolic difference causes girls to be more intoxicated than males when the same amount of alcohol is ingested.

In 2015, an estimated 47.4% of females aged 12 and up reported past-month alcohol use, compared to 56.2% of males. Women also had lower rates of binge drinking (four or more drinks on the same occasion in the past month for women, five or more drinks for men; 20.5%), heavy drinking (binge drinking on at least 5 days in the past month; 4.2%), and alcohol use disorder (4.1%) than men as 29.6%, 8.9%, and 7.8%, respectively (Centre for Behavioural Health Statistics and Quality [CBHSQ], 2016). Although adult men are more likely than women to use alcohol and engage in problematic behaviour (such as binge drinking or alcohol use disorder), recent studies show that this gender gap does not exist among adolescent boys and girls. For example, data reveal (CBHSQ, 2016) no gender differences among

adolescents (i.e., ages 12-17) in both current alcohol usage (9.9% of girls vs. 9.6% of boys) and binge drinking (5.8% of both genders). This gap also appears to be closing for older persons in the United States, with data from the National Interview Surveys from 1997 to 2014 revealing that binge drinking grew 3.7% annually among U.S. women but showed no change among U.S. males over the age of 60 (Breslow et al., 2017).

Nicotine dependency affects 52.3% of current smokers and 9.7% of all women (CBHSQ, 2016). However, tobacco consumption has decreased among both men and women over the last decade (CBHSQ, 2016). Women have consistently used less tobacco than men throughout this time period (CBHSQ, 2016). In 2015, 18.5% of women aged 12 and up reported using tobacco products within the last month, compared to 22.5% in 2007. Adolescents have had particularly rapid decreases in past-month tobacco use, with 4.9% of girls reporting use in 2015, compared to 10.7% in 2007. The drop in tobacco product use has coincided with a rise in other methods of nicotine administration. For example, e-cigarette use is currently more common among adolescents than tobacco use. According to the 2016 Monitoring the Future Study (Johnston et al., 2017), 9.1% of 12th grade girls reported using electronic cigarettes in the previous month, which is much lower than boys of the same age (16.1%).

Men are substantially more likely to take illicit drugs than women (CBHSQ, 2016). In 2015, 7.9% of women and 12.5% of men aged 12 and up reported using illicit drugs in the previous month, with rates of illicit drug use disorders at 2% and 3.8%, respectively. However, 8.8% of adolescents (ages 12-17) of both genders reported using illicit drugs in the previous month (CBHSQ, 2016). This gender disparity among adolescents appears to be driven by prescription drug abuse, with teenage girls reporting greater rates of past-month usage than boys (2.3% of girls vs. 1.7% of boys). According to McHugh and colleagues (2018), prescription medicines are one of the few substance classes in which the past-month prevalence of misuse is comparable in adults of both genders (2.2% of women vs. 2.7% of men).

Late adolescence is the highest risk phase for substance use onset (Vega et al., 2002). On average, women begin substance use at a later age than men (Greenfield et al., 2010; Keyes et al., 2010). Several studies have demonstrated that, in comparison to men, women may have an accelerated course of substance use, advancing more swiftly from commencement of substance use to issues with substances, and from problems with substances to treatment-seeking (Hernandez-Avila et al., 2004).

The likelihood of transitioning from use to dependence varies by substance type and gender, with evidence for greater dependence liability of nicotine and lower dependence liability of marijuana in women compared to men (Wagner & Anthony, 2007; Lopez-Quintero et al., 2011). Many illegal drugs including heroin, cocaine, and methamphetamine, have a chronic course (i.e., consistent usage) in both men and women (Hser et al., 2008). Receiving therapy is related with a better course of illness in both genders, especially when started early and continued over time (Evans et al., 2013).

Other co-occurring mental problems among persons with SUDs varied by gender, with women having greater rates of anxiety and depressive disorders and men having higher rates of other externalizing disorders like conduct disorder and antisocial personality disorder (Conway et al., 2006; Khan et al., 2013). Women are more likely to describe a traumatic occurrence and the start of posttraumatic stress disorder before developing an SUD (Compton et al., 2000; Sonne et al., 2003). Women also use substances more frequently to decrease negative emotions (McHugh et al., 2013; Lehavot et al., 2014). Co-occurring psychiatric diseases can worsen SUD treatment results, particularly at the beginning and end of treatment (Greenfield et al., 2009). Because co-occurring mental diseases are more common in women with SUDs than in males, psychiatric comorbidity may be an especially important therapy focus for women with SUDs (Greenfield et al., 2007).

Gender difference in Anxiety

Anxiety problems have become more common in the previous 30 years. Anxiety appears to rise with socioeconomic growth, an ageing population that is

more dependent on others, and urbanisation. Anxiety disorders affect an estimated 4.05% of the world's population, or 301 million individuals. Between 1990 and 2019, the number of those impacted increased by more than 55%. The prevalence, incidence, and DALY rates for anxiety disorders continue to rise (Javaid et al., 2023).

Gender differences in anxiety were investigated in a large sample of teenagers, which comprised 1,079 samples who had never fulfilled the criteria for any disorder, 95 who had recovered from an anxiety disorder, and 47 who currently had an anxiety disorder. Females outnumbered males in both present and recovered anxiety disorder cases, but not in those who had never had an anxiety illness. The female predominance begins early in life, with retrospective evidence indicating that by age 6, females are twice as likely as males to have suffered an anxiety disorder. (Lewinsohn et al., 1998). A study conducted by McLean and associates (2011) reveals that any anxiety condition had a lifetime and 12-month male: female prevalence ratio of 1:1.7 and 1:1.79, respectively. Women received greater lifetime diagnoses for all of the anxiety disorders studied, with the exception of social anxiety disorder, which had no gender difference in prevalence. There were no gender differences in the onset age or duration of the illness. Women with a lifelong anxiety condition were more likely than men to be diagnosed with another anxiety illness, bulimia nervosa, or major depressive disorder. Furthermore, anxiety disorders were linked to a higher illness burden in women than in males, notably among European American women and, to some extent, Hispanic women. These findings indicate that anxiety disorders are not only more widespread, but also more disabling in women than in men.

Gender difference in Depression

Depression is a global health concern. According to the World Health Organisation (2023), depression accounts for fully 10% of the overall non-fatal disease burden worldwide. Furthermore, this burden is borne disproportionately by girls and women. One study found that the global 12-month prevalence of major depressive disorder was 5.8% in women and 3.5% in men (Ferrari et al., 2013).

Depression is more common in women, and if this occurs, the symptoms will persist throughout adulthood. The male-to-female ratio in depression is roughly 1:2 (Solomon et al., 2009).

In a Seasonal Affective disorder, the prevalence ratio was (women: men) 3.6:1 in unipolar depression and 2.4:1 in bipolar disorder (I and II) (Lucht et al., 1999). Both genders had a mild class (41.1% women, 40.1% men). Gender disparities emerged in the most symptomatic courses. Women were classified as melancholy (39.3%) or atypical (19.5%), based on somatic/vegetative symptoms. The melancholy class exhibited inhibition and decreasing eating/sleeping symptoms, whereas the atypical class displayed increased appetite/weight and hypersomnia. For men, symptoms that distinguish the two most symptomatic classes were associated with psychomotor activity: melancholic/psychomotor retarded (40.4%) and agitated depression (19.6%). Men in the agitated class had the highest between-class proportion of agitation and racing thoughts, which is similar to the bipolar mixed state (Alexandrino-Silva et al., 2013). Benazzi (2006) reported that females were more likely to develop bipolar depression at an early age, showed a substantially lower age of onset and a family history of suicidal behaviour than males.

Reproductive factors such as menstrual cycle, pregnancy, and menopause have been believed to contribute to the high risk of depression among women, with some evidence that oestrogen influences the neurotransmitter system (Nolen-Hoeksema, 2001). Pubertal development predicts the appearance of the gender difference in depression better than age alone, and girls who go through puberty early are at the highest risk of getting depression (Hankin & Abramson, 2001).

Behavioural genetics research has demonstrated that the likelihood of depression following a stressful life event is enhanced among persons who are at high genetic risk, whereas the risk is reduced among people who are at low genetic risk (Lesch, 2003). In conclusion, the genesis of depression appears to be best explained by a transactional model that combines a genetic predisposition with the presence of contextual factors such as stressful life experiences. Environmental

factors, such as stressful life experiences, may increase the incidence of depression in women (Sloan & Sandt, 2006).

Gender difference in Attention Deficit Hyperactivity Disorder (ADHD)

With a solid genetic, neuro-biologic, and neurochemical foundation, ADHD is acknowledged as a widespread paediatric mental illness (Biederman et al., 1995; National Collaborating Centre for Mental Health UK, 2009). It is characterised by signs of inattention and/or impulsivity and hyperactivity, which can profoundly impair many aspects of behaviour and performance, both at school and at home (Faraone et al., 2003).

In general, the characteristics of ADHD are not sex-specific with boys and girls with the disorder being more alike than different. There are also minor gender differences: adolescent females with ADHD show lower self-efficacy and worse coping mechanisms than adolescent boys with ADHD; they may also have higher rates of anxiety and sadness and lower levels of physical violence and other externalising behaviours. It appears that men with ADHD are more likely than women to be jailed (Rucklidge et al., 2010).

Research frequently finds disparities in prevalence by sex and age. For example, in the preschool age range, prevalence rates may be 4% for females and 8% for boys (Nolan et al., 2001) but, according to parent reports, it declines to 2-4% for girls and 6-9% for boys between the ages of 6 and 12 (Breton et al., 1999). By adolescence, the incidence drops once more to 0.9–2% for girls and 1–5.6% for boys (McGee et al., 1990; Lewinsohn et al., 1993; Breton et al., 1999; Romano et al., 2001). Between 2% and 9% of school-age children suffer with ADHD overall.

ADHD's genetic component has been a significant concern (Szatmari, 1992). It is estimated that between 10% and 35% of children with ADHD's close family members also have the disease, with siblings at about 32% risk (Biederman et al., 1991; Barkley, 2003; Null et al., 2005). What's even more startling is the fact that 57% of children are at risk if one parent has ADHD (Biederman et al., 1995). ADHD is strongly suggested to have a genetic basis because it clusters significantly among

the biological relatives of children with the disorder (Biederman et al., 1991). Consequently, African American samples with ADHD have shown this higher incidence of problems (PAULS et al., 1991) as well as in girls with ADHD as in contrast to boys (Welner et al., 1997).

ADHD has a strong heritability and is familial (Faraone et al., 2019). According to the greater risk of ADHD symptoms in carriers of sex chromosome aneuploidies, sex chromosomes may contribute to the higher incidence of ADHD in males (Tartaglia et al., 2012). The impact of hormones or pubertal timing in the observed sex differences remains unclear. A review of studies looking into the possible link between testosterone levels and ADHD showed that the few trials in humans were inconclusive (Bölte et al., 2023). There is some evidence that variations in oestrogen levels might exert a stronger influence on mood and wellbeing in females with ADHD than in those without ADHD (Dorani et al., 2021). However, the relevance of this hormone in ADHD detection remains uncertain. Studies that combined males and females and examined females separately showed no link between ADHD onset and pubertal timing (Greenfield, et al., 2014; Rosenthal et al., 2024).

Between 25 and 40 days (puberty onset), male D2 receptor density in the striatum grows by $144 \pm 26\%$, but female D2 receptor density only increases by $31 \pm 7\%$. Male receptor density is thus, dramatically reduced by 55% by adulthood. Pre-adolescent girls have less overproduction and pruning of striatal D1 and D2 receptors, but adult density is comparable to males. The increase in male, but not female, striatal dopamine receptors correspond to the early onset of ADHD motor symptoms and may explain why prevalence rates are 2-4 times higher in males than in women. Pruning of striatal dopamine receptors is associated with an estimated 50-70% remission rate by adulthood. Transient lateralised D2 dopamine receptors (left>right) in the male striatum may increase susceptibility to ADHD (Andersen et al., 2000).

Gender difference in Conduct Disorder (CD)

Conduct disorder (CD) is a widespread and severely debilitating psychiatric condition that typically begins in childhood or adolescence and is distinguished by severe antisocial and violent behaviour. It is usually associated with attention-deficit/hyperactivity disorder (ADHD) and frequently progresses to antisocial personality disorder in maturity. CD affects approximately 3% of school-aged children and is twice as common in males as in females (Fairchild et al., 2019).

The lifetime prevalence of DSM-IV CD is predicted to be 9.5% (12.0% in men, 7.1% in women). The prevalence of particular CD symptoms ranges greatly, from a high of 32.8% who report routinely staying out late without parental permission to a low of 0.3% who describe forced sexual activity (Nock et al., 2006).

Antisocial personality disorder in adults and conduct disorder in children has been linked to elevated testosterone levels (Stålenheim et al., 1998; Aromäki et al., 1999; Chance et al., 2000; Aromäki et al., 2002). Additionally, inmates' adults and children and adolescents who engage in delinquent and externalising behaviours may have greater testosterone levels (Kreuz et al., 1972; Maras et al., 2003; Maras et al., 2003; Van Bokhoven et al., 2006).

The promotion of traditional masculinity encourages the growth of aggressive conduct. In actuality, intimate partner violence is influenced by gender stereotypes (Bates 2019), gender-based violence (López Núñez et al., 2013), bullying (Gini et al., 2006; Rosen et al., 2019), as well as online aggression (Wright 2020). The masculine gender role includes standards that encourage violent behaviour, whereas the conventional feminine role emphasises behaviours considered protective from aggressiveness (Eagly et al., 1986).

Social changes over the past few decades have played a role in the evolution of traditional gender roles and the inconsistent nature of stereotypes' content (Barberá, 1989). In this approach, masculinity and femininity as social phenomena would have had a different meaning. But boys typically exhibit traits that are associated with traditional masculinity (Parent et al., 2013; Grieve et al., 2019),

whereas girls typically exhibit traits associated with femininity, e.g., understanding, compassion, warmth, affection, tenderness, crying easily, submissiveness, caring, feeling more sensitive to the needs of others, etc. (Malonda et al., 2018) as a result of socialisation that is sexist.

The next chapter will deal with the Statement of the Problem of the present study.

CHAPTER – III
STATEMENT OF THE PROBLEM

The global community has evolved rapidly in the past few decades, particularly with the emergence of better forms of transportation, easier international movement, and the ground-breaking revolution in information technology (Gupta, 2014). These advancements, particularly the digital revolution, have a huge impact, either positive or negative, on the life of every youth throughout the world. This has presented additional mental health issues and significant challenges for mental health professionals.

Adolescence is a period of rapid physical, intellectual, emotional and social growth—a period of growing up. Physically, the boy or girl becomes an adult. There is intellectual growth towards a more abstract, mature mode of thinking and intelligence reaches its maximum during this period. Emotionally, the adolescent grows independent of parents and prepares himself for entering into other relationships that are needed in marriage, work and in the community. Sex consciousness develops and this influences the emotional as well as the intellectual activities of the individual. An adolescent has many variations in mood, variations between excessive bursts of energy and periods of laziness. They are extremely sensitive, self-conscious with a desire to be intellectually and emotionally independent. All these changes lead to confusion, worries and can ultimately result in the development of mental problems. As children up to the age of 18, most adolescents are protected by their parents and under the Convention on the Rights of the Child. Yet, their vulnerabilities and needs are distinctly different from those of children and therefore often remain unaddressed.

The world is home to 1.8 billion young people aged 10 - 24 years, contributing about one-fourth of the total world population; out of this, 1.3 billion are adolescents in the age group of 10 - 19 years, making up 16 per cent of the world's population as indicated by UNICEF (2024) and WHO (2024). An estimated 20% of adolescents worldwide are assumed to have mental, behavioural and psychological problems, with half of these issues beginning during the adolescent period (Kessler et al., 2005). According to WHO (2021), one in seven 10 – 19-year-olds experiences a mental disorder, accounting for 13% of the global burden of disease in this age

group. The worldwide prevalence rates for any mental disorder among adolescents were found to be 13.4% (Polanczyk et al., 2015), 13% (Verhulst & Koot, 1991), 12% (Verhulst & Koot, 1995) and 12% to 15% (Roberts et al., 1998). In 2015, Polanczyk and associates, undertook a meta-analysis of the worldwide prevalence of mental disorders in children and adolescents and came to the conclusion that the most common group of mental disorders were anxiety disorders (117 million), disruptive behaviour disorder (113 million), Attention Deficit Hyperactivity Disorders (63 million) and depressive disorders (47 million).

The prevalence rate of psychiatric disorders in India is 12.5% among children aged 0-16 years and 12% among the 4 – 16- year- old children (Srinata et al., 2005). As per the National Mental Health Survey-2016, the prevalence of psychiatric illness was about 7.3% in adolescents aged between 13-17 years. Depression, anxiety disorders, substance use disorder, attentive deficit hyperactive disorder, conduct disorder are the common psychiatric illnesses in children and suicide is the leading cause of death in the adolescent age group in India (GOI, 2016).

A study by Vos and colleagues, in 2017, which was published in the Lancet Journal revealed that, about one third (37%) of global suicide deaths among women and about one-third (24%) of global suicide deaths among men occur in India. The National Crime Records Bureau (NCRB), 2022 reported that a total of 1,70,924 suicides were reported in the country during 2022, showing an increase of 4.2% in comparison to 2021 and the rate of suicides has increased by 3.3% during 2022 over 2021; there was also an increase in the suicide rate of students in the secondary level of education from 23.4% in 2020 to 23.9% in 2022.

Studies or relevant data relating to adolescent mental disorders in Mizoram with respect to the epidemiology, aetiology, awareness and intervention was found to be sadly lacking. As per the report given by the Superintendent of Police, Aizawl, from 2014 to July, 2024 there were 948 cases of suicide, 794 were males and 154 females, majority was found in the age group 20 – 39 years (584), 40 – 69 years (201) and 1 – 19 years (117); the report also stated that suicide affects children as young as 9 years old and as old as 90 years in Mizoram (DIPR, Govt of Mizoram,

2024). In fact, the actual suicide rate may be much higher than this official account as many cases of suicide remains unreported. Moreover, the main causes of suicide pertaining to adolescents were family problems, substance abuse, love affairs, failure in examination and death of loved ones. All these are risk factors leading to depression, anxiety and other associated mental disorders. Therefore, identification of the risk factors at an early stage, referral to mental health professionals and integrating mental health focused interventions at the family, school and society level is of utmost importance.

National Mental Health Survey (NMHS) 2015–16 estimated the prevalence of mental disorders among adolescents in urban areas (age 13–17 years) to be 4.1%, which was nearly thrice the prevalence in rural areas, that is, 1.5% (Gururaj et al., 2019). Several studies reported that the overall prevalence of depression was 30.65% (Singhal et al., 2014; Singhal et al., 2016; Shukla et al., 2019; Bharati et al., 2022; Gupta et al., 2022; Jeelani et al, 2022). Another study conveyed higher prevalence of depression (18.5%) and anxiety disorders (24.4%) among adolescents and young adults; about 87% of those having depression also suffered from anxiety disorder (Sahoo & Khess, 2010). The behavioural, emotional, and social problems for school children suggest that conduct disorder was the most common (Harikrishnan et al., 2017; Das et al., 2021; Dangi & Joseph, 2021), followed by hyperactivity (Harikrishnan et al., U., 2017; Dangi & Joseph, 2021; Kothari et al., 2021), emotional problems (Kothari et al., 2021), and peer problems (Das et al., 2021). In India, the prevalence of eating disorders is also on the rise. Srinivasan and colleagues (1995) reported 14.8% of the study population to have syndrome of eating distress and the prevalence of Bulimia Nervosa to be 0.4% (Bhugra et al., 2000). Studies on prevalence and other parameters of eating disorders have been conducted worldwide; however, limited studies have been conducted in India. Nonetheless, it can be concluded that Depression, Anxiety, Substance Abuse, Eating Disorders, Attention Deficit Hyperactive Disorders and Conduct Disorders are the most common Mental Disorders among the school going adolescents.

India faces a serious threat which can affect the health of the nation as a result

of an increased burden of mental disorders. Mental disorders contributed 4.7% of the total DALYs in India in 2017, compared with 2.5% in 1990 (ICMR, 2019). The highest contribution to DALYs due to mental disorders in India in 2017 was from depressive disorders, anxiety disorders, intellectual or developmental disorders, schizophrenia, bipolar disorder, and conduct disorder (ICMR, 2019).

The consequences of suffering from mental illness are felt by all. Individuals besieged with mental problems endure great personal suffering since these illnesses frequently make it difficult for them to live happy, full lives. Building a relationship, looking for educational or employment opportunities, and engaging in social events may be difficult for them (W.H.O., 2023). Moreover, mental disorders markedly affect the overall functioning of communities and the nation. Decreased productivity, both in the workplace and within households, is a significant economic consequence. Mental health problems have a detrimental effect on labour productivity and economic growth since they frequently result in absenteeism, decreased work efficiency, and long-term impairment (McDaid et al., 2008; W.H.O., 2023). The expenditure incurred for mental illness including diagnosis, medical treatment, therapy and rehabilitation is exponential. Rising cost of healthcare services in addition to mental disorders requiring longstanding intervention may be the reason for this (Agboola et al., 2018). Moreover, the indirect costs, such as lost productivity and an increased burden on caregivers, further exacerbate the economic impact. In India, mental illness has significant societal ramifications in addition to its personal and financial effects. People in many communities are discouraged from seeking support and assistance because of the stigma and discrimination associated with mental illnesses. This causes delays in identification and treatment of the mental illness, which aggravates the long-term effects and prolongs the cycle of suffering (Srivastava et al., 2016).

Exploration of the paradigm of mental health awareness is a means of combating stigma, enhancing prevention, ensuring early recognition, and stimulating practical interventions to the community to have a positive outcome. Some effective strategies of mental awareness in addressing the stigmatization of

mental illness are participation by family members, sensitization to treatment and social inclusion (Patel & Saxena, 2014; Rebello et al., 2014). Lack of knowledge about mental illnesses poses a challenge to the mental health care delivery system (Brown et al., 2010) whereas the role of community-based systems in low-income countries has a positive result in creating awareness (Tranietal., 2016). Stigmatization and discrimination of mental patients and their family are negative consequences of ignorance and misinformation (Pinfold, 2003).

There are a few studies that have measured mental health literacy in the Indian context, one study highlighted that only 29.04% identified depression, 1.31% recognized schizophrenia/psychosis (Ogorchukwu et al., 2016). Mental health literacy is an “ability to access, understand, and use the information to promote and maintain good health”. It includes mental illness recognition, causes, self-help, facilitation of professional intervention, and navigating the information (Nutbeam et al., 1993). Mental health awareness programs have had a favourable impact and can produce positive changes in people's views of mental illnesses (Kolappaetal.,2013). It is expected that rising awareness will enhance early recognition and access to treatment will follow, as will the adoption of preventive measures. It is also expected that it will be followed by policy decision including advocacy, leveraging of political will, funding, and cross-synergies.

Progress in mental health service delivery has been slow in most low- and middle-income countries and the barriers include the existing public-health priorities, delivery of mental health care, the low numbers of trained personnel, lack of mental health leadership (Saraceno et al., 2007).

Theories of teaching and learning have long emphasized the important role teacher's play in supporting students' development in areas beyond their core academic skills. High-quality teaching, a set of emotional supports and organizational techniques are equally important to learners as teachers' instructional methods (Pianta & Hamre, 2009), to become more self-reliant, motivated to learn, and willing to take risks. Teachers can help build students' own ability to self-regulate, critical thinking and problem solving around authentic tasks (Lampert,

2001). For decades, efforts to improve the quality of the teacher workforce have focused on teachers' abilities to raise students' academic achievement. Teachers can take steps in their classroom to help recognize mental health issues in students. They can educate themselves and others on the symptoms of mental health issues, provide a safe environment, encourage good health, and help the student to access mental health resources. This study will highlight the potential and importance of teachers' awareness towards mental health to promote students' attitudes and behaviours that are equally important for students' long-term success as well as national development.

Teachers have a unique position in monitoring and detecting pupils with childhood mental disorders who have clinical or subclinical symptoms (Whitley et al., 2013). In addition, teachers interact daily with a large group of pupils and can detect early signs of mental health disorders if they are aware of the symptoms and signs of these disorders. They can also speed the detection of mental health disorders by assisting the referral to a mental health professional if they have favorable attitudes toward these disorders and a tendency to help those pupils. This can assist in early detection and proper treatment (Moor et. al, 2007; Reinke et al., 2011). The treatment of children makes less use of medications or other methods of individual treatment. The main emphasis is on changing the attitudes of parents, reassuring and retraining children, working with family and coordinating the efforts of others who can help children especially at school.

The New Education Policy (NEP) of 2020, has brought about a monumental change in the new educational policy of our country. It has placed high priority and importance on the physical and mental health of students. In addition to regular school schedules, there are also several new programs that have been put down by the policy to holistically take care of health. These strategies includes creating awareness about mental health among students, teachers and parents; establishment of counselling services in all educational institutions to provide students with emotional support and guidance; inclusion of mental health education in the school curriculum to promote mental health literacy among students; provision of appropriate support and accommodations for special needs students; and capacity

building of teachers and other educational personnel to address mental health issues in students. NEP 2020 recommends that schools should provide access to mental health professionals, including counsellors and psychologists, and ensure that they are trained to provide effective support to students. Schools should also develop and implement mental health promotion programs, including awareness campaigns and mental health literacy programs for students, teachers, and parents. It is the responsibility of all citizens, and especially educators, to recognize the significance of the policy and to take steps to ensure that it is successfully executed, despite the fact that the policy is still in its early stages of implementation.

Targeted Population (Mizoram)

Mizoram is a small state located in the north-eastern region of India, and is bounded by Myanmar to the east and south and Bangladesh to the west; and by the states of Tripura to the northwest, Assam to the north, and Manipur to the northeast. Aizawl is the State Capital with a total population of 2,93,416, having the male population of 1,44,913 and female of 1,48,503. The total population in the 10 – 19 age group was 2,27,324 (male = 1,15,433 and female = 1,11,891) which accounts for 20.72% of the total population of Mizoram. The youths make up a vast amount of the population and they are the future of our nation. It is crucial that the adolescent population are given every opportunity to grow and become a productive member of the society, which can be achieved only when they are healthy and happy.

According to the Mizoram Statistical Abstract (2021), in the year 2020-2021, among the 712 recognized high schools in Mizoram, 199 high schools were located in Aizawl District, 52 run by the State Government and 98 by private enterprises. The total number of students was 14,270 (male = 6657 and female = 7613) and there were 1440 teachers (male = 865 and female = 575) which makes the teacher student ratio at 1:10.

The present study's targeted population are the students studying in Class X which is in the High School section, both from the state government managed High Schools and the Private Unaided High Schools located in Aizawl. From the

Directorate of Economics and Statistics, Government of Mizoram, (2022), whose primary source is the Directorate of School Education, Government of Mizoram, the 52 high schools under the State Government have 4,025 students with 481 teachers (teacher student ratio = 1:8) and the 98 private high schools have a total of 6,330 students with 580 teachers (teacher student ratio = 1:11). The researcher did not come across any studies relating to the prevalence or epidemiology of adolescent's mental disorders nor any investigations about teachers' awareness of mental illness or mental health in Mizoram which displayed the dearth of literature in the state and the need to correct this neglect.

Research Gaps:

In Mizoram, there are few researches done on depression and substance abuse. However, there are no research focusing on the awareness of teachers regarding mental illness in adolescents and its effect on the mental health of their students. Children are generally less able to express themselves in words; therefore, evidence of disturbance is based more on observations of behaviour made by parents, teachers and significant others. Data also reveals that adolescent's mental illness is prevalent in the State but due to the lack of awareness by the parents and teachers, it turns into a neglected part of the youth's development, preventing them from becoming a fruitful member of the society.

Considering the importance of early diagnosis to reduce the prevalence and prevent complications of mental disorders, along with the dearth of studies concerning teachers' awareness of mental illness and its impact on adolescent mental health among the Indian and Mizo population, this research will highlight a comprehensive picture on the situations and hopefully will lead to better outcomes in terms of promoting students' mental health in Mizoram.

Objectives:

The present study will address the following objectives:

- 1) To study any significant difference between students of Teacher with Low and

High awareness of mental illness on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression.

- 2) To discern any significant difference on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression between male and female students.
- 3) To find out the relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 4) To determine the independent effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 5) To examine the interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

Hypotheses:

In an attempt to meet the objectives, the following hypotheses were framed for the present study:

- 1) Students under teachers with high awareness of mental illness will score lower on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression than students under teachers with low awareness of mental illness.
- 2) Male students will score lower on Eating Disorder, Anxiety and Depression but higher on Attention Deficit Hyperactivity Disorder, Conduct Disorder and Substance Abuse, than female students.

- 3) There will be a positive significant relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression.
- 4) There will be a significant independent effect of the 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 5) There will be a significant interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

A comprehensive description of the procedures and methods that were designed to be used in the present study to achieve the objectives are given in the following chapter, which is titled Chapter IV: Methods and Procedures.

CHAPTER – IV
METHOD AND PROCEDURE

Sample

The samples for the study were selected following multi stage sampling and random sampling procedures. Firstly, List of high schools run by Government of Mizoram and private or faith based was collected from the Directorate of School Education, Government of Mizoram.

Secondly, 24 high schools were selected which comprised of six high schools from each Zones (three private and three government high schools) - Aizawl South, Aizawl North, Aizawl East and Aizawl West.

Thirdly, 480 teachers from the selected high schools were administered the Mental Illness Inventory for Teacher (Structured questionnaire; Lalrinhlui, 2021) which was constructed by the researcher based on ICD-10 and DSM-V.

Fourthly, 10 High Schools which comprised of Five High Aware of Mental health and Five Low aware of mental health were selected ($M \pm 2SD$).

Fifthly, 500 high school students, 50 each from selected 10 high schools (five schools with high aware mental health and five schools with low aware mental health) with equal match on gender and socio-demographic variables (age, address, family income, family size, and physical health condition) were selected for evaluation on the selected psychological scales of the study.

Sixthly, 240 high school students were selected for the final count which comprised 120 (60 male and 60 female) students of teachers with high mental illness awareness (STHMIA) and 120 (60 male and 60 female) from students of teachers with low mental illness awareness (STLMIA) and having equal match on age, address, family income, family size, and physical health condition which was done to control extraneous variables other than teacher mental health awareness and gender effect on student's mental health.

Inclusion and exclusion criteria for teacher:

A sample of High School teachers of Mizoram, employed on a regular basis, age range between 26 to 50 years of age, and graduate degree holders represented High School teachers.

High School teachers of Mizoram who were not regular teacher, age range not between 26 to 50 years of age, below or above graduate degree were excluded from the sample.

Inclusion and exclusion criteria for Students

A sample of students in High School from the same school where the teacher samples were drawn, studying in class 10, age ranging between 14-18 years of age, settling in Aizawl city, family monthly income between Rs 10000 to 40000, three-ten family members, and not having any physical illness and good health condition served as sample in the study.

Students of High School who were not from the same school where teacher samples were drawn, not studying in class 10, age range does not fall between 14-18 years, not settled in Aizawl city, family monthly income falls outside Rs 10000 to 40000, more than ten family members, and suffering from any physical illness were excluded.

Design of the Study

The design of the study was a 2x2 factorial design which consisted of 2 levels of teacher's awareness of Mental illness (High awareness of mental illness and Low awareness of mental illness) and 2 types of genders (male and female) students. It can be explained as 240 students {(120 students from the schools of teachers with high awareness of mental illness (60 male and 60 female) and 120 students from the school of teachers with low awareness of mental illness (60 male and 60 female) students} were selected for this study.

Tools used:

- 1) *Informed Consent form - Teachers (Lalrinhlui, 2021)*:** Informed Consent form for teachers was constructed by the researcher which was done following the guidelines of APA, UGC and MZU guidelines for Ethical Code of research. It was used to get a written consent from the subjects after informing them about the purpose and importance of the study, expected participation, expected time to be taken for the psychological test administration, assurance of keeping confidentiality on personal information and responses, voluntary participation at any time and the freedom to leave without penalty.
- 2) *Socio-demographic datasheet for teachers (Lalrinhlui, 2021)*:** This was constructed by the researcher. It contained the semi-structured proforma for socio-demographic details including – age, sex, permanent address, name of the school served, type of school, service length, type of appointment, physical health condition, participation on any mental health/ mental illness awareness programme, whether the school had guidelines about mental health.
- 3) *Mental Illness Inventory for teachers (Structured questionnaire; Lalrinhlui, 2021)*:** This scale was constructed by the researcher containing the symptoms of the six most common mental illnesses (Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder) among the adolescents (DSM-5 & APA, 2013) for screening of the teachers' level of mental illness awareness.
- 4) *Informed Consent form- Students (Lalrinhlui, 2021)*:** Informed Consent form for students was constructed by the researcher which was done following the guidelines of APA, UGC and MZU guideline for Ethical Code of research, and it was used to obtain consent in written form from the subjects after informing them about the purpose and importance of the study, expected participation, expected time to be taken for psychological test administration, assurance of keeping confidentiality on personal information and responses, voluntary participation and the freedom to leave at any time during the test without any penalty.

- 5) ***Socio-demographic datasheet for students (Lalrinhlui, 2021)***: This was constructed by the researcher. It contained the semi-structured proforma for socio-demographic details including – age, birthplace, sex, name of the school, type of school, family income, family size, etc. for inclusion and exclusion of sample selection.
- 6) ***The Eating Disorder Examination (EDE)***: It is a semi-structured, investigator-based interview that assesses the cognitive and behavioural symptoms associated with eating disorders (Fairburn and Cooper 1993; Fairburn et al. 2008). Cognitive symptoms (e.g., dissatisfaction with shape, dietary restraint) are assessed for the past 28 days and are rated on a 7-point Likert scale from 0 to 6, with higher scores representing more severe pathology. The internal consistency reliability of the EDE-Q which was measured with Cronbach's α coefficients were high: global score, $\alpha=.95$; restraint, $\alpha=.85$; eating concern, $\alpha=.81$; weight concern, $\alpha=.83$; shape concern, $\alpha=.91$ (Swets, 1988).
- 7) ***The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; WHO, 2003)***: This test was developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect psychoactive substance use and related problems in primary care patients. This report describes the new instrument as well as a study of its reliability and feasibility. The average test-retest reliability coefficients ranged from a high of 0.90 to a low of 0.58. The ASSIST items are reliable and feasible to use as part of an international screening test. Further evaluation of the screening test should be conducted. The ASSIST can be used even when patients have low levels of literacy. Patient checks the names of drugs that are commonly used, and has to name which particular drugs have been used by them.
- 8) ***Generalized Anxiety Disorder Assessment (GAD-7; Spitzer et al., 2006)***: The GAD-7 is commonly used as a measure of general anxiety symptoms across various settings and populations. The GAD-7 has excellent internal consistency, and the one-factor structure in a heterogeneous clinical population was supported. GAD-7 consists of seven items measuring worry and anxiety symptoms. Each

item is scored on a four-point Likert scale (0–3) with total scores ranging from 0 to 21 with higher scores reflecting greater anxiety severity. Scores above 10 are considered to be in the clinical range (Spitzer et al., 2006). The GAD-7 has shown good reliability and construct validity (Kroenke et al., 2007; Löwe et al., 2008). Scores range from 0 to 21 with higher scores indicating more severe GAD symptoms. Research has suggested that the GAD-7 is a valid screening tool for GAD in a primary care setting and for assessing its severity in clinical practice and research (Spitzer et al., 2006). The average GAD-7 score was 11.60 (SD = 5.44) in the sample.

9) *The Patient Health Questionnaire (PHQ; Spitzer et al., 1999)*: The PHQ-9 is the 9-item depression module from the full PHQ. Major depression is diagnosed if 5 or more of the 9 depressive symptom criteria have been present at least “more than half the days” in the past 2 weeks, and 1 of the symptoms is depressed mood or anhedonia. As a severity measure, the PHQ-9 score can range from 0 to 27, since each of the 9 items can be scored from 0 (not at all) to 3 (nearly every day).

10) *The Disruptive Behavior Disorder Rating Scale (DBD; Pelham et al., 1992)*: This scale is based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; APA, 2000) which was developed by Pelham and his colleagues (Pelham et al., 1992). It is a 45-question screening measure, completed by either parents or teachers, designed to identify symptoms of attention deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder in children and adolescents. For each question, the respondent is asked to indicate the degree to which a statement describes the child’s behaviour. Response options include “not at all”, “just a little”, “pretty much”, and “very much”. For any question they do not know the answer to, respondents are asked to write “DK” for “don’t know”. The behavioural rating scale takes 5–10 minutes to complete and is designed for use with children and adolescents. The scores of the scale are reliable and valid across different study samples. It is often seen as the precursor to antisocial personality disorder, which is not diagnosed until the individual is 18 years old (APA, 2000). The DBDRS has subscales, which are-

- (i) Attention-Deficit/Hyperactivity Disorder (Inattention Symptoms (items 9, 18, 23, 27, 29, 34, 37, 42, 44; Hyperactivity/impulsivity Symptoms (items 1, 7, 12, 19, 22, 25, 30, 33, 35; Oppositional Defiant Disorder items 3, 13, 15, 17, 24, 26, 28, 39),
- (ii) Conduct Disorder (aggression to people and animals - items 6, 20, 31, 32, 36, 40, 45; destruction of property -items 16, 41; deceitfulness or theft- items 4, 8, 43; serious violation of rules (items 2, 11, 38).

Data Collection Procedures

The researcher constructed structured questionnaires including (i) Informed consent form for the teachers and students (ii) Socio-demographic profile for the students and teachers, and (iii) Mental Illness Inventory for teachers (Structured questionnaire; Lalrinhlui, 2021). The selected tools were collected, appropriate permission was taken from the concerned authorities, and psychometric properties were checked for the target population with a pilot study.

Selection of teachers from different high school based on their mental health awareness level was done. 240 samples were selected from identified 10 high school based on their level of mental health awareness as low and high aware, necessary permission were taken from school authorities, and informed consent was taken from all participants in the study. The physical health conditions were checked by the researcher as a health practitioner which included vital signs, height and weight; then psychological scales were administered individually with strict observance of APA ethics for research (2014), all responses were checked out for missing or invalid responses before collection and was ended with thanks.

Statistical Analysis

To test the hypotheses set forth to determine the “Effect of Teacher’s Awareness of Mental Illness on Mental Health of their Student” the following statistical analysis were employed:

The psychometric properties of the items, scale, and sub-scales of the

psychological measures were ascertained to warrant their applicability for use in the population of the proposed study. Descriptive statistics (Mean, Standard-Deviation, Skewness, Kurtosis, & graphical method) were employed to outline the general nature of the participants along with the 'level of teacher's mental health awareness' and 'gender' on the psychological measures. Skewness values and Kurtosis values were used to ensure that the data had normality. The reliability coefficient (Cronbach's Alpha) was employed to test the trustworthiness of the psychological scales for the targeted population. The Levene's Test of Equality of variances was employed to ensure that the scales had acceptable homogeneity. The above tests were employed for selecting the appropriate statistics and the results obtained confirmed that parametric statistics could be used for further analysis.

An independent t-test was employed to examine any significant difference between students of Teachers with Low and high mental health awareness on the dependent variables; and between male and female samples on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder.

The Pearsons' Correlation was computed to determine any significant relationship between Eating disorders, Substance abuse, Anxiety, Depression, ADHD, and Conduct disorder.

The One-Way ANOVA was calculated to determine the independent effect of 'levels of teacher's awareness of mental illness' and 'Gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder.

The two way-ANOVA was employed to determine the interaction effect of 'level of teacher awareness of mental health and Gender' on Eating disorders, Substance abuse, Anxiety, Depression, ADHD, and Conduct disorder.

The findings of this study were reported in the following Chapter V: Results and Discussions.

CHAPTER – V
RESULT AND DISCUSSION

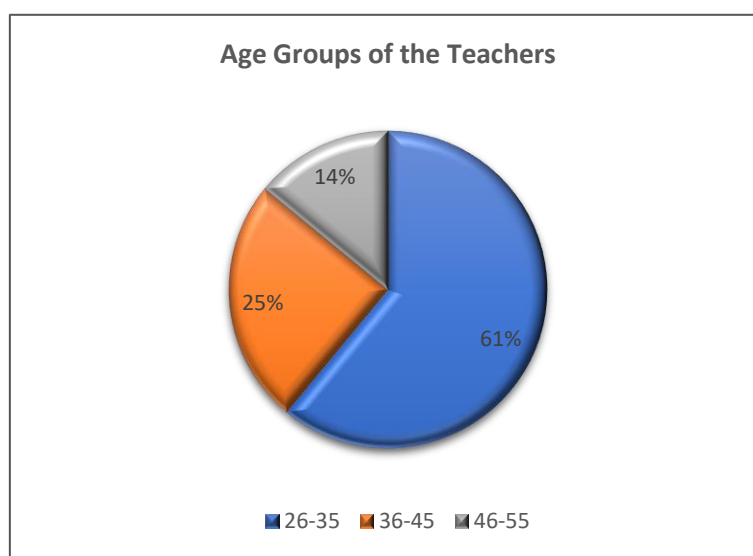
The study aims to examine the effect of teacher's awareness of mental illness on the mental health of their students. Mental health awareness level of teachers was screened using the Mental Illness Awareness Inventory and based on their scores, the teachers were categorized as high and low mental health awareness. 240 High school students were selected from the high schools where the selected teachers were also serving as teachers. The students of teachers with High awareness and the students of teachers with Low awareness were compared on the selected mental illness, and the results were presented under:

1. Checking of Raw Data: The raw data was checked for missing and outliers. As none was seen, the data was proceeded for further analysis.

2. Sample characteristics of the teachers: The sample comprised of high school teachers employed on a regular basis, age ranging between 26 to 55 years of age, graduate degree holders with a good physical health condition. All other extraneous variables were kept under control to prevent the harmful effect on results.

Figure 1

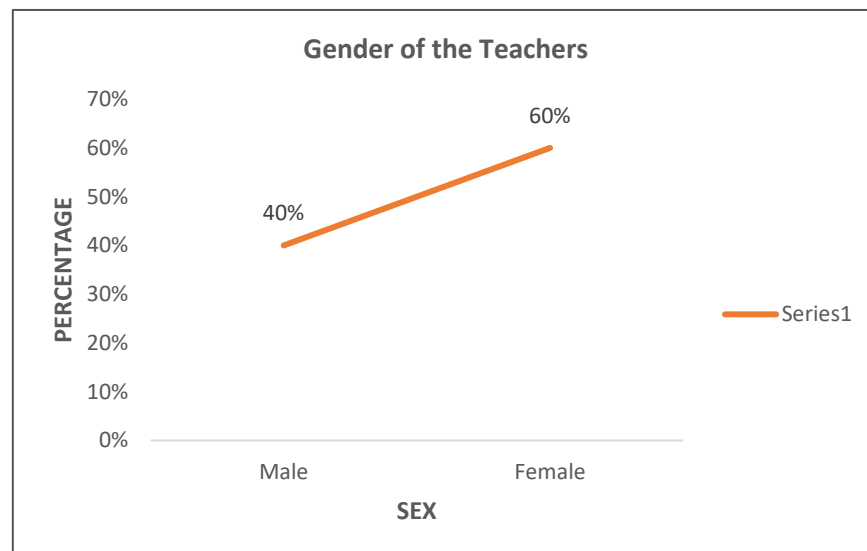
Showing the distribution of Age Group in the Teacher Sample



Majority of the teachers in the sample (61%) were in the age group 26 – 35 years, 25% were between 36 – 45 years, and 14% of the teachers ranged between 46 – 55 years.

Figure 2

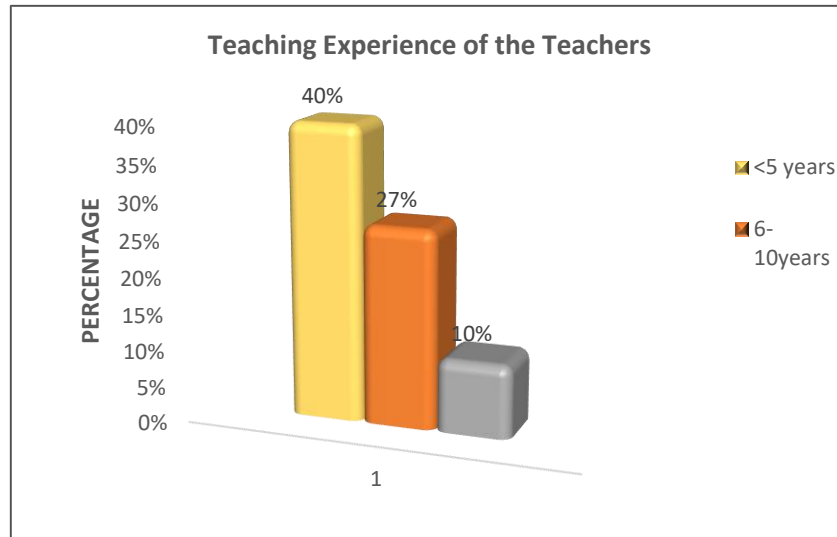
Showing the distribution of Gender in the Teachers Sample



The distribution of gender in the teacher sample revealed that 40% were male while 60% were female.

Figure 3

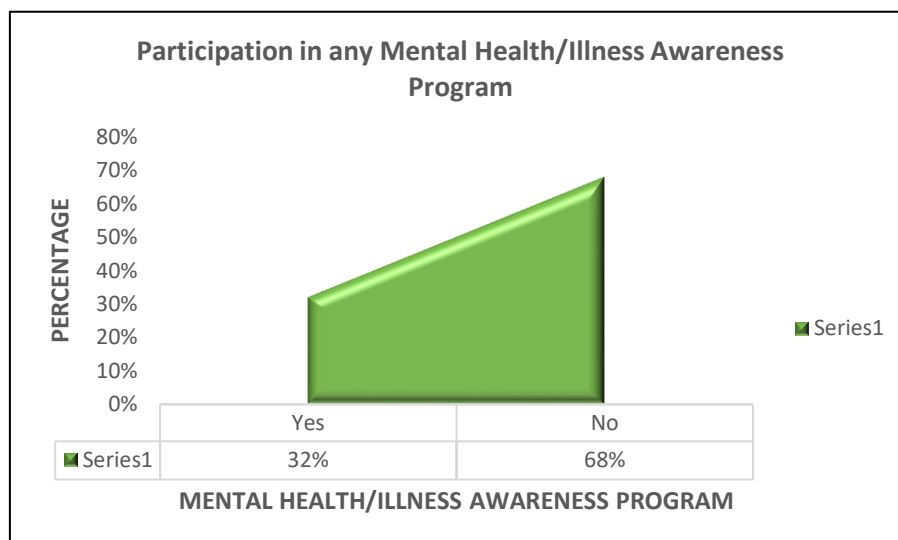
Showing the distribution of Teaching Experience in the Teacher Sample



The years of teaching experience for 40% of the teacher sample was less than 5 years while 10% had more than 10 years of teaching experience, 27% had 6 – 10 years of experience in teaching.

Figure 4

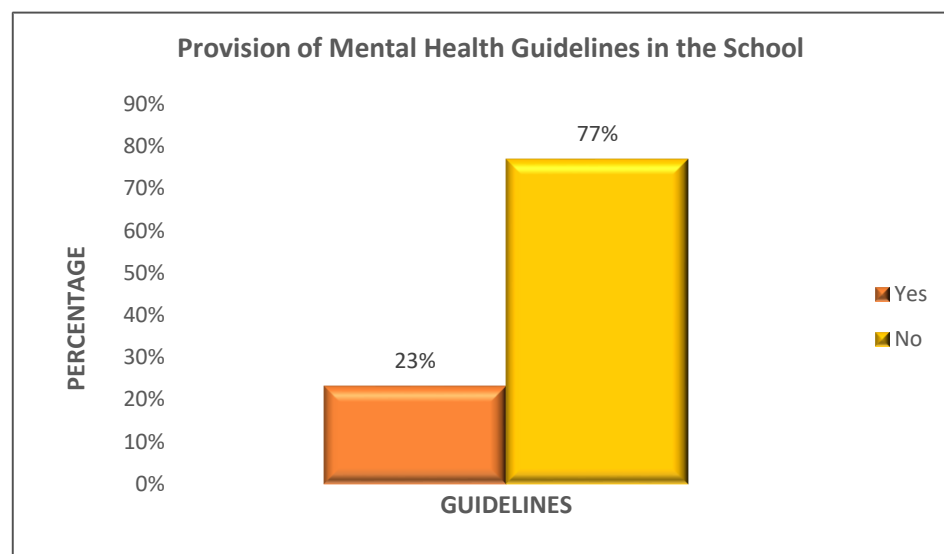
Showing the distribution of Participation in the Mental Illness Awareness Program among the Teacher Sample



Majority of the teacher sample, comprising of 68%, had never attended any Mental Health /Mental Illness Awareness Program while only 32% had attended an awareness program.

Figure 5

Showing the distribution of Provision of Mental Health Guidelines in the school among the Teachers Sample



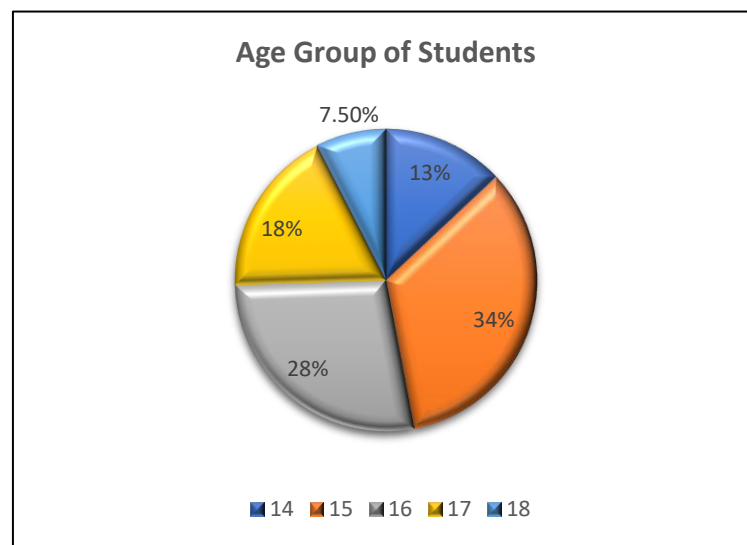
Seventy seven percent (77%) of the teacher sample reported that their school does not have any provision of Mental Health Guidelines and 23% reported having a Guideline that should be followed in relation to Mental Health/Illness.

Sample characteristics of the students: The student sample comprised of high school students from the same schools where the teacher sample was obtained. An equal representation of students with teachers having high level of mental health awareness and students with teachers having low level of mental health awareness was ensured. Apart from this, two genders (male and female students), age range between 14-18 years of age, permanently living in Aizawl city, having Rs. 10,000 to Rs. 50,000 family monthly income, having family members between three members to ten members, and having a good physical health condition served as samples in the

study. All other extraneous variables were kept under control to prevent the harmful effect on results.

Figure 6

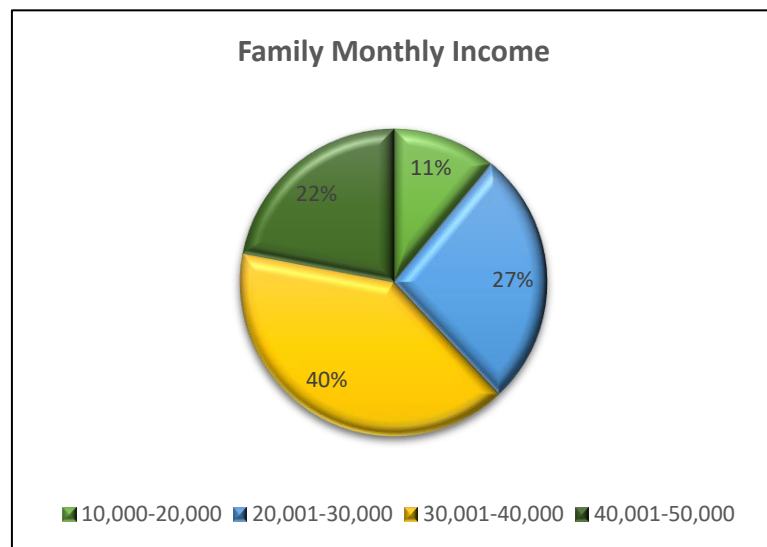
Showing the distribution of age group in the Students Sample



The distribution of age group of the student samples showed that 13% were 14 years, 34% were 15 years, 28% were 16 years, 18% were 17 years, and 7.50% were 18 years.

Figure 7

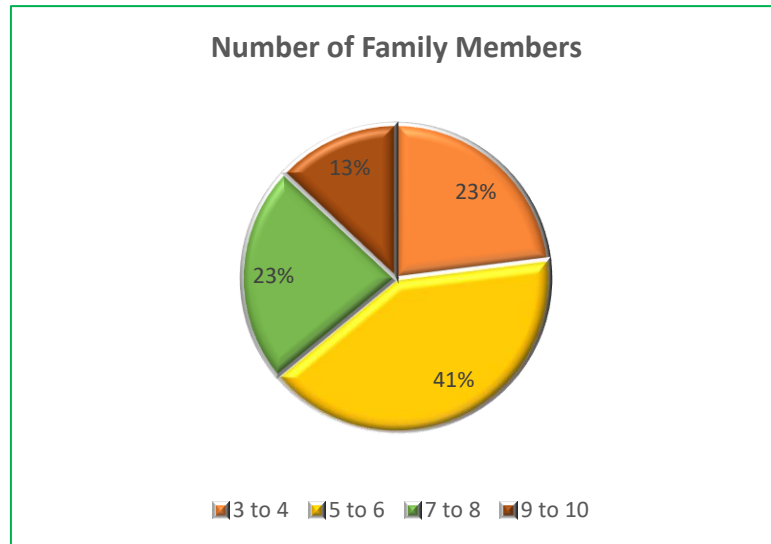
Showing the distribution of Monthly Family Income in the Student Sample



From the student sample, 11% of the students belonged to a family with a monthly income between ₹ 10,000 – ₹ 20,000, 27% had a family income of ₹ 20,001 – ₹ 30,000 per month, 40% with ₹ 30,001 – ₹ 40,000 per month, and 22% with ₹ 40,001 – ₹ 50,000 per month.

Figure 8

Showing the distribution of Number of Family Members in the Student Sample



Majority of the students in the sample (41%) belonged to a family consisting of 5 to 6 members, 23% had a family of 3 to 4 members, only 13% belonged to a family of 9 to 10 members and 23% of the students belonged to a family having 7 to 8 members.

2. Psychometric adequacy check: The Mental Illness Awareness Inventory for teachers used in the present study was developed by the researcher and the checking of the psychometric properties demonstrated its trustworthiness for the population under study ($\alpha=.87$). The selected psychological scales used for evaluating psychological illness were also constructed for other culture and thus, it was necessary to check the applicability for the target population of the present study. So, the normality, homogeneity and reliability were calculated and the results are presented in Table-1.

Table 1

Showing the Normality (Mean, SD, Kurtosis, and Skewness), Reliability, and Homogeneity of the Psychological scales (Eating Disorder, ADHD, Conduct Disorder, Substance Abuse, Anxiety and Depression) among the samples.

Teacher's Awareness	Statistics	Eating disorder	ADHD	Conduct disorder	Substance abuse	Anxiety	Depression
Total Samples	Mean	31.08	33.46	31.34	5.535	11.15	12.88
	SD	4.32	5.51	4.77	1.72	2.85	2.97
	Kurtosis	0.86	0.88	0.79	0.82	0.87	0.76
	Skewness	0.79	0.76	0.83	0.78	0.83	0.86
Reliability (Alpha)		0.89	0.82	0.81	0.84	0.86	0.81
Homogeneity (Levene)		0.16	0.27	0.23	0.24	0.28	0.19

Normality: The results revealed that Skewness values and Kurtosis values were less than 1.0 (+/-) which conveyed that the data had a normality.

Reliability: The reliability coefficient (Cronbach's Alpha) was employed and the internal consistency of the scales was found to be highly reliable as all were higher than .80; reliability coefficients for Eating disorder ($\alpha = .89$), ADHD ($\alpha = .82$), Conduct disorder ($\alpha = .81$), Substance abuse ($\alpha = .84$), Anxiety ($\alpha = .86$) and Depression ($\alpha = .81$) demonstrated the trustworthiness of the psychological scales for the target population.

Homogeneity: The Levene's Test of Equality of variances was used to check the homogeneity of variances of the scale as shown in Table-1 and the scales showed acceptable homogeneity (Eating disorder = .16, ADHD = .27, Conduct disorder = .23, Substance abuse = .24, Anxiety = .28 and Depression = .19).

The overall results showed the applicability of the tests for the target population. The results also highlighted the appropriateness of using the parametric statistics for further analysis.

The results of the study are presented and discussed sequentially by following the sequence of the objectives of the study; Eating Disorder, ADHD, Conduct Disorder, Substance Abuse, Anxiety and Depression.

Objective-1: To study any significant difference between students of Teachers with Low and High awareness of mental illness on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression.

Table 2

Showing the Normality (Mean, SD, Kurtosis, Skewness) and significant difference in Eating Disorder, ADHD, Conduct Disorder, Substance Abuse, Anxiety and Depression between the Students of Teachers with High and Low Awareness of Mental Illness Samples (N=240)

Teacher's Awareness	Statistics	Eating disorder	ADHD	Conduct disorder	Substance abuse	Anxiety	Depression
STLMIA	Mean	34.33	41.97	38.13	7.61	15.88	16.82
	SD	4.26	6.58	5.11	1.68	3.31	3.5
	Kurtosis	-0.82	-0.95	-0.8	-0.76	-0.77	-0.79
	Skewness	-0.76	0.79	0.8	-0.8	0.86	0.87
STHMIA	Mean	27.83	24.93	24.56	3.49	6.43	8.94
	SD	4.39	4.43	4.43	1.78	2.39	2.44
	Kurtosis	-0.91	-0.81	-0.78	-0.88	0.95	-0.72
	Skewness	-0.41	-0.73	-0.86	-0.79	0.82	-0.86
t -test between student with high and low aware mental illness		21.64**	21.69**	21.84**	18.37**	21.20**	21.50**
**= Significant at a.01 level							

To examine the significant differences of the two groups (students of teachers with high and low awareness of mental illness) on selected dependent variables, an independent t-test was employed and the findings are presented in Table-2.

(i) *On Eating Disorder:* Results of the present study indicated that Students of Teachers with Low Mental Illness Awareness (STLMIA) scored higher than Students of Teachers with High Mental Illness Awareness (STHMIA) on eating disorder ($M=34.33; 27.83; t=21.64; p < .01$) and their difference is significant at the .01 level. This reiterated that the students whose teachers have better awareness of eating disorders have fewer signs and symptoms of eating disorders compared to those students who are under teachers with poor awareness level of eating disorders.

In a study conducted by Harshbarger and colleagues (2011), majority of the school counsellors felt eating disorders were a problem in their school but very few felt competent identifying or helping students with eating disorders. This lack of confidence or competency in recognizing eating disorders was a result of lack of awareness and knowledge about eating disorders. The awareness and understanding of eating disorders is relatively poor among the public, health professionals and school educators (Hay, et al., 2007; Darby, et al., 2012). Eating disorders are poorly understood among teachers, personal trainers, and certain health professionals (Bullivant et al., 2019).

This is perhaps not unexpected, as the necessity of awareness programs for eating disorders is only now being acknowledged (Mond, 2014 & 2016). Nevertheless, there has been a recent increase in the momentum of initiatives to augment awareness and comprehension of the adverse effects and occurrence of eating disorders (Mond, J. M., 2016; McLean et al., 2016).

Even though there are some studies relating to awareness of public, health professionals and other key stakeholders about eating disorders, there are no studies examining the difference between students of teachers with low and high mental health awareness on eating disorders. Therefore, this study was undertaken to understand the influence of teachers' awareness of mental health on eating disorders.

(ii) *On ADHD:* Results of the current study suggested that Students of Teachers with Low mental health awareness scored higher than Students of Teacher with High

mental health awareness on ADHD ($M=41.97$; 24.93 ; $t= 21.69$; $p < .01$) and significant at the .01 level.

Teachers' awareness and attitudes towards students with mental health disorders frequently influence their daily role in delivering efficient support to these children (Kamel et al., 2020). Teachers' awareness of ADHD is significant since they are frequently the first to discover ADHD symptoms in children, can supply information useful for ADHD diagnosis, and have an impact on student school performance and overall learning ability. The diagnosis process depended on an extensive review of the child's history and behavioral observations across multiple contexts, which frequently included ADHD symptom checklists rated by parents and teachers (Tahıllıoğlu et al., 2021). Additionally, parents and teachers were equally accurate in predicting ADHD in both boys and girls, which emphasizes how important it is to raise their awareness of the disorder.

Teachers who lack accurate awareness or harbour misconceptions about ADHD may fail to recognize or utilize evidence-based interventions intended to support students with ADHD in the classroom. In contrast, teachers who possess a more comprehensive understanding and display a positive attitude toward ADHD are generally more inclined to employ effective strategies. These strategies lower the incidence of ADHD by the teachers, educating the parents and students about preventive measures, but also for early recognition of symptoms.

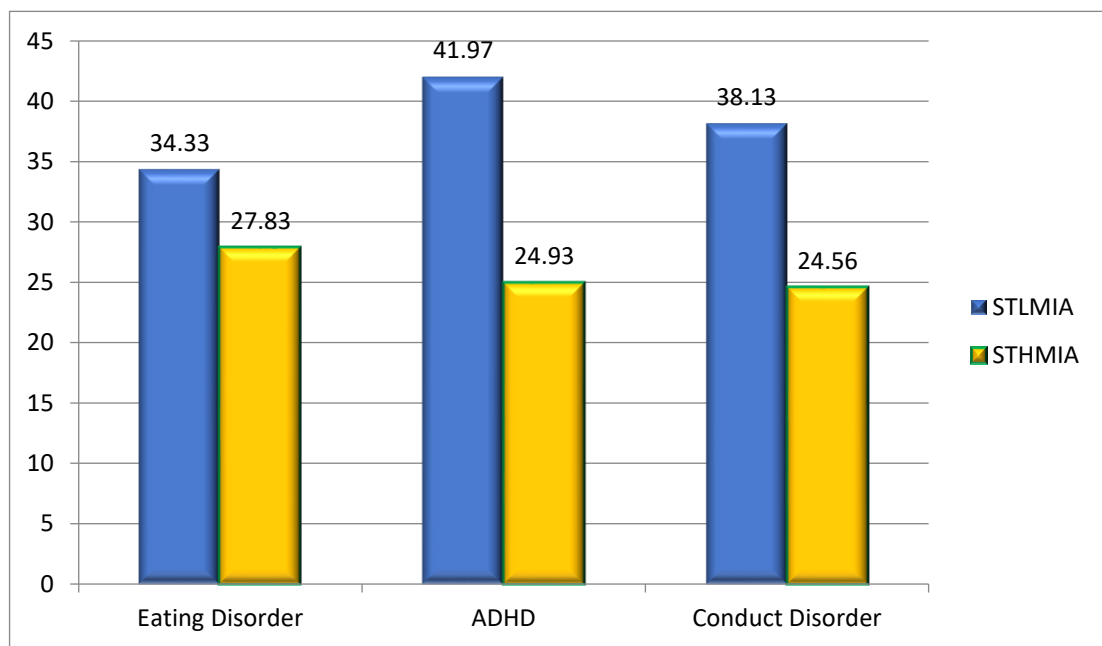
(iii) On Conduct Disorder: Results revealed that Students of Teachers with Low mental health awareness scored higher than Students of Teachers with High mental health awareness on Conduct Disorder ($M=38.13$; 24.56 ; $t= 21.84$; $p < .01$) and their difference is significant at the .01 level.

A study conducted by Singh and colleagues (2024) declared that teachers typically have an average degree of awareness on the characteristics, symptoms, and diagnostic processes linked with CD, which may directly or indirectly help in the decrease of CD symptoms. According to Al Noimi's (2022) findings, 63.3% of teachers accurately identified the indications and symptoms of behaviour disorders while 32.7% only provided right responses for kinds of conduct disorders. Furthermore, consistent with the findings of Alfred and Yasmin (2020), experienced

instructors have a good understanding of conduct disorder on both the rural and urban sides, but the majority of rural teachers do not have adequate awareness. Research studies relating to conduct disorders in India was very scarce, and the researcher did studies specific to the effect of teacher awareness on Conduct Disorders in school-aged children.

Figure 9

Showing the mean difference between Students of Teachers with Low mental illness awareness (STLMIA) and students of teachers with High mental illness awareness (STHMIA) on Eating Disorder, ADHD, and Conduct Disorders.



(iv) On Substance Abuse: The present study findings demonstrated that Students of Teachers with Low mental illness awareness (STLMIA) scored higher than Students of Teachers with High mental illness awareness (STHMIA) on Substance abuse ($M=7.61; 3.49; t= 18.37; p < .01$) and significant at .01 level.

This finding was supported by several studies as discussed below. Being aware of the risk factors and manifestations of substance abuse can assist school teachers and educational institutions with identifying at risk youth and aid in the prevention and referral services (Chakravarthy et al., 2013). The highly aware

teachers were able to recognize the students who are at risk of abusing substances and take proactive steps to prevent it. Based on the signs and symptoms of substance abuse, the teachers were also able to detect abuse at the early stages so that psychological intervention could be initiated at the earliest.

According to Kantor and associates (1992), teachers who are trained and highly aware about substance abuse will have the ability to identify substance-abuse problems in the students. In addition, they are more likely to educate their students about drugs, demonstrate a greater willingness to intercede when a student shows signs of substance usage, and refer students with suspected substance abuse problems. Various researches also indicated that a school that prioritizes the duties of teachers regarding awareness relating to substance abuse and acknowledges the significance of the school environment will show benefits in terms of the students abstaining from drug use (Moreira & Micheli, 2015; Chan, et al., 2016; Razali & Madon, 2016). These studies indicated that the teacher's awareness about mental health has an impact on substance abuse, wherein the students of high aware teachers scored lower than the students of low aware teachers.

(v) On Anxiety: According to the present study, Students of Teachers with Low Mental Illness Awareness (STLMIA) scored significantly higher than Students of Teacher with High Mental Illness Awareness (STHMIA) on Anxiety ($M=15.88$; 6.43 ; $t=21.20$; $p<.01$).

The finding was supported by Layne and colleagues (2006) whose primary aim of the study was to evaluate the degree to which teachers are aware of anxiety in their students. The teachers were, in fact, aware that their students were exhibiting signs and symptoms of anxiety such as somatic complaints, restlessness, irritability, fatigue, difficulty in concentrating, muscle tension and sleep disturbances. The teachers who have high awareness about anxiety and mental health made every effort to identify these students so that appropriate intervention can be started. School teachers had some knowledge of the physical indicators and behaviours associated with anxiety and depression (Trudgen & Lawn, 2011). The threshold at which these teachers voiced their worries regarding the presence of anxiety in their students was

arbitrary and largely dependent on each teacher's innate feeling of urgency to intervene.

Adolescents with anxiety problems are often overlooked in school settings and do not receive the treatment they need. The development of anxiety disorders can be reduced or prevented, and schools can improve their capacity to recognize the students suffering from anxiety by increasing the awareness of the teachers (Tomb & Hunter, 2004). Teacher support and peer support also have important impacts on adolescent anxiety (Zhao & Li, 2017). The teachers who are aware of the symptoms of anxiety were able to identify and educate the students regarding its preventive measures. In addition, early identification and prompt referral ensures a rapid recovery from the disorders which enable the students to continue their studies.

The school teachers generally learned about anxiety informally through media, personal knowledge, or teaching experience. Teachers rarely receive formal training on mental health and mental diseases, particularly in the study settings which would have been helpful in the prevention of anxiety in students. There are several literatures regarding the prevalence, preventive strategies and role of schools in educating the teachers about anxiety, the researcher could not find any study in the literature examining the difference between students of teachers with low and high mental health awareness on anxiety. Hence, this study was selected with a hope to recognize the effect of teachers' awareness level in the mental health of their students. The findings in this present study evinced that those students of teachers with high awareness of mental health scored lower on anxiety.

(vi) On Depression: The findings of the present study revealed that Students of Teachers with Low Mental Illness Awareness (STLMIA) scored significantly higher than Students of Teachers with High Mental Illness Awareness (STHMIA) on Depression ($M=16.82; 8.94; t= 21.50; p < .01$).

This result attested that there are less students manifesting symptoms of depression when they are being taught by teachers having high awareness about depression. Enhancing teachers' mental health literacy can have positive outcomes, such as recognizing early signs of depression (Whitley et al., 2012), whereas limited

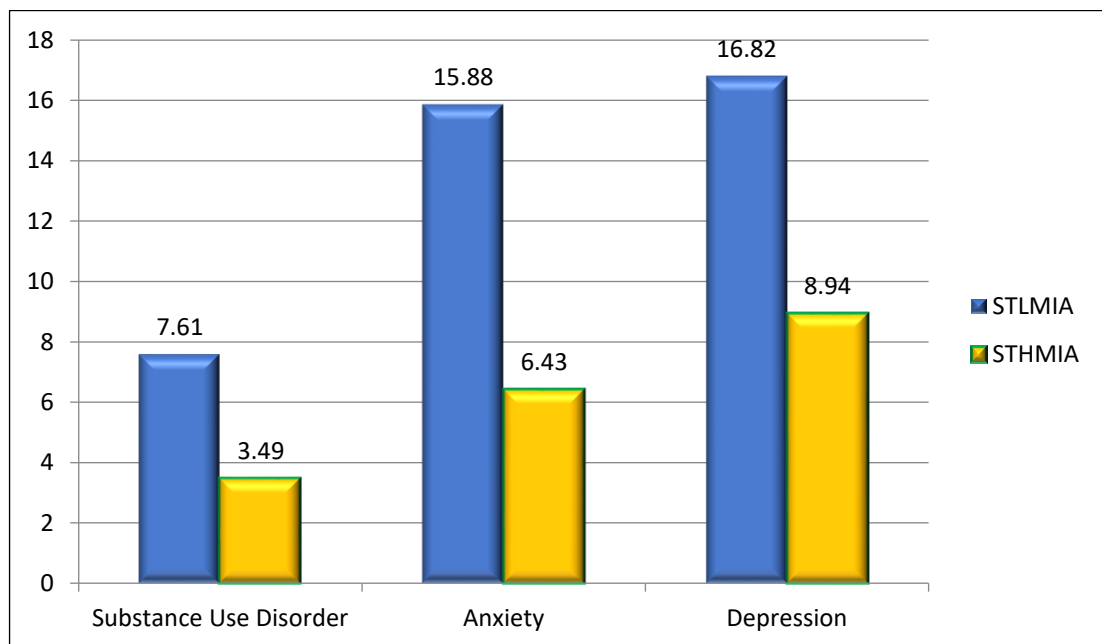
knowledge and awareness can lead to a delay in early intervention. Furthermore, as knowledge and self-efficacy are inextricably linked, concentrating on developing mental health literacy for teachers can lead to increased self-efficacy in mental health, which may then be transferred to students (Dods, 2016). Miller and partners (2019) confirmed that teacher depression literacy was associated with student depression literacy, suggesting that teachers' awareness and knowledge about depression influences their student's acquisition of this information.

A highly aware and knowledgeable teachers imbued confidence in their students to approach them for support concerning depression (Ojio et al., 2015; Lai et al., 2016), improving teacher mental health knowledge and decreasing stigma can have a long-lasting positive impact on students (Kutcher et al., 2013). Teachers also disclosed students seeking treatment for themselves or helping a friend seek treatment after receiving adolescent depression awareness program (Miller et al., 2018). The findings of the present study, corroborated by the above-mentioned studies, signifies that the teachers' level of awareness have an impact on the prevalence of depression on the students.

Thus, the findings of the present study suggested that hypothesis 1 can be accepted as students under teachers with high awareness of mental illness scored lower on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression than students under teachers with low awareness of mental illness.

Figure 10

Showing the mean difference between Students of Teachers with Low mental illness awareness (STLMIA) and Students of Teachers with High mental illness awareness (STHMIA) on Substance Use Disorder, Anxiety, and Depression for the samples



Objective-2: To discern any significant difference on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression between male and female students.

Table 3

Showing the Normality (Mean, SD, Kurtosis, Skewness) and significant difference between Male and Female students on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples(N=240)

Gender	Statistics	Eating disorder	ADHD	Conduct disorder	Substance abuse	Anxiety	Depression
Male	Mean	28.90	35.13	36.10	6.46	7.75	11.65
	SD	4.55	5.75	4.33	1.98	2.65	2.39
	Kurtosis	-0.89	-0.87	-0.77	-0.81	-0.89	-0.83
	Skewness	-0.71	-0.63	-0.85	-0.73	-0.79	0.86
Female	Mean	33.22	31.79	26.58	4.63	14.55	14.11
	SD	4.09	5.41	4.21	1.85	3.03	3.55
	Kurtosis	-0.83	-0.89	-0.81	-0.83	-0.85	-0.79
	Skewness	-0.87	0.89	-0.81	-0.83	0.87	-0.86
Total Samples	Mean	31.08	33.46	31.34	5.53	11.15	12.88
	SD	4.32	5.51	4.77	1.72	2.85	2.97
	Kurtosis	0.86	0.88	0.79	0.82	0.87	0.76
	Skewness	0.79	0.76	0.83	0.78	0.83	0.86
t -test between Male and female samples		24.85*	-23.31**	27.89*	21.84*	-23.92*	22.39**
*= Significant at a.05 level; **= Significant at a.01 level							

An independent t-test was used to determine the significant differences between male and female samples on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression, and the results are displayed in Table-3.

(i) On Eating Disorder (ED): Results revealed that male students scored lower than female students on ED ($M=28.90$; 33.22 ; $t = 24.95$; $p < .01$) and their difference is significant at the .01 level. The prevalence of eating disorders was higher in female than in male students.

The finding was reinforced by a study carried out by Hoek (2006) where an upward trend was observed in the incidence of eating disorders and the most substantial rise occurred among females between the ages of 15 and 24. Another study carried out by Lewinsohn and associates (2002) explored the gender differences in young adult men and women in regard to the prevalence of the eating disorder symptoms. Compared to men, women scored higher, reflecting greater eating disorder symptomatology among women. In many studies, the proportion of girls with eating disorders is significantly higher than that of boys (Wittchen & Jacobi, 2005; Hoek, 2006). The contribution of eating disorders to the total Disability Adjusted Life Years (DALYs) in India in 2017 was considerably higher in females than in males as furnished by ICMR (2019).

One of the reasons why the incidence of eating disorders was found to be higher in females could be that males are often underrepresented in the literature and when they are included in the studies, the sample sizes are often too small to be analyzed on their own or in comparison to females (Bulik et al., 2007). According to a review of adolescents and young adults, females report more concern about shape and weight, drive for thinness, and body dissatisfaction than males while the males exhibit more concerns about muscularity than their female counterpart (Yager et al., 2006; Fernández-Aranda et al., 2009; Shingleton et al., 2015). However, some studies suggest better treatment outcomes in males than in females with eating disorders. However, some research studies indicated that men with eating disorders respond better to treatment than women leading to a full recovery (Bean et al., 2008; Støving et al., 2011; Strobel et al., 2019).

(ii) On ADHD: Results revealed that Male students scored higher than Female Students on ADHD ($M=35.13$; 31.79 ; $t = -23.31$; $p < .01$) and their difference is significant at the .01 level.

Studies have established that ADHD is highly prevalent in children and adolescents (Thomas et al., 2015; Faraone et al., 2021; Getinet et al., 2023), with boys twice more likely to experience the disorder than girls (Getinet et al., 2023). In a study of gender difference by Sayal and partners (2018), ADHD was two to three times more common among boys than girls. According to Mohammadi and colleagues (2021), the prevalence of ADHD was 4% higher in boys (5.2% vs. 2.7%), younger participants, urban dwellers and children whose mothers had previously been admitted to a mental health facility. In addition to the higher prevalence in boys compared to girls, ADHD also often persists into adulthood (APA, 2013; Barkley, 2010).

ICMR (2019), in its evaluation of the Global Burden of Disease, India reported that the contribution of ADHD to the total Disability Adjusted Life Years (DALYs) in India in 2017 was significantly higher in males than in females. Females are more likely to present inattentive symptoms and males are more likely to present combined symptoms and higher rates of hyperactivity and impulsivity that suggest a gender difference in the presentation of ADHD symptoms (Willcutt, 2012; Li et al., 2019). The difference in disease prevalence between men and women during childhood and adulthood may be due to the tendency of impulsive and hyperactive symptoms to diminish over time, whereas inattentive symptoms endure (Francx et al., 2015; Williamson & Johnston, 2015; Li et al., 2019).

One of the reasons of gender disparity in ADHD could be that the presenting symptoms of ADHD in girls are more likely to be overlooked compared to boys (Berry et al., 1985). Also, girls are more protected against the development of ADHD (Mahone and Wodka, 2008). In early childhood, boys are more prone than females to exhibit easily identifiable externalizing symptoms such hyperactivity, impulsivity, defiance, and rule-breaking (Littman & Wagenberg, 2023). Conduct and oppositional defiance disorders are two behavioural problems that co-occur in boys with ADHD (Arnold, 1996; Quinn, 2008). It has also been shown that compared to girls, boys with ADHD annoy or upset their teachers and parents, and they see the boys as more as less problematic (Graetz et al., 2005, Ohan & Johnston, 2005). It is possible that

parents and teachers may not as readily recognize manifestations of ADHD in girls compared to boys. Therefore, it is possible that parents and educators are less likely to notice signs of ADHD in girls compared to boys.

(iii) On Conduct Disorder: Results revealed significant difference between male and female students in conduct disorder, with male students scoring higher than female Students ($M=36.10$; 26.58 ; $t= 27.89$; $p<. 01$).

The finding was supported by a study done by Sarkhel and team (2006) which highlighted that the ratio of conduct disorder of boys to girls was found to be 4.5:1, childhood onset type was 7:1 while in adolescent onset type, it was reduced to 2:1. Several other studies have also confirmed that the rate of conduct problems was significantly higher in males compared to females (Nwankwo et al., 2000; Maughan et al., 2004; Nock et al., 2006; Akpan et al., 2010; Diwe et al., 2016).

According to Baillargeon and colleagues (2007), gender differences were already apparent at 17 months of age whereby boys were 2.62 times more likely than girls in aggressive behaviours. It has been suggested that the gender disparity in CD prevalence may be somewhat influenced by the increased usage of severe punishment for boys than girls. (Meier et al., 2009).

(iv) On Substance Abuse: Results revealed that male students scored higher than female students on Substance abuse ($M=6.46$; 4.63 ; $t= 21.84$; $p < .01$), with the difference between the two groups significant at the .01 level.

The prevalence of substance use disorders varies among nations is influenced by the cultural norms and laws that affect substance access and acceptance (McHugh, 2018). Despite considerable cultural variance, men are generally more likely than women to have access to substances; this disparity in accessibility seems to be largely responsible for the gender gap in substance use prevalence (Van Etten & Anthony, 1999; Delva et al., 1999; Caris et al., 2009; McHugh et al., 2018).

Gender disparities in substance use are influenced by biological, metabolic, cultural, and environmental factors (McHugh et al., 2018). Illicit drug use is

substantially more prevalent among men than women where 7.9% of women and 12.5% of men aged 12 and older reported past-month illicit drug use in 2015 (CBHSQ, 2016). Adolescent males more often showed higher rates in relation to substance use, abuse and dependence than in females (Young et al., 2002). These studies highlight that male students scored higher than female students on Substance abuse.

(v) On Anxiety: Results revealed that Male students scored lower than Female Students on Anxiety ($M = 7.75; 14.55; t = -23.92; p < .01$) and their difference is significant at the .01 level.

This finding demonstrated that there is a substantial gender gap in anxiety disorders, with girls experiencing higher rates of anxiety symptoms than boys. In psychiatric epidemiology, many studies reported that women are substantially more likely than men to experience anxiety disorders at some point in their lives (Angst & Dobler-Mikola, 1985; Regier et al., 1990; Bruce et al., 2005). Prevalence rates were also higher in women than in men for some anxiety disorders such as generalized anxiety disorder and posttraumatic stress disorder (Kessler, et al., 1995).

In a study of the gender differences in anxiety disorders and anxiety symptoms in adolescents, Lewinsohn and colleagues (1998) found that from a very young age, girls start to diverge from boys, and by the age of six, twice as many girls as boys had suffered from an anxiety problem. Furthermore, girls reported significantly higher major life events, self-consciousness, emotional reliance, social support from friends, physical illness and they are lower in respect to self-esteem and a greater number of physical symptoms compared to boys.

(vi) On Depression: Results revealed a gender difference in depression, indicating that male students scored significantly lower than female students on Depression ($M=14.55; 11.65; t= 22.39; p < .01$).

Several studies corroborated the findings of the present study. In some epidemiological studies on adults, major depressive disorder is more common in women than in males, with an average ratio of 2:1 (Andrade et al., 2003; Bromet et

al., 2011). It was also reported that the contribution of depressive disorders to the total Disability Adjusted Life Years (DALYs) in India in 2017 was significantly higher in females than in males (ICMR, 2019).

The female preponderance and gender difference in depression is estimated to appear between the age of 13 to 15 (Hankin et al., 1998; Wichstrøm, 1999; Twenge & Nolen-Hoeksema, 2002; Wade et al., 2002) and then widened between ages 15 and 18 (Hankin et al., 1998). Females were found to have more somatic depression than males among high school (Silverstein et al., 1995) and college students (Silverstein et al., 1998). The multifactorial etiology of the gender disparity in depression had been well accepted now (Cyranowski et al., 2000; Hyde et al., 2008). The affective factors (emotional reactivity), biological factors (genetic vulnerability, pubertal hormones, pubertal timing and development) and cognitive factors (cognitive style, objectified body consciousness, rumination) are interact with stressors in adolescence, increases girls' rates of depression starting in adolescence and clarifies the gender disparity in depression (Hyde et al., 2008).

The differences in how males and females expressed distress through diverse socialization processes might also account for gender differences in somatic depression (Wenzel et al., 2005). Personality factors, specifically neuroticism, may play a key role in gender difference in depression where females had an increased risk of depression (Goodwin & Gotlib, 2004). Reports of violent victimization are higher in women (Koss et al., 1994), gender inequality and discrimination against women may also contribute to the gender difference (Belle & Doucet, 2003).

The above findings suggest that hypothesis 2 of the present study can be accepted, which stated that 'Male students will score lower on Eating Disorder, Anxiety and Depression but higher on Attention Deficit Hyperactivity Disorder, Conduct Disorder and Substance Abuse, than female students'.

Objective-3: To find out the relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

Table 4

Showing the Relationship (Pearson's Correlation) between Eating disorders, Substance abuse, Anxiety, Depression, ADHD, and Conduct disorder among the samples (N=240)

Dependent Variables	Eating disorder	Substance abuse	Anxiety	Depression	ADHD	Conduct disorder
Eating disorder	1	.424**	.447**	.456**	.442**	.471**
Substance abuse		1	.290**	.319**	.327**	.331**
Anxiety			1	.323**	.326**	.328**
Depression				1	-.391**	-.387**
ADHD					1	.393**
Conduct disorder						1

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearsons' Correlation Coefficient was computed to find any significant relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression, and the results are presented in Table-4.

Eating Disorder relation to Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder (ADHD), and Conduct Disorder: Results revealed that eating disorder had a positive relationship with Substance Abuse ($r=.42$; $p < .01$), Anxiety ($r=.45$; $p < .01$), Depression ($r=.47$; $p < .01$), ADHD ($r=.44$; $p < .01$), and Conduct Disorder ($r=.47$; $p < .01$) which are significant at the .01 levels.

Eating Disorder relationship with Substance Abuse: The findings can be discussed in the context of previous studies showing that people with eating disorders often have high rates of alcohol and other drug use, which often meet the criteria for a comorbid substance use disorder (Mitchell et al., 1985, Newman & Gold 1992; Bushnell et. al. 1994). Lifetime prevalence of any substance use in

adolescents was found to be 24.6% in those with anorexia nervosa, 48.7% in bulimia nervosa, and 28.6% in eating disorders not otherwise specified (Mann et al., 2014). The relationship between eating disorders and substance use extends beyond those individuals seeking treatment which were identified through research using nonclinical samples (Bulik 1987; Kendler et. al. 1991). Furthermore, studies using samples from high school and college have discovered positive relationship between substance use and eating disorder symptoms (i.e., bingeing, purging, restrained eating, and dysfunctional attitudes about weight and body shape), confirming that as improper eating behaviour rises, so does substance use (Killen et. al. 1987, Timmerman, Wells, & Chen 1990; Krahn et. al. 1992, Striegel-Moore & Huydic 1993). Significant associations were also found between risk for an eating disorder and the life-time abuse of and dependence on illicit drugs (Piran & Gadalla, 2007).

Pearlstein (2002) as well as Peveler and Fairburn (1990) have implicated the possibility of heritable factors leading to the comorbidity of SUDs and Eds, stating that the root causes of comorbidity are the shared biological factors. Disturbances in the dopaminergic system and endocrine system could also be the cause of its relationship (Pearlstein, 2002; Rothman et al., 2008). Prolonged substance usage and ED behaviours produce similar physical symptoms such as weight loss, increased or decreased appetite, increased or decreased heart rate, amenorrhea, fatigue, muscle weakness, insomnia, vomiting, diarrhoea, anxiety, sexual dysfunction, constipation, nausea, restlessness, and difficulty concentrating (APA, 1994). Thompson-Brenner and colleagues (2008) investigated the personality traits associated with comorbid substance abuse, and found that different personality traits appear to support the development of EDs and SUDs; avoidant insecure and obsessional sensitive traits predicted Eds while behavioural dysregulation traits predicted SUDs. In addition to improving treatment options for comorbid individuals, prevention interventions should target both SUDs and EDs simultaneously, according to Gadalla and Piran (2007).

Eating Disorder relationship with Anxiety: A study of women with eating disorders highlights that 53% of the sample met the criteria for an anxiety disorder

(Ulfvebrand et al., 2015) and women with anxiety disorders have elevated rates of eating disorders (Garcia et al., 2020). Community samples of adolescents with Anorexia Nervosa (AN), Bulimia Nervosa (BN) and Binge Eating Disorder have also shown a significant relationship with anxiety disorders. (Touchette et al., 2011; Swanson et al., 2011; Rojo-Moreno et al., 2015).

Female adolescents and young adults with comorbid anxiety disorders have higher levels of eating disorder psychopathology (Vall et al., 2015; Smith et al., 2018). Individuals who suffer from an eating disorder, similar to those who suffer from anxiety disorders, employ maladaptive coping mechanisms in order to maintain their emotional equilibrium (De Young et al., 2016). Moreover, persons who experience chronic concurrent anxiety symptoms after remission from an eating disorder are more likely to relapse because they are more likely to turn to coping behaviours that were previously associated with the eating disorder (Bardone et al., 2010; Fitzsimmons et al., 2011).

Eating Disorder relationship with Depression: A recent study on 15 to 25 - year - old females found that those with a lifetime major depressive disorder were four times more likely to have a lifetime eating disorder (Ulfvebrand et al., 2015). The comorbidity rate for mood disorders was between 24.1% and 90.5% for BN, and between 31% and 88.9% for AN (Milos et al., 2003, Godart et al., 2006, Herzog and Eddy, 2007). There is a positive association between depressive symptoms and eating disorders, and when disordered eating attitudes rise, so do depressive symptoms. The most important symptoms connecting depression and eating disorders are irritability, social eating and depression in a community sample of adolescents (Kenny et al., 2021).

As highlighted by Rojo-Moreno and associates (2015), due to physiological and psychosocial effects of eating disorders, they usually precede the onset of depressive disorders. Among individuals with eating disorder whose onset was in adolescence, it was found that the presence of ED in adolescence predicted the development of affective disorders in the future (Ivarsson et al., 2000; Marmorstein et al., 2008). Depressive disorders during early adolescence could contribute to the

development of eating disorders and have a close association between them (Sihvola et al., 2009). It was also determined by Santos and colleagues (2007) that females were more likely than males to experience comorbidity.

Eating Disorder relationship with ADHD: The risk of association between patients with Attention Deficit Hyperactive Disorders and Eating Disorders was five times higher than in the population without Eating Disorders (Rojo-Moreno et al., 2015). ADHD symptoms of impulsivity and hyperactivity may promote disturbing and irregular eating habits that result in eating disorders, at the same time, eating habits that are impulsive may encourage other impulsive behaviors that are typical of ADHD (Cortese et al., 2007).

Eating Disorder relationship with Conduct Disorder: Bulimia Nervosa and Binge Eating Disorder were found to be significantly associated with Conduct Disorders according to the study by Swanson and colleagues (2011) using a large sample of adolescents. Bulimia symptoms were strongly associated with other psychiatric disorders symptoms including anxiety and depression. In a population-based sample of female twins aged 8-17 years, a significant association between Bulimia symptoms and conduct disorders was found (Rowe et al., 2002).

The above studies supported the finding of this present study, that there was a significant relationship between Eating disorders, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct disorder.

(ii) Substance Abuse relation with Anxiety, Depression, ADHD, and Conduct Disorder: Results revealed that Substance Abuse had a positive relationship with Anxiety ($r=.29$; $p < .01$), Depression ($r=.32$; $p < .01$), ADHD ($r=.33$; $p < .01$), and Conduct Disorder ($r=.33$; $p < .01$) significant at .01 levels.

Substance Abuse relationship with Anxiety: As demonstrated in both epidemiological and clinical samples, an individual suffering from anxiety has a higher risk of developing substance abuse and vice versa (Kushner et al., 1990; Kushner et al., 2008). The co-occurrence of substance uses and anxiety was determined by factors such as educational level, being male, and the presence of

stress. In addition, almost half of the participants from the study or youth were found to have anxiety disorders with substance use (Melkam et al., 2024). The presence of a substance use disorder can also impact the course of anxiety disorders, a 12-year prospective study showed that substance use disorder decreased the recovery rate and increased the likelihood of recurrence of Generalized Anxiety Disorder (Bruce et al., 2005).

Melkam and associates (2024) declared that male sex, low educational status of the father, and the presence of stress were significantly associated factors with anxiety disorders as well as substances use. There was also a significant relationship between addiction intensity and anxiety levels (Kordlar & Tavacioglu, 2024). Prompt diagnosis and treatment initiation are essential for successful treatment of comorbid anxiety and substance abuse disorders (Hellwig & Domschke, 2023), along with raising awareness among the school administration.

Substance Abuse and Depression: Several studies have reported that substance use disorder has a close relation with depressive symptoms (Esmaealzadeh et al., 2018; Alsheikh et al., 2020), and this relationship between substance usage and depression varies according to the substance used (Boden & Fergusson, 2011). Early depression was likely to be positively related to later alcohol use (King et al., 2004; Wu et al., 2006), and depression was likely to have an impact only on later multiple drug use but not on alcohol nor marijuana use (Henry et al., 1993). In adolescents undergoing treatment for Substance Use Disorders, depression was found to be associated with relapse, indicating that depression exerts a negative influence on abstinence in the short term (Crowley et al., 1998; White et al., 2004).

Substance Abuse relationship with ADHD: According to meta-analysis by Rohner and colleagues in 2023, every fifth patient with SUD have comorbid ADHD. Some studies suggested the co-occurrence of ADHD and Substance Use Disorder which could be partly described by common vulnerability factors, including genetic predispositions (Derks et al., 2014; Vink & Schellekens, 2018; Abdellaoui et al., 2021). Similar studies were done by Lee and partners (2011) and Molina with associates (2014) in which they found that the symptoms of ADHD and its

consequences might significantly increase the risk of addiction problems, particularly with those co-occurring oppositional defiant disorder and conduct disorder. ADHD was also associated with the prognosis of severe substance use disorder (SUD) and the early onset of such problems (Rohner et al., 2023); ADHD patients are more likely to acquire substance-use disorders at a younger age (Lee et al., 2011; Bassiony et al., 2022).

Substance Abuse relationship with Conduct Disorder: Similar findings were also reported by Hopfer and associates (2013) who conducted a study on Conduct Disorder and Initiation of Substance Use and depicted that among community subjects, Conduct Disorder was significantly associated with elevated adjusted hazards for the initiation of all substances which is comparatively higher hazard ratios of initiating illicit substances at 15 years of age. By the age of 18, the ratios of adjusted hazard remained significant excluding alcohol. By the age of 21, the ratios of adjusted hazard were significant only for those of cocaine, amphetamines, inhalants and club drugs.

(iii) Anxiety relation to Depression, ADHD, and Conduct disorder: Results revealed that Anxiety had a positive relationship with Depression ($r=.32$; $p < .01$), ADHD ($r=.33$; $p < .01$), and Conduct Disorder ($r=.33$; $p < .01$), all significant at the .01 level.

Anxiety relationship with Depression: This finding was supported by a global survey about major depression revealing that 45.7% of people with a lifetime history of major depressive disorder also had a history of one or more anxiety disorders (Kessler et al., 2015). This is consistent with the study conducted by Fava and associates (2004) in which individuals with depression were significantly more likely to have symptoms related to generalized anxiety and somatoform disorders.

Bittner and associates (2004) attested that anxiety disorders were depicted as emerging frequently during childhood or adolescence period which typically precede the onset of depressive symptoms thus, increasing the risk factors for the first onset of major depressive disorder. Strong relationships between anxiety and depression symptoms have been consistently shown in studies of anxiety and depressive

symptoms in clinical, school, and community populations (Eason et al., 1985; Achenbach et al., 1989; Ollendick & Yule, 1990; Hewitt et al., 1997).

Anxiety relationship with ADHD: In children and adolescents, the incidence of comorbidity between attention-deficit hyperactivity disorder (ADHD) and anxiety disorders can reach as high as 25% to 50% (León-Barriera et al., 2023). Gokce and partners in 2015 declared that the rate of comorbidity of anxiety disorders with ADHD was 24% and attention deficit symptoms and anxiety symptoms were significantly associated too. The combination of ADHD and anxiety is associated with a very high risk of other mental disorders particularly bipolar disorder (Meier et al., 2018). There was a strong positive relationship between ADHD and anxiety symptoms. As compared with the component of hyperactivity, the inattention trait was especially strongly associated and significant (Das et al., 2012). The factors associated with GAD among those with ADHD, as disclosed by Fuller-Thomson et al. and associates (2022) included being female, few close relationships, and a history of depression.

Anxiety relationship with Conduct Disorder: In childhood, adolescence, and adulthood, anxiety disorders co-occurred with conduct disorder (and its adult sequelae) considerably more frequently than expected for both sexes (Zoccolillo, 1992). Adolescents with conduct disorder and anxiety disorder have higher chance for aggressive behavior, record of delinquency, engagement in violence, antisocial behavior, to be mistreated by their parents, and substance abuse (Hodgins et al., 2011).

(iv) Depression relation to ADHD, and Conduct disorder: Results revealed that Depression had a negative relationship with ADHD ($r = -.39$; $p < .01$), and Conduct Disorder ($r = -.39$; $p < .01$) and their relationship is significant at the .01 levels.

Depression relationship with ADHD: Similar findings were reported by Kaiser and others (2023) in which individuals with ADHD are more likely to have depressive episodes, suffer worse from depression, and support higher levels of suicidal ideas and behaviours compared to people without ADHD. Chen and

associates (2018) depicted that among adults with ADHD, the prevalence estimates of depression rate were higher in females as compared to males, it was also mentioned that the top three comorbidities during adulthood includes depression. The correlation between ADHD and depression has become increasingly apparent, within the first year following an ADHD diagnosis, there is an estimated 6.5-fold increase in the likelihood of developing depression (Gundel et al., 2018).

Riglin and colleagues (2021) suggested that there was a hereditary tendency for ADHD and indicated that ADHD raises the risk of depression later in life. Childhood ADHD symptoms were associated with higher depressive symptoms and an increased odds of clinically significant depressive symptoms in adolescence (Powell et al., 2020).

Depression relationship with Conduct Disorder: Comorbid conduct disorder was a consequence of depression that lasted even after the depression subsided, as indicated by Kovacs and partners (1988). Research studies revealed that the prevalence of comorbidity between depression and conduct disorder peaks in the middle of adolescence (Loeber & Keenan, 1994; Beyers & Loeber, 2003). The incidence of adolescents suffering from conduct disorder or depressive disorder was related to the presence of depressive disorder in the mother and antisocial behaviour exhibited by their father, it was also directly associated with high parent–child conflict (Marmorstein & Iacono, 2004). A study found that the comparison of adolescents with symptoms of depression only, symptoms of conduct disorder only, or decreased psychopathology with co-occurring depression as well as symptoms of conduct disorder had the highest risk for subsequent suicidal ideation, recurrent suicidal behaviours, and suicide attempts (Stoep et al., 2011).

(v) Attention Deficit Hyperactivity Disorder (ADHD) relation to Conduct disorder: Results revealed that ADHD had a positive relationship with Conduct Disorder ($r=.39$; $p > .01$) which is significant at the .01 level.

ADHD relationship with Conduct disorder: The relationship between ADHD and other externalizing disorders, such as oppositional-defiant disorder (ODD) or

conduct disorder (CD) has been recognized for years and the comorbidity between ADHD and these externalizing disorders is more prevalent, approximately 50% (Jarrett & Ollendick, 2008). Another study concluded that conduct disorder alone or the combination of hyperactivity and conduct disorder in childhood is highly related with delinquency during adulthood. In the absence of conduct disorder, children with ADHD do not have higher risk for later delinquency as compared to the rest of the study population in the present study (Mordre et al., 2011).

Thus, the findings show a positive significant relationship between eating disorder with substance abuse, anxiety, depression, ADHD and conduct disorder; substance abuse with anxiety, depression, ADHD and conduct disorder; anxiety with depression, ADHD, conduct disorder; as well as between ADHD and conduction disorder; a negative relationship was found between depression and ADHD in addition to Depression and conduct disorder. Therefore, hypothesis 3, stating that ‘There will be a positive significant relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression’ can be partially accepted.

Objective-4: To determine the independent effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

Table 5

Showing the Independent effect (One-Way ANOVA) of ‘Level of teacher’s awareness of mental illness’ and ‘Gender’ on Eating disorders, Substance abuse, Anxiety, Depression, ADHD, and Conduct disorder among the samples (N=240)

Dependent Variables	Independent Variables	Sum of Squares	Mean Square	F	Sig.	Eta Squared
Eating Disorders	Teacher’s awareness of mental illness	2526.515	2526.515	468.700	0.000	.26
	Gender	6.706	6.706	0.419	0.01	.18
Substance Abuse	Teacher’s awareness of mental illness	1015.079	1015.079	337.785	0.000	.31
	Gender	1.811	1.811	0.249	0.01	.15
Anxiety	Teacher’s awareness of mental illness	2484.950	2484.950	449.629	0.002	.27
	Gender	2.619	2.619	0.164	0.001	.19
Depression	Teacher’s awareness of mental illness	2829.713	2829.713	462.548	0.001	.25
	Gender	21.644	21.644	1.205	0.01	.17
ADHD	Teacher’s awareness of mental illness	2962.420	2962.420	470.512	0.001	.27
	Gender	19.259	19.259	1.029	0.010	.21
Conduct Disorder	Teacher’s awareness of mental illness	2476.485	2476.485	477.020	0.000	.28
	Gender	11.102	11.102	0.712	0.011	.20

The One-Way ANOVA was computed to examine the independent effect of ‘levels of teacher’s awareness of mental illness’ and ‘Gender’ on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder among the samples, and findings were given in Table- 5.

(i) Independent effect of ‘levels of teacher’s awareness’ on observed dependent variables

(a) On Eating disorders: The findings of the present study evinced that the level of teacher’s awareness of mental illness had a 26% independent effect on Eating Disorder and significant at the .001 level ($F= 468.70$; $\mu = .26$; $p < .01$). This

finding is supported by previous studies where ‘teachers’ awareness of mental illness’ has an effect on prevalence (Yager & O’Dea, 2005), early diagnosis and appropriate intervention (Knightsmith et al., 2013), prevention of eating disorders in the school setting (Knightsmith et al., 2013 & 2014).

(b) On Substance Abuse: The results revealed that the levels of teacher’s awareness of mental illness had a significant independent effect ($F= 337.08$; $\mu = .31$; $p < .01$) with a 31% effect on substance abuse and is significant at the .01 level. This finding is reinforced by previous researches on the influence of highly aware teachers providing health education concerning substance abuse prevention and detection (Tobler & Stratton, 1997; Moreira et al., 2015; Chan et al., 2016).

(c) On Anxiety: The outcome of the present study demonstrated that the level of teacher’s awareness of mental illness had a 27% independent effect on Anxiety which is significant at the .01 level ($F= 449.63$; $\mu = .27$; $p < .01$) which was supported by a study led by Layne and associates (2006) where they determined that teachers were aware of symptoms of physiological anxiety, social anxiety, separation anxiety, and high overall anxiety, regardless of child age or gender. This influences the teachers in identifying the anxiety symptoms in the students and initiate appropriate intervention. The teachers' awareness of anxiety also affects anxiety reduction measures in the classroom (Ginsburg et al., 2022).

(d) On Depression: The results elucidates that the level of teacher’s awareness of mental illness had a 25% independent effect on Depression and significant at .01 level ($F= 462.548$; $\mu = .25$; $p < .01$). The present study findings indicate a 25% independent effect of the level of teacher’s awareness of mental illness on depression which was consistent with the idea that teacher’s high awareness about mental illness contributes to the increase in depression literacy on the students (Townsend et al., 2017; Miller et al., 2019; Khorrami et al., 2023).

(e) On ADHD: The results evinced that the level of teacher’s awareness of mental illness had a 27% independent effect on ADHD which is significant at the .01 level ($F= 470.512$; $\mu = .27$; $p < .01$). This finding is congruent with similar studies whereby the level of teachers’ awareness facilitates the development of a supportive learning environment for students with the disorder, lessen the impact of the disorder on their social and emotional development, and strengthen the

bond between educators, parents, and healthcare providers (Al-Sharbati et al., 2012). Moreover, teacher's awareness about ADHD increases their openness and support to the different treatment interventions (Elliott, 1988; Ohan et al., 2008).

(f) On Conduct Disorder: The result of the present study showed that the levels of teacher's awareness of mental illness had a 28% independent effect on Conduct Disorder and the impact is significant at the .01 level ($F= 477.020$; $\mu = .25$; $p < .01$). The finding is consistent with the existing literature that suggested that increased awareness of teachers on mental illness have a positive effect in terms of identifying the students' showing symptoms of conduct disorders, developing helpful attitudes and promoting psychosocial interventions (Khalil et al., 2020; Pinchess et al., 2023).

(ii) Independent effect of gender on observed variables

(a) On Eating Disorder: Gender had a 18% independent effect on Eating Disorder and significant at the .01 level ($F= 0.419$; $\mu = .18$; $p < .01$). This finding was supported by the American Psychiatric Association (2013) and Murray and associates (2017) who revealed that in the general population, the prevalence of EDs ranges between 1% and 5%, and men represent only between 17% and 43%. Hence, the prevalence of EDs is considered higher in women than in men. These differences in prevalence rates suggested that specific risk factors such as minority stress, sociocultural norms, and expectations may differentially affect risk for eating disorders according to gender (Bankoff & Pantalone, 2014; Dotan et al., 2021). Gender also has an effect on the clinical presentation of EDs (Nagata et al., 2020; Roberts et al., 2021). This impression was reinforced by several studies whereby body image concerns in men was often related to muscularity. Men are more frequently diagnosed with other specified or unspecified EDs than women (Lavender et al., 2017; Murray et al., 2017; Coelho et al., 2021; Ridout et al., 2021). Men may also be less likely to seek professional help for an ED, and when they do, symptoms are often more severe and have comorbidities more frequent when compared to women (Murray et al., 2017; Ridout et al., 2021). Vulnerability to stress is likely influenced by sex hormones which may contribute to gender difference in the development and coping with ED (Hildebrandt et al., 2010;

McCarthy et al., 2017; Fisher et al., 2018; VanRyzin et al., 2020; Culbert et al., 2021; Franceschini & Fattore, 2021).

(b) On Substance Abuse: Gender had a 15% independent effect on substance abuse which is significant at the .01 level ($F = 0.249$; $\mu = .15$; $p < .01$). Gender effect on substance abuse could be explained by the fact that women make up about one-third of the population with alcohol problems and slightly less than half of those who have problems with other drugs (Greenfield et al., 2003a) and reported problems of greater severity and experience more health-related consequences (Bradley et al., 1995). Men are more likely to drink more alcohol and are more likely than women to develop alcohol-related problems (Fillmore et al., 1997). Randall and colleagues (1999) are of the opinion that men are younger than women when they started drinking to intoxication. Gender also has an effect on the type of substances abused.

(c) On Anxiety: Gender had a 19 % independent effect on Anxiety and the impact is significant at the .01 level ($F = 0.164$; $\mu = .19$; $p < .01$). This finding was corroborated by a study conducted by McLean and associates (2011) suggesting that any anxiety condition had a lifetime and 12-month male: female prevalence ratio of 1:1.7 and 1:1.79, respectively, which evinced that gender had an effect on the onset of any type of anxiety disorder. Generalized Anxiety Disorder develops twice as often in women than in men (Kessler et al., 1994; Brawman-Mintzer, 1996). Gender, rather than environmental factors, was found to be more important in determining the risk factors for the development of Generalized Anxiety Disorder in women (Pigott, 1999).

(d) On Depression: Gender had a 17% independent effect on Depression which is significant at the .01 level ($F = 1.205$; $\mu = .17$; $p < .01$) which was supported by several existing studies. The global 12-month prevalence of major depressive disorder was 5.8% in women and 3.5% in men (Ferrari et al., 2013), the male-to-female ratio in depression is roughly 1:2 (Solomon et al., 2009). These indicates that the female gender was more susceptible to develop depression. Gender disparities emerged in the symptomatic courses of depression too. The difference in depressive symptoms across genders was mediated by chronic strain, low

mastery, and rumination, which were all more prevalent in women than in men (Nolen-Hoeksema et al., 1999).

(e) On ADHD: Gender had a 21% independent effect on ADHD and is significant at the .01 level ($F = 1.029$; $\mu = .21$; $p < .01$). This finding was reinforced by other studies in which during the preschool age range, prevalence rates was found to be more in boys than girls (McGee et al., 1990; Lewinsohn et al., 1993; Breton et al., 1999; Nolan et al., 2001; Romano et al., 2001). Gender specific variations in symptom manifestation were observed where boys predominantly exhibit externalized symptoms such as hyperactivity and impulsivity, whereas girls tend to display more internalized symptoms, including inattention, diminished self-esteem, and depression (Martel, 2013).

(f) On Conduct Disorder: Gender had a 20% independent effect on Conduct Disorder which is significant at the .01 level ($F = 0.712$; $\mu = .20$; $p < .01$). The earlier studies suggested that the conduct Disorder affects approximately 3% of school-aged children and is twice as common in males as in females (Fairchild et al., 2019). Conduct disorder in children has been linked to elevated testosterone levels (Stålenheim et al., 1998; Aromäki et al., 1999; Chance et al., 2000; Aromäki et al., 2002) which may explain why it is more prevalent in males.

Studies related to the independent effect of ‘levels of teacher’s awareness of mental illness’ and ‘Gender’ on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder was few and far between. This makes this present study more imperative to contribute to the existing knowledge. Overall findings highlighted a significant independent effect of the ‘levels of teachers awareness of mental illness’ and ‘gender’ on depression, anxiety, substance abuse, attention deficit hyperactivity disorder, conduct disorder and eating disorder among samples, and the finding suggest to accept hypothesis 4 which states that ‘There will be a significant independent effect of the ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

Objective-5: To examine the interaction effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

Table 6

Showing the Interaction effect (Two-Way ANOVA) of ‘Level of teacher’s awareness of mental illness and Gender’ on Eating disorders, Substance abuse, Anxiety, Depression, ADHD, and Conduct disorder among the samples (N=240)

Dependent Variables	Interaction Variables	Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Eating Disorders	Teacher awareness of mental illness and Gender	3354.571	3	1118.190	584.610	0.000	0.282
Substance Abuse	Teacher awareness of mental illness and Gender	1366.247	3	455.416	296.427	0.000	0.291
Anxiety,	Teacher awareness of mental illness and Gender	3276.774	3	1092.258	495.527	0.000	0.263
Depression	Teacher awareness of mental illness and Gender	3793.312	3	1264.437	611.045	0.000	0.286
ADHD	Teacher awareness of mental illness and Gender	3947.735	3	1315.912	610.088	0.000	0.291
Conduct Disorder	Teacher awareness of mental illness and Gender	3280.509	3	1093.503	602.689	0.000	0.385

The Two Way-ANOVA was employed to determine the interaction effect of ‘level of teacher awareness of mental illness’ and ‘Gender’ on Eating disorders, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct disorder among the samples as presented in Table- 6.

(i) *The interaction effect of ‘level of teacher’s awareness of mental illness’ and ‘Gender’:*

- (a) *On Eating disorder:*** ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 28% interaction effect on Eating Disorder which is significant at the .01 level ($F = 584.610$; $\mu = .28$; $p < .01$). Literature has shown that the teacher awareness of mental illness had an effect on the student’s mental health (Yager & O’Dea, 2005; Knightsmith et al., 2013), and male and female differences was also revealed (American Psychiatric Association, 2013; Murray et al., 2017; Bankoff & Pantalone, 2014 Dotan et al., 2021)
- (b) *On Substance Abuse:*** ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 29% interaction effect on substance abuse which was significant at the .01 level ($F = 296.427$; $\mu = .29$; $p < .01$). The finding is supported by existing studies that the level of teacher awareness of mental illness influences substance abuse (Tobler & Stratton, 1997; Moreira et al., 2015; Chan et al., 2016) and gender also affects substance abuse (Bradley et al., 1995; Fillmore et al., 1997; Greenfield et al., 2003).
- (c) *On Anxiety:*** ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 26% interaction effect on Anxiety and this effect is significant at the .01 level ($F = 495.527$; $\mu = .26$; $p < .01$). Ginsburg along with his partners (2022) and Layne and his associates (2006) indicated that teacher awareness of anxiety had an effect on their student’s mental health and there were differences between male and female students on anxiety (Brawman-Mintzer, 1996; Kessler et al., 1994; Pigott, 1999; McLean et al., 2011).
- (d) *On Depression:*** ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 29% interaction effect on Depression which is significant at the .01 level ($F = 611.045$; $\mu = .29$; $p < .01$). This finding was reinforced by several studies whereby the level of teacher awareness of mental illness (Townsend et al., 2017; Miller et al., 2019; Khorrami et al., 2023) and Gender (Nolen-Hoeksema et al., 1999; Solomon et al., 2009; Ferrari et al., 2013) had an effect on Depression.

(e) On ADHD: ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 29% interaction effect on ADHD and the impact is significant at the .01 level ($F= 610.088$; $\mu = .29$; $p < .01$). Teacher’s awareness about ADHD increases their openness and support to the different treatment interventions (Elliott, 1988; Ohan et al., 2008) and Gender had an influence on ADHD (McGee et al., 1990; Lewinsohn et al., 1993; Breton et al., 1999; Nolan et al., 2001; Romano et al., 2001). Adequate literature was not available relating to level of teacher’s awareness about ADHD and its effect on their student’s mental health. This was one of the reasons the present study was formed which will highlight the interaction effect on ADHD.

(f) On Conduct Disorder: The interaction of ‘Level of teacher awareness of mental illness’ and ‘Gender’ had a 38% effect on Conduct Disorder with a significance at the .01 level ($F= 0. 602.689$; $\mu = .38$; $p < .01$). The finding is consistent with the literature that indicated that increased awareness of teachers on mental illness has an effect in terms of identifying symptoms of conduct disorders (Khalil et al., 2020; Pinchess et al., 2023) and male and female differences in conduct disorders was also suggested (Fairchild et al., 2019; Chance et al., 2000; Aromäki et al., 2002). There were only a few literatures available relating to level of teacher’s awareness about conduct disorder and its effect on their student’s mental health. On this count, the present study was selected which will furnish the effect of teacher’s awareness on ADHD.

The overall results of the interaction effect of ‘level of Teacher awareness of mental illness’ and ‘Gender’ suggested the acceptance of hypothesis 5 - “There will be a significant interaction effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.”.

The next chapter, Chapter VI will contain Summary and Conclusion of the study.

CHAPTER – VI
SUMMARY AND CONCLUSION

The present study entitled “*effect of teacher’s awareness of mental illness on the mental health of their students*” aimed to examine the teacher’s awareness level of mental illness and its effect on the mental health of their students. The study focused on mental illness such as eating disorder, attention deficit hyperactivity disorder, conduct disorder, substance abuse, anxiety and depression.

The objectives of the study included: 1) To study any significant difference between students of Teacher with Low and High awareness of mental illness on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression; 2) To discern any significant difference on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression between male and female students; 3) To find out the relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 4) To determine the independent effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 5) To examine the interaction effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

It was hypothesized that: 1) Students under teachers with high awareness of mental illness will score lower on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression than students under teachers with low awareness of mental illness; 2) Male students will score lower on Eating Disorder, Anxiety and Depression but higher on Attention Deficit Hyperactivity Disorder, Conduct Disorder and Substance Abuse, than female students; 3) There will be a positive significant relationship between Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression; 4) There will be a significant independent effect of the ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating

Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 5) There will be a significant interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactivity Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

To achieve the objectives and hypothesis of the study, firstly, the list of high schools run by the Government of Mizoram and private or faith base were collected from the Directorate of School Education, Government of Mizoram. Secondly, 24 high schools were selected which comprised of six high schools from each Zones (three private and three government high schools) - Aizawl South, Aizawl North, Aizawl East and Aizawl West.

Four hundred eighty (480) teachers from the 24 high schools selected (six high schools from each Zone) were administered the Mental Illness Inventory for Teachers (Structured questionnaire; Lalrinhlui, 2021) which was constructed by the researcher based on ICD-10 and DSM-V. Ten High Schools, out of which Five High Schools comprised of Teachers with High Awareness of Mental Illness and another Five High Schools comprising of Teachers with Low awareness of Mental illness were selected on the basis of $M \pm 2SD$ of their mental illness awareness scores.

From the ten selected high schools, 240 high school students were selected for the final count which comprised of 120 students of teachers with high mental awareness (60 male and 60 female) and 120 students of teachers with low mental health awareness (60 male and 60 female) while ensuring equal match on age, address, family income, family size, and physical health condition which was done to control extraneous variables other than teacher mental health awareness and gender effect on student's mental health.

The design of the study was a 2x2 factorial design which comprised of 2 levels of teacher's awareness of mental illness (High Awareness of Mental Illness and Low Awareness of Mental Illness) and 2 genders (Male and Female). Thus, it can be

explained as such - 240 students {(120 students from the schools of teachers with high awareness of mental illness (60 male and 60 female) and 120 students from the school of teacher's with low awareness of mental illness (60 male and 60 female) students} were selected for the study.

A socio-demographic questionnaire was administered to all participants to assist in the identification of confounding variables that could affect the data. Mental Illness Inventory for teacher which was constructed by the researcher containing the symptoms of the six most common mental illnesses (Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder) among the adolescents and it was administered for screening of the teachers' level of mental illness awareness. The Eating Disorder Examination (EDE: Fairburn and Cooper 1993; Fairburn et al. 2008) was used to assess cognitive symptoms for the past 28 days and were rated on a 7-point Likert scale from 0 to 6, with higher scores representing more severe pathology. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; WHO, 2003) which was developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect psychoactive substance use and related problems in primary care patients. Generalized Anxiety Disorder Assessment (GAD-7: Spitzer et al., 2006) consisting of seven items measuring worry and anxiety symptoms. The Patient Health Questionnaire (PHQ; Spitzer et al, 1999) is the 9-item depression module from the full PHQ. Major depression is diagnosed if 5 or more of the 9 depressive symptom criteria have been present at least "more than half the days" in the past 2 weeks, and 1 of the symptoms is depressed mood or anhedonia. The Disruptive Behavior Disorder Rating Scale (DBD; Pelham et al., 1992) which was developed by Pelham and his colleagues is a 45-question screening measure, designed to identify symptoms of attention deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder in children and adolescents. The present study uses the DBDRS subscales, which are Attention-Deficit/Hyperactivity Disorder subscale and Conduct Disorder subscale.

The study started with the identification and selection of samples as per objectives. Procurement of necessary permission from concerned authorities was taken for use of the selected tools in the study. After the samples were identified, necessary permission was taken, and oral and written informed consent was procured from each study sample. The purpose of the study was explained to all the study participants and it was explained to them that they may withdraw from the study at any time without any penalty. Assurance was given to the participants that confidentiality would be maintained throughout the study. The participants were clearly informed about what they had to perform during the conduction of the scale. The demographic questionnaire was administered to all the participants and assisted in the identification of confounding variables that could affect the data. The administration of the tools was done to the selected samples with due care of instructions as given in the manual and APA Research Ethical Code (2002).

Subject-wise scores on the selected psychological scales and subscales were prepared for the whole samples. Results Analysis of the present study was done in a phased manner:

Checking of missing raw data and outlier: The raw data set was checked for missing raw data and extreme outliers. Since none was seen, further analysis was carried on.

The psychometric adequacies of the behavioural measures were analysed by employing SPSS 26 (Statistical Package for Social Sciences). Firstly, to check the psychometric adequacy of each scale used in the target population, the following were analysed: i) Reliability coefficients (Cronbach's Alpha) ii) Descriptive statistics consisting of Mean, SD, Skewness and Kurtosis were included for comparison of the test scores between the groups.

The first objective was to study any significant difference between students of Teachers with Low and High awareness of mental illness on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct Disorder. An independent t-test was used to ascertain this and the result

indicated that Students under teachers with high awareness of mental illness scored lower on Eating disorder, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct disorder than students under teachers with low awareness of mental health.

The second objective was to discern any significant difference on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct Disorder between male and female students. An independent t-test was employed and the results evinced that male students scored lower on eating disorder, anxiety and depression but higher on substance abuse, attention deficit hyperactivity disorder and conduct disorder than female students.

The third objective was to find out the relationship between Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct Disorder among the samples. The Pearsons' Correlation Coefficient was computed to determine any significant relationship between the selected mental disorders and the results confirmed that there was a positive significant relationship between Eating disorder, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder (ADHD) and Conduct disorder.

The fourth objective was to determine the independent effect of 'levels of teacher's awareness of mental illness' and 'Gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct Disorder among the samples. One-Way ANOVA was calculated and the overall results revealed that there was a significant independent effect of the 'levels of teachers' awareness of mental illness' and 'gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct Disorder among the samples.

The fifth objective was to examine the interaction effect of 'level of teacher's awareness of mental illness and gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder and Conduct Disorder among the samples. The Two Way-ANOVA was employed to determine the

interaction effect of 'level of teachers' awareness of mental illness and Gender' on the selected mental disorders and the findings suggested that there was a significant interaction effect of 'levels of teachers' awareness of mental illness and gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct Disorder among the samples.

Limitations of the study

The present study has been conducted successfully and achieved the objectives put forth for the study. However, it is not without limitations. The sample size was limited to high school students in selected high schools located in Aizawl City only and therefore the represented samples were not adequate for generalization. The study was able to include just the level of awareness and gender as independent variables. Apart from the type of school, age group, socio demographic variables, more independent variables were not included in the present study. Qualitative study was not done except for the structured questionnaire administered to the teachers for screening high and low awareness towards mental illness.

Suggestions for future research

Larger sample size from high schools located not only in Aizawl city but in other districts of Mizoram, would provide an in-depth information which will aid in the prevention, early detection and appropriate intervention for the students suffering from mental disorders.

Future research should attempt to include more independent variables such as age, childhood trauma, family dysfunction and peer pressure; and dependent variables such as other mental illnesses in order to provide a wider effect of independent variables.

A qualitative study could be performed on the teacher's awareness about mental illness and the prevalence of mental illness in the students to identify problems that happened in real life which was not covered by psychological scales.

Future study could also be directed towards developing structured teaching program on mental health awareness for both the teachers and students. This will contribute to the prevention of mental illness and promotion of mental health in adolescents by raising awareness and knowledge of key shareholders.

A study could be conducted on the prevalence of common mental disorders on school going adolescents to identify the magnitude of adolescent mental disorders in Mizoram. A comparative study could be conducted on the knowledge and attitude towards mental illness between government and private schools, different zones in Aizawl and different districts of Mizoram.

Significance and Implications of the study

The results of the present study revealed that the level of teacher awareness of mental illness have an influence on the student's mental health. Teachers can help in improving the mental health status of students by detecting preliminary signs of mental health concerns, making appropriate referrals to health professionals, and also by creating awareness on mental health problems among adolescents. The teachers will be able to perform this role only with an increased awareness about the mental illness commonly affecting the students.

There was a significant difference between male and female students in relation to specific mental disorders. These differences highlight the vulnerability of gender in terms of prevalence, risk factors, clinical manifestations, treatment modalities and prognosis of the illness. Teachers, school authorities and parents need to keep this in mind while caring for the adolescents at risk or suffering from mental illnesses.

The present study also disclosed that there was a significant relationship between the selected mental disorders prevalent in school going children. A student suffering from one mental disorder is at risk of developing another disorder, or two or more mental disorders may coexist in the student. This will affect the prevention and intervention strategies which the school and parents has to be aware of.

The findings of the present study can be employed as bases for highlighting the need of mental health and mental illness awareness among the teachers. The capability of teachers has to be enhanced to enable them to recognize mental health problems in children when given descriptions of children exhibiting common emotional and behavioral disorders in their students. NEP 2020 had recommended that schools should provide access to mental health professionals, including counsellors and psychologists, and ensure that they are trained to provide effective support to students. Schools should also develop and implement mental health promotion programs, including awareness campaigns and mental health literacy programs for students, teachers, and parents. Mental health education should also be included in the school curriculum to promote mental health literacy among students. Initiating and developing school-based interventions for mental illness along with training of teachers are of paramount importance for the prevention of mental illness and promotion of mental health. In line with the recommendation of NEP 2020, the findings of this study can be utilized for framing educational policy for solving youth mental problems in prevention and intervention for the target population in Mizoram and for the whole nation.

In conclusion, the study contributed to the existing academic literature about teachers' awareness about mental illness, namely, Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct Disorder, the effect of their awareness level on the mental health of their students. Research relating to the present study is very scarce and this will be a valuable addition to the existing literature.

APPENDICES

Informed Consent Form for Teachers

You are invited to participate in research topic on “Effect of Teacher’s Awareness of Mental Illness on Mental Health of their Student”. This is a research project being conducted by Ms. Lalrinhlui, Ph.D Scholar of Prof Zokaitluangi, Department of Clinical Psychology, Mizoram University. It should take approximately 1 hour to complete.

Your participation in this research is voluntary. You may refuse to take part in the research or exit the research at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about psychological conditions based on which I can give you suggestion how to cope with your problems, if there is any.

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life, some of the questions may be sensitive, some questions may cause emotional discomfort, some may be distressing to you as you think about your experiences.

Nowhere is your name written. Your answers will be stored in a password protected electronic format, not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

If you have questions at any time about the study or the procedures, you may contact my research supervisor, Professor Zokaitluangi via phone at 9436151606 or via email at zktluangi.psy@mzu.edu.in.

You have read the above information, kindly give our response and agreement:

- You voluntarily agree to participate
- You are 18 years of age or older

☐ Agree

Signature: _____

☐ Disagree

Thank You

Investigator: Ms. Lalrinhlui

Phone : 9436152467

SI No: _____

Socio – Demographic Datasheet for Teachers

1. Age: _____
2. Sex: _____
3. Permanent address: _____

4. Name of School served: _____
5. Type of school: Government / Private
6. Service length: Less than 5 yrs / 6 - 10 yrs / More than 10 yrs
7. Type of Appointment: Permanent / Contract / Guest
8. Physical Health Condition:
 - a) TPR : Normal / Not normal
 - b) BP : Normal / Not normal
 - c) Any illness : _____
9. Have you ever participated in any Mental Health/Mental Illness Awareness Programme in your school? Yes or No
10. Are there any guidelines provided in your school about mental health? Yes or No

Appendix-III

Mental Illness Awareness Inventory for Teachers (Lalrinhlui, 2021)

	Mental illness symptom Correct answer -1; not correct =0	Name of illness	Rate of familiarity	
1.	Angry outbursts, irritability or frustration, even over small matters		0	1
2.	Loss of interest or pleasure in most or all normal activities, such as sex, hobbies or sports		0	1
3.	Sleep disturbances, including insomnia or sleeping too much		0	1
4.	Tiredness and lack of energy, so even small tasks take extra effort		0	1
5.	Reduced appetite and weight loss or increased cravings for food and weight gain		0	1
6.	Feelings of worthlessness or guilt, fixating on past failures or self-blame		0	1
7.	Frequent or recurrent thoughts of death, suicidal thoughts, suicide attempts or suicide		0	1
8.	Unexplained physical problems, such as back pain or headaches		0	1
9.	Trouble thinking, concentrating, making decisions and remembering things		0	1
10.	Increased amounts of the substance to achieve intoxication or desired effect		0	1
11.	Markedly diminished effect with continued use of the same amount of the substance		0	1
12.	Manifested withdrawal syndrome for the substance		0	1
13.	Substance is taken to relieve or avoid withdrawal symptoms		0	1
14.	Substance is taken in larger amounts or over a longer period than intended		0	1
15.	Persistent desire or unsuccessful efforts to cut down or control substance use		0	1
16.	A great deal of time is spent in activities necessary to obtain the substance/ use the substance, or recover from its effects		0	1
17.	Important social, occupational, or recreational		0	1

	activities are given up or reduced because of substance use			
18.	Substance use is continued despite knowledge of having a persistent physical or psychological problem		0	1
19.	Restlessness or feeling keyed up or on edge		0	1
20.	Being easily fatigued		0	1
21.	Difficulty concentrating or mind going blank		0	1
22.	Irritability		0	1
23.	Muscle tension		0	1
24.	Sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)		0	1
25.	Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities		0	1
26.	Often has difficulty sustaining attention in tasks or play activity		0	1
27.	Often does not seem to listen when spoken to directly		0	1
28.	Often does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace		0	1
29.	Often has difficulty organizing tasks and activities		0	1
30.	Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort		0	1
31.	Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books or tools)		0	1
32.	Is often easily distracted by extraneous stimuli		0	1
33.	Is often forgetful in daily activities		0	1
34.	Often leaves seat in classroom or in other situations in which remaining seated is expected		0	1
35.	Often fidgets with hands or feet or squirms in seat		0	1
36.	Often has difficulty awaiting turn		0	1
37.	Often bullies, threatens, or intimidates others often initiates physical fights		0	1
38.	Has been physically cruel to people		0	1

39.	Has been physically cruel to animals		0	1
40.	Destruction of property		0	1
41.	Has deliberately destroyed others' property		0	1
42.	Often lies to obtain goods or favors or to avoid obligations		0	1
43.	Serious violations of rules		0	1
44.	Is often truant from school		0	1
45.	Has run away from home overnight at least twice while living in parental or parental surrogate home		0	1
46.	Has used a weapon that can cause serious physical harm to others		0	1
47.	Intense fear of gaining weight or becoming fat, even though underweight		0	1
48.	Recurrent episodes of binge eating		0	1
49.	Eating in a discrete period of time		0	1
50.	More amount of food than most people would eat during a similar period of time		0	1
51.	Lack of control, cannot stop eating or control what or how much one is eating		0	1
52.	Fasting or excessive exercise		0	1
53.	Self-induced vomiting to prevent weight gain		0	1
Total Score=				

Informed Consent Form for Students

You are invited to participate in research topic on “Effect of Teacher’s Awareness of Mental Illness on Mental Health of their Student”. This is a research project being conducted by Ms. Lalrinhlui, Ph.D Scholar of Prof Zokaitluangi, Department of Clinical Psychology, Mizoram University. It should take approximately 1 hour to complete.

Your participation in this research is voluntary. You may refuse to take part in the research or exit the research at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about psychological conditions based on which I can give you suggestion how to cope with your problems, if there is any.

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life, some of the questions may be sensitive, some questions may cause emotional discomfort, some may be distressing to you as you think about your experiences.

Nowhere is your name written. Your answers will be stored in a password protected electronic format, not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

If you have questions at any time about the study or the procedures, you may contact my research supervisor, Professor Zokaitluangi via phone at 9436151606 or via

email at zktluangi.psy@mzu.edu.in.

You have read the above information, kindly give our response and agreement:

- You voluntarily agree to participate
- Your parents/guardians have no objection in your participation in this study

☐ Agree

Signature: _____

☐ Disagree

Thank You

Investigator: Ms. Lalrinhlui

Phone : 9436152467

SI No: _____

Socio – Demographic Datasheet for Student

1. Age: _____
2. Sex: _____
3. Permanent address: _____

4. Name of School: _____

5. Type of school: Government / Private
6. Monthly Family Income: Rs. 10,000 – Rs, 20,000
 Rs. 20,001 – Rs, 30,000
 Rs. 30,001 – Rs, 40,000
 Rs. 40,001 – Rs, 50,000
7. Number of Family Members: 3 – 4 / 5 – 6 / 7 – 8 / 9 – 10
8. Physical Health Condition:
 - a) TPR : Normal / Not normal
 - b) BP : Normal / Not normal
 - c) Any illness : _____

Appendix-VI

The Eating Disorder Examination (EDE; Fairburn et al., 1993)

Instruction: Read the statement carefully. Give your response appropriate to your behaviour in the past 28 days							
Sl No	Questions on Eating	1-5	6-12	13-15	16-22	23-27	Everyday
1	Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight (whether or not you have succeeded)?						
2	Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your shape or weight?						
3	Have you tried to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have succeeded).						
4	Have you tried to follow definite rules regarding your eating (for example, a calorie limit) in						
5	Have you had a definite desire to have an empty stomach with the aim of influencing your shape or weight?						
6	Have you had a definite desire to have a totally flat stomach?						
7	Has thinking about food, eating or calories made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?						
8	Has thinking about shape or weight made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?						
9	Have you had a definite fear of losing control over eating?						
10	Have you had a definite fear that you might gain weight?						
11	Have you felt fat?						
12	Have you had a strong desire to lose weight?						
Total=							

Appendix-VII

The Disruptive Behavior Disorder Rating Scale - Attention-Deficit/Hyperactivity Disorder (ADHD; Pelham et al., 1992)

Instructions: Please answer the questions below. Rate yourself on each of the criteria shown using the scale on the right side of the page. As you answer each question, put a tick mark (✓) in the box that best describes how you have felt and conducted yourself over the past 6 months.					
Statements	Never	Rarely	Some	Often	Very often
How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?					
How often do you have difficulty getting things in order when you have to do a task that requires organization?					
How often do you have problems remembering appointments or obligations?					
When you have a task that requires a lot of thought, how often do you avoid or delay getting started?					
How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?					
How often do you feel overly active and compelled to do things, like you were driven by a motor?					
How often do you make careless mistakes when you have to work on a boring or difficult project?					
How often do you have difficulty keeping your attention when you are doing boring or repetitive work?					
How often do you have difficulty concentrating on what people say to you, even when they are speaking to you directly?					
How often do you misplace or have difficulty finding things at home or at work?					
How often are you distracted by activity or noise around you?					
How often do you leave your seat in meetings or other situations in which you are expected to remain seated?					
How often do you feel restless or fidgety?					
How often do you have difficulty unwinding and relaxing when you have time to yourself?					
How often do you find yourself talking too much when you are in social situations?					
When you're in a conversation, how often do you find yourself finishing the sentences of the people you are talking to, before they can finish them themselves?					
How often do you have difficulty waiting your turn in situations when turn taking is required?					
How often do you interrupt others when they are busy?					
Total Score=					

Appendix-VIII

The Disruptive Behavior Disorder Rating Scale-Conduct Disorder (DBD; Pelham et al., 1992)

Instruction: Check the column that best describes You. Please write tick mark to any items for which best describe you.					
	Statement	Not at All	Just a Little	Pretty Much	Very Much
1	has run away from home overnight at least twice or once without returning for a lengthy period				
2	often lies to obtain goods or favors or to avoid obligations has been physically cruel to people				
3	has stolen items of nontrivial value without confronting a victim (shoplifting, but without breaking and entering; forgery)				
4	often truant from school, beginning before age 13 years				
5	has deliberately destroyed others' property (other than by fire setting)				
6	often initiates physical fights with others (sibling, peers at school or in the neighborhood)				
7	has forced someone into violent activity				
8	often bullies, threatens, or intimidates others				
9	has been physically cruel to animals				
10	often stays out at night despite parental prohibitions, beginning before age 13 years				
11	has stolen while confronting a victim (purse snatching, extortion, armed robbery)				
12	has deliberately engaged in fire setting with the intention of causing serious damage				
13	has broken into someone else's house, building, or car				
14	skips school without permission				
15	has been physically cruel to people				
Total Scores=					

Appendix-IX

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; WHO, 2003)

	Instructions: 1. Read carefully 2. Give your response appropriate to your behavior.		
SI No	In your life, which of the following substances have you ever used? (NON- MEDICAL USE ONLY)	Yes	No
1	Tobacco products (cigarettes, chewing tobacco, cigars, etc.)		
2	Alcoholic beverages (beer, wine, spirits, etc.)		
3	Cannabis (marijuana, pot, grass, hash, etc.)		
4	Cocaine (coke, crack, etc.)		
5	Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)		
6	Inhalants (nitrous, glue, petrol, paint thinner, etc.)		
7	Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)		
8	Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)		
9	Opioids (heroin, morphine, methadone, codeine, etc.)		
10	Other - specify:		
Total Scores=			

Appendix-X

Generalised Anxiety Disorder Assessment (GAD-7: Spitzer et al., 2006)

Introduction: Read the instruction carefully.					
Over the last 2 weeks, how often have you been bothered by the following problems?					
Not At All = 0; Several Days = 1; Over Half The Days = 2; Nearly Every Day = 3					
1	Feeling nervous, anxious, or on edge	0	1	2	3
2	Not being able to stop or control worrying	0	1	2	3
3	Worrying too much about different things	0	1	2	3
4	Trouble relaxing	0	1	2	3
5	Being so restless that it's hard to sit still	0	1	2	3
6	Becoming easily annoyed or irritable	0	1	2	3
7	Feeling afraid as if something awful might happen	0	1	2	3
Total Scores=					

Appendices-XI

The Patient Health Questionnaire (PHQ: Depression Scale; Spitzer et al, 1999)

Introduction: Read the instruction carefully.					
Over the last 2 weeks, how often have you been bothered by the following problems?					
Not at All = 0; Several Days = 1; Over Half the Days=2; Nearly Every Day = 3					
1	Little interest or pleasure in doing things	0	1	2	3
2	Feeling down, depressed, or hopeless	0	1	2	3
3	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4	Feeling tired or having little energy	0	1	2	3
5	Poor appetite or overeating	0	1	2	3
6	Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8	Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9	Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3
Total Scores=					

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2. Lalrinhlui, Zokaitluangi & Konwar, Gitumoni. (2024). Generalized Anxiety Disorder, Depression and Eating Disorders among High School Students in Aizawl, Mizoram. International Journal For Multidisciplinary Research. Vol. 6, Issue 4, ISSN No: 2582-2160.
<https://doi.org/10.36948/ijfmr.2024.v06i04.26737>

PAPER PRESENTATIONS

1. “Conduct Disorder Correlate to Attention Deficit Hyperactivity Disorder among School Children”, in the 57th National and 26th International Conference of the Indian Academy of Applied Psychology (IAAP) on 27th January, 2022.
2. “Level of General Anxiety Disorder, Depression and Eating Disorders among High School Students”, in the International Conference organized by School of Medical and Paramedical Sciences, MZU on 16th November, 2023.
3. “Correlation between substance Use Disorders and Conduct Disorders Among School Students”, in the International Conference on Substance Use Disorder: Global Perspectives, Local Challenges and Integrated Solutions, organized by School of Medical and Paramedical Sciences, MZU on 30th May, 2025.

SEMINAR/CONFERENCE/WORKSHOP/TRAINING:

1. Workshop on ‘Techniques for Effective Dissemination of Scientific Findings and Quality Practice’ organized by Faculty of Nursing, Assam Down Town University from 25 – 27 March 2021.
2. International Webinar on “COVID 19: Disruption of Life Process-Impacting Mental Health”, organized by Department of Clinical Psychology, MZU on 3 June, 2021.
3. Training Course on “Management for Senior Nursing Administrators”, organized by NIHFW, New Delhi on 9 – 11 August, 2021.
4. National Webinar on “Mental Health in an Unequal World”, organized by Department of Clinical Psychology, MZU on 8 October, 2021.
5. Training course on “Research Methodology for Nursing Professionals”, organized by NIHFW, New Delhi on 6 – 10 December, 2021.

6. 57th National & 26th International Conference of Indian Academy of Applied Psychology (IAAP) organized by the Department of Clinical Psychology and Psychology, Mizoram University on 27th – 29th January, 2022.
7. National Workshop on “Research Methodology and Statistics in Behavioural Sciences”, organized by Institute of Advanced Studies in Education (IASE) on 21 – 25 February, 2022 (Night Schedule).
8. National E-Conference on “Integration of Nursing Education & Competency Based Clinical Practices”, organized by Datta MEGHE Institute of Medical Sciences, Maharashtra on 24 – 25 February, 2022.
9. 77th Trained Nurses’ Association of India (TNAI) National Conference with the theme ‘Invest in Nursing for Global Health’ on 30 & 31 January 2023 at Guwahati, Assam.
10. Workshop on ‘Professional Development for Staff nurses’ organized by College of Nursing, RIPANS during 27 – 31 March 2023.
11. 6th Regional Conference on “Enhancing Research Methodology: Empowering effective dissemination and utilization of research studies” organized by Assam Down Town University (ADTU) on 28 June 2023, Guwahati.
12. International Conference on “Emerging Trends in Psychological Interventions (Health and Allied Sciences): Future Prospects and Challenges” organized by School of Medical and Paramedical Sciences, Mizoram University, Aizawl on 14 -16 November, 2023.
13. National Conference on “Forensic Science: Moral, Ethical & Legal responsibilities of medical, nursing & paramedical professionals” organized by Rahman Hospitals Pvt Ltd and Rahman Institute of Nursing & Paramedical Sciences, Guwahati on 28 November 2023.

14. Workshop on “Empowering Nurses: Advancing Administration and Management Skills” from 13 – 17 May 2024 organized by College of Nursing, RIPANS.
15. National CNE program on “Leading with Vision: Strategies for Effective Leadership in Nursing” organized by College of Nursing, RIPANS on 7 June, 2024.
16. Successfully completed "Dte.GHS Mental Health Champion ECHO TOT Program" (13 modular virtual training) from 10 January to 11 March 2025, organized by Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India in collaboration with ECHO India.
17. Staff development Program on ‘Teaching methods’ organized by College of Nursing, RIPANS held during 24 – 28 march 2025.

As a Resource Person

1. Training of Nurses under the Central Sponsored Scheme of “Development of Nursing Services”, organized by Mizoram Nursing Council (MNC) on 1 July, 8 July, 12 July, 19 July & 29 July, 2022.
2. ‘Training of Nurses on Mental Health Self Care’ on the topic “Mental health in the workplace” on 5 July 2023 and “Conflict resolution” on 23 August 2023, organized by ECHO India and Mizoram Nursing Council.

PARTICULARS OF THE CANDIDATE

NAME OF THE CANDIDATE	:	LALRINHLUI
DEGREE	:	Doctor of Philosophy
DEPARTMENT	:	Nursing
TITLE OF THESIS	:	Effect of Teacher's Awareness of Mental Illness on Mental Health of their Student
DATE OF ADMISSION	:	7 th December, 2020
APPROVAL OF RESEARCH PROPOSAL		
1) DRC:	:	15 th April, 2021
2) BOARD OF STUDIES	:	20 th April, 2021
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ABSTRACT

EFFECT OF TEACHER'S AWARENESS OF MENTAL ILLNESS ON MENTAL HEALTH OF THEIR STUDENT

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

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**DEPARTMENT OF NURSING
SCHOOL OF MEDICAL AND PARAMEDICAL SCIENCES
OCTOBER, 2025**

**EFFECT OF TEACHER'S AWARENESS OF MENTAL ILLNESS
ON MENTAL HEALTH OF THEIR STUDENT**

BY

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**In partial fulfillment of the requirement of the Degree of
Doctor of Philosophy in Nursing of Mizoram University, Aizawl**

INTRODUCTION

“Health” is defined by W.H.O. as a “state of complete physical, mental and social well- being and not merely the absence of disease or infirmity”. Mental health is “a state of well- being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his or her community” (WHO, 2022).

There is a close link between physical health and mental health, as they affect each other directly and indirectly. Mental health is conceptualized with three components: *emotional well-being* - happiness, interest in life, and satisfaction; *psychological well-being* - liking most parts of one's personality, being good at managing the responsibilities of daily life, having good relationships with others, and being satisfied with one's own life; and *social well-being* - positive functioning and involve having something to contribute to society (social contribution), feeling part of a community (social integration), believing that society is becoming a better place for all people (social actualization) and that the way society works makes sense to them (social coherence).

The term ‘adolescence’ is derived from the Latin verb ‘adolescere’, meaning to grow up or to grow to adulthood; therefore, it refers to a development phase in the human life cycle that intervenes between childhood and adulthood (Kruger & Eldrie, 1994). It is the phase of life between childhood and adulthood, from ages 10 to 19, marked by rapid physical, cognitive and psychosocial development (UNICEF, 2024; WHO, 2024).

Mental illness affects almost half of the world's population, negatively affecting their relationships, sense of self, and capacity to go about their daily lives. Mizoram shows limited research but local data points to significant mental health concerns among students. In order to address this issue, the present study focused on six common mental disorders:

Eating Disorder:

A chronic disruption of eating or eating-related behavior that leads to

changed food consumption or absorption and severely compromises physical or psychosocial functioning is known as eating disorders (American Psychiatric Association, 2022). Eating disorders among adolescents can have significant physical health complications, including malnutrition, weakened immune system, and impaired growth. It may also result in social withdrawal, low self-esteem and academic difficulties. The awareness and detection of such symptoms by teachers is important for early referral and support.

Substance Abuse:

The World Health Organization defined substance abuse as the harmful or hazardous use of psychoactive substance, including alcohol and illicit drugs (WHO, 1997). Substance abuse among school-going adolescents can interfere with school attendance, learning outcomes and can lead to risky behaviours, conflict with family and school authorities. Early signs of substance abuse may go unnoticed if teachers are not aware of the behavioural changes and risk factors in students.

Anxiety:

Anxiety can be defined as an unpleasant emotional state for which the cause is either difficult to determine or is thought to be uncontrollable or inevitable (WHO, 2009). Anxiety during adolescence may manifest as excessive worry, restlessness, difficulty concentrating, irritability and physical symptoms such as headaches or stomach aches. Teachers' awareness of internalising problems like anxiety can help in identifying students who may not openly express their distress.

Depression:

Depression is a negative affective state, ranging from unhappiness and discontent to an extreme feeling of sadness, pessimism, and despondency, that interferes with daily life (APA, 2022). Depression can result in poor academic performance, withdrawal from peers and family, loss of interest in activities, changes in appetite and sleep patterns. Unrecognised depression in adolescence can have long-term consequences, including risk of self-harm and suicide.

Attention Deficit Hyperactive Disorder (ADHD):

ADHD is a neurodevelopmental disorder characterized by impairment in the levels of disorganization, inattention, and/or hyperactivity-impulsivity that are inconsistent with age or developmental level. ADHD often affects classroom behaviour, learning and peer relationships. Students with ADHD may have difficulty following instructions, completing tasks, sitting still or may disrupt classes, which can affect the learning environment for others. Teacher training and awareness play a crucial role in supporting such students through classroom strategies and referrals.

Conduct Disorder:

Conduct Disorder can be defined as consistent and persistent behaviours that violate the rights of others including aggression, vandalism, theft or that violate major age-appropriate societal norms or rules such as deceitfulness, truancy, running away from home in children and adolescents aged under 18. Students with conduct disorder may show frequent fighting, bullying, lying, or destruction of property, which affects school climate and safety. Teachers with adequate awareness can help manage such behaviour through early intervention and appropriate disciplinary and counselling referrals.

REVIEW OF LITERATURE

The literature shows that mental problems among children and adolescents are common and may have significant long-term health biopsychosocial consequences (Hossain et al., 2022). Early adolescence (11-14 years old) is a critical period for the development and onset of mental health issues, which may develop as diseases later in life if not managed early on (Solmi et al., 2022) and more than one-third of mental problems appear before the age of 14 years (Scheiner et al., 2022). Several studies have concluded that teachers often underestimate the prevalence of mental problems and have difficulty recognizing the symptoms of mental disorders in their class (Rothì et al., 2008; Daniszewski, 2013; Ibn Auf, 2023). Ibn Auf and colleagues (2023) found a significant association between teachers' awareness and the average number of pupils estimated by the teacher to have psychiatric problems.

When teaching students who have anxiety issues, the awareness levels of teachers are inconsistent and they were more consistent in identifying students with external behavioural issues rather than students with internal mental-health issues (Figueroa, 2013). Teachers' recognition of mental health problems in students and the threshold for reporting their concerns depends on the individual and not based on any formal knowledge of how to identify anxiety or depression risk factors in students (Trudgen & Lawn, 2011). Monserrat and colleagues (2024) reported that teachers' knowledge and experiences improved after the implementation of an eating disorder prevention program in the physical education classroom. School teachers are generally aware about the prevalence of substance abuse in adolescence. However, there is lack of awareness about the specific symptoms and complications of the different substances abused (Jailaxmi, 2016). The awareness level and knowledge of the teachers about ADHD are insufficient, ranging from poor to adequate; teaching experience and previous training had a positive bearing on knowledge which indicates that creating an awareness on ADHD is necessary (Shetty & Rai, 2014).

According to Safaan and associates (2017), 59% of teachers had poor knowledge and only 10.2% had adequate knowledge about attention deficit hyperactivity disorder. Singh and colleagues (2024) declared that teachers typically

have an average degree of awareness on the characteristics, symptoms, and diagnostic processes linked with conduct disorder, which may directly or indirectly help in the decrease of CD symptoms. Al Noimi's (2022) findings stated 63.3% of teachers accurately identified the indications and symptoms of behaviour disorders while 32.7% only provided right responses for kinds of conduct disorders.

There are consistent findings regarding gender differences in the prevalence of mental disorders, with girls and women generally showing higher rates of internalizing disorders such as anxiety and depression, and boys showing higher rates of externalizing disorders such as conduct disorder and ADHD (Rutter et al., 2003)

The literature also highlights relationships among the selected variables. Depression and anxiety often co-occur and are among the most prevalent psychiatric disorders among adolescents (Frances et al., 1992; Kessler et al., 2015). There is an association between anxiety and eating disorders (Swinbourne et al., 2007; Fehm et al., 2008). A significant correlation between substance abuse and ADHD was reported (Harstad et al., 2014; Luderer et al., 2021). Several studies have indicated the relationship between conduct disorder and substance use (Dalwani et al., 2014; Wymbs et al., 2014). Attention deficit hyperactivity disorder and conduct disorder co-occur frequently and have significant comorbidity (Fischer et al., 2002; Erskine et al., 2014). A study conducted by Shek and Ma (2011) revealed that low awareness and understanding of mental health issues among teachers contributed to higher levels of stress and poor mental health among students. The interaction between teachers' awareness level and students' gender plays a significant role in influencing the mental health outcomes of students (Zhang et al., 2024).

STATEMENT OF THE PROBLEM

The global community has evolved rapidly in the past few decades, particularly with the emergence of better forms of transportation, easier international movement, and the ground-breaking revolution in information technology (Gupta, 2014). These advancements, particularly the digital revolution, have a huge impact, either positive or negative, on the life of every youth throughout the world. This has presented additional mental health issues and significant challenges for mental health professionals.

Adolescence is a period of rapid physical, intellectual, emotional and social growth - a period of growing up. Physically, the boy or girl becomes an adult. There is intellectual growth towards a more abstract, mature mode of thinking and intelligence reaches its maximum during this period. Emotionally, the adolescent grows independent of parents and prepares himself for entering into other relationships that are needed in marriage, work and in the community. Sex consciousness develops and this influences the emotional as well as the intellectual activities of the individual. An adolescent has many variations in mood, variations between excessive bursts of energy and periods of laziness. They are extremely sensitive, self-conscious with a desire to be intellectually and emotionally independent. All these changes lead to confusion, worries and can ultimately result in the development of mental problems.

As children up to the age of 18, most adolescents are protected by their parents and under the Convention on the Rights of the Child. Yet, their vulnerabilities and needs are distinctly different from those of children and therefore often remain unaddressed. The world is home to 1.8 billion young people aged 10 - 24 years, contributing about one-fourth of the total world population; out of this, 1.3 billion are adolescents in the age group of 10 - 19 years, making up 16 per cent of the world's population as indicated by UNICEF (2024) and WHO (2024). An estimated 20% of adolescents worldwide are assumed to have mental, behavioural and psychological problems, with half of these issues beginning during the adolescent period (Kessler et al., 2005). According to WHO (2021), one in seven 10 – 19-year-

olds experiences a mental disorder, accounting for 13% of the global burden of disease in this age group. The worldwide prevalence rates for any mental disorder among adolescents were found to be 13.4% (Polanczyk et al., 2015), 13% (Verhulst & Koot, 1991), 12% (Verhulst & Koot, 1995) and 12% to 15% (Roberts et al., 1998).

The present study's targeted population are the students studying in Class X which is in the High School section, both from the state government managed High Schools and the Private Unaided High Schools located in Aizawl. The researcher did not come across any studies relating to the prevalence or epidemiology of adolescent's mental disorders nor any investigations about teachers' awareness of mental illness or mental health in Mizoram which displayed the dearth of literature in the state and the need to correct this neglect. In Mizoram, there are few researches done on depression and substance abuse. However, there are no research focusing on the awareness of teachers regarding mental illness in adolescents and its effect on the mental health of their students. Children are generally less able to express themselves in words; therefore, evidence of disturbance is based more on observations of behaviour made by parents, teachers and significant others. Data also reveals that adolescent's mental illness is prevalent in the state but due to the lack of awareness by the parents and teachers, it turns into a neglected part of the youth's development, preventing them from becoming a fruitful member of the society.

OBJECTIVES

- 1) To study any significant difference between students of Teacher with Low and High awareness of mental illness on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression.
- 2) To discern any significant difference on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression between male and female students.
- 3) To find out the relationship between Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 4) To determine the independent effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 5) To examine the interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

HYPOTHESES

- 1) Students under teachers with high awareness of mental illness will score lower on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression than students under teachers with low awareness of mental illness.
- 2) Male students will score lower on Eating Disorder, Anxiety and Depression but higher on Attention Deficit Hyperactivity Disorder, Conduct Disorder and Substance Abuse, than female students.
- 3) There will be a positive significant relationship between Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression.
- 4) There will be a significant independent effect of the 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.
- 5) There will be a significant interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

METHODS AND PROCEDURE

Sample

The samples for the study were selected following multi stage sampling and random sampling procedures. Firstly, List of high schools run by Government of Mizoram and private or faith based was collected from the Directorate of School Education, Government of Mizoram. Secondly, 24 high schools were selected which comprised of six high schools from each Zones (three private and three government high schools) - Aizawl South, Aizawl North, Aizawl East and Aizawl West. Thirdly, 480 teachers from the selected high schools were administered the Mental Illness Inventory for Teacher (Structured questionnaire; Lalrinhlui, 2021) which was constructed by the researcher based on ICD-10 and DSM-V.

Fourthly, 10 High Schools which comprised of Five High Aware of Mental health and Five Low aware of mental health were selected ($M \pm 2SD$). Fifthly, 500 high school students, 50 each from selected 10 high schools (five schools with high aware mental health and five schools with low aware mental health) with equal match on gender and socio-demographic variables (age, address, family income, family size, and physical health condition) were selected for evaluation on the selected psychological scales of the study. Sixthly, 240 high school students were selected for the final count which comprised 120 (60 male and 60 female) students of teachers with high mental illness awareness (STHMIA) and 120 (60 male and 60 female) from students of teachers with low mental illness awareness (STLMIA) and having equal match on age, address, family income, family size, and physical health condition.

Inclusion and Exclusion Criteria

A sample of High School teachers of Mizoram, employed on a regular basis, age range between 26 to 50 years of age, and graduate degree holders represented High School teachers. High School teachers of Mizoram who were not regular teacher, age range not between 26 to 50 years of age, below or above graduate degree were excluded. A sample of students in High School from the same school where the teacher samples were drawn, studying in class 10, age ranging between

14-18 years of age, settling in Aizawl city, family monthly income between Rs 10000 to 40000, three-ten family members, and not having any physical illness and good health condition served as sample in the study

Design of the Study

The design of the study was a 2x2 factorial design which comprised of 2 levels of teacher's awareness of Mental illness (High awareness and Low awareness) and 2 genders (male and female) of students.

Tools Used

The following tools were employed in the present study:

- (a) Informed Consent form- Teachers (Lalrinhlui, 2021)
- (b) Socio-demographic datasheet for teachers (Lalrinhlui, 2021)
- (c) Mental Illness Inventory for teachers (Structured questionnaire; Lalrinhlui, 2021)
- (d) Informed Consent form - Students (Lalrinhlui, 2021)
- (e) Socio-demographic datasheet for students (Lalrinhlui, 2021).
- (f) The Eating Disorder Examination (EDE; Fairburn et al., 1993)
- (g) The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; WHO, 2003)
- (h) Generalized Anxiety Disorder Assessment (GAD-7; Spitzer et al., 2006)
- (i) Patient Health Questionnaire (PHQ; Spitzer et al., 1999)
- (j) Disruptive Behavior Disorder Rating Scale (DBD; Pelham et al., 1992)

Data Collection Procedures

The researcher constructed structured questionnaires including (i) Informed consent form for the teachers and students (ii) Socio-demographic profile for the students and teachers, and (iii) Mental Illness Inventory for teachers (Structured questionnaire; Lalrinhlui, 2021). The selected tools were collected, appropriate permission was taken from the concerned authorities, and psychometric properties were checked for the target population with a pilot study.

Selection of teachers from different high school based on their mental health

awareness level was done. 240 samples were selected from identified 10 high school based on their level of mental health awareness as low and high aware, necessary permission were taken from school authorities, and informed consent was taken from all participants in the study. The physical health conditions were checked by the researcher as a health practitioner which included vital signs, height and weight; then psychological scales were administered individually with strict observance of APA ethics for research (2014), all responses were checked out for missing or invalid responses before collection and was ended with thanks.

RESULTS AND DISCUSSION

The present study aimed to examine the effect of teacher's awareness of mental illness on the mental health of their students. Mental health awareness level of teachers was screened using the Mental Illness Awareness Inventory and based on their scores, the teachers were categorized as high and low mental health awareness. A total of 240 high school students were selected from the high schools where the selected teachers were also serving as teachers. The students of teachers with High awareness and the students of teachers with Low awareness were compared on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder (ADHD) and Conduct Disorder.

The psychometric adequacies of the behavioural measures were analysed by employing SPSS 26 (Statistical Package for Social Sciences). The normality, homogeneity and reliability were calculated. The mean, standard deviation, skewness and kurtosis were computed. The reliability coefficient (Cronbach's Alpha) was employed and the internal consistency of the scales was found to be highly reliable as all were higher than .80; Eating Disorder ($\alpha = .89$), ADHD ($\alpha = .82$), Conduct Disorder ($\alpha = .81$), Substance Abuse ($\alpha = .84$), Anxiety ($\alpha = .86$) and Depression ($\alpha = .81$). The Levene's Test of Equality of variances was used to check the homogeneity of variances and the scales showed acceptable homogeneity. The results highlighted the appropriateness of using parametric statistics for further analysis.

The independent t-test was employed to find the significant mean difference between Students of Teachers with High Mental Illness Awareness (STHMIA) and Students of Teachers with Low Mental Illness Awareness (STLMIA) on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD and Conduct Disorder. Students of Teachers with Low Mental Illness Awareness scored significantly higher than Students of Teachers with High Mental Illness Awareness on Eating Disorder ($M = 34.33$; 27.83 ; $t = 21.64$; $p < .01$), Substance Abuse ($M = 7.61$; 3.49 ; $t = 18.37$; $p < .01$), Anxiety ($M = 15.88$; 6.43 ; $t = 21.20$; $p < .01$), Depression ($M = 16.82$; 8.94 ; $t = 21.50$; $p < .01$), ADHD ($M = 41.97$; 24.93 ; $t = 21.69$; $p < .01$) and Conduct Disorder ($M = 38.13$; 24.56 ; $t = 21.84$; $p < .01$).

The mean difference between male and female students on the variables was also tested using independent t-test. Male students scored lower than female students on Eating Disorder ($M = 28.94$; 33.22 ; $t = 24.85$; $p < .01$), Anxiety ($M = 7.75$; 14.55 ; $t = -23.92$; $p < .01$) and Depression ($M = 14.11$; 11.65 ; $t = 22.39$; $p < .01$) but scored higher than female students on Substance Abuse ($M = 6.46$; 4.63 ; $t = 21.84$; $p < .01$), ADHD ($M = 35.13$; 31.79 ; $t = 23.31$; $p < .01$) and Conduct Disorder ($M = 36.10$; 26.58 ; $t = 27.89$; $p < .01$).

The Pearson's Correlation Coefficient was employed to find the relationship between Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD and Conduct Disorder. Eating Disorder has significant positive relationship with Substance Abuse ($r = .42$; $p < .01$), Anxiety ($r = .45$; $p < .01$), Depression ($r = .47$; $p < .01$), ADHD ($r = .44$; $p < .01$) and Conduct Disorder ($r = .47$; $p < .01$). Substance Abuse has significant positive relationship with Anxiety ($r = .29$; $p < .01$), Depression ($r = .32$; $p < .01$), ADHD ($r = .33$; $p < .01$), and Conduct Disorder ($r = .33$; $p < .01$) significant at .01 levels. Anxiety had a positive relationship with Depression ($r = .32$; $p < .01$), ADHD ($r = .33$; $p < .01$), and Conduct Disorder ($r = .33$; $p < .01$). Depression had a negative relationship with ADHD ($r = -.39$; $p < .01$), and Conduct Disorder ($r = -.39$; $p < .01$). ADHD had a positive relationship with Conduct Disorder ($r = .39$; $p > .01$).

The one-way ANOVA was used to find the independent effect of levels of teacher's awareness of mental illness on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD and Conduct Disorder. The level of teacher's awareness of mental illness had a 26% independent effect on Eating Disorder and significant at the .001 level ($F = 468.70$; $\mu = .26$; $p < .01$). The level of teacher's awareness of mental illness had a 31% independent effect on Substance Abuse and significant at the .01 level ($F = 463.368$; $\mu = .31$; $p < .01$). The level of teacher's awareness of mental illness had a 27% independent effect on Anxiety significant at the .01 level ($F = 449.63$; $\mu = .27$; $p < .01$). The level of teacher's awareness of mental illness had a 25% independent effect on Depression significant at the .01 level ($F = 462.548$; $\mu = .25$; $p < .01$). The level of teacher's awareness of mental illness had a 27% independent effect on ADHD significant at the .01 level ($F = 470.512$; $\mu = .27$; $p < .01$). The level of teacher's awareness of mental illness had a 28% independent effect on Conduct Disorder significant at the .01 level ($F = 477.020$; $\mu = .28$; $p < .01$).

The two-way ANOVA was used to find the interaction effect of levels of teacher's awareness of mental illness and gender on Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD and Conduct Disorder. The level of teacher awareness of mental illness and gender had a 28% interaction effect on Eating Disorder which is significant at the .01 level ($F = 584.610$; $\mu = .28$; $p < .01$). The level of teacher awareness of mental illness and Gender had a 29% interaction effect on substance abuse which was significant at the .01 level ($F = 296.427$; $\mu = .29$; $p < .01$). The Level of teacher awareness of mental illness and Gender had a 26% interaction effect on Anxiety and this effect is significant at the .01 level ($F = 495.527$; $\mu = .26$; $p < .01$). The level of teacher awareness of mental illness and gender had a 29% interaction effect on Depression significant at the .01 level ($F = 611.045$; $\mu = .29$; $p < .01$). The level of teacher awareness of mental illness and gender had a 29% interaction effect on ADHD significant at the .01 level ($F = 610.088$; $\mu = .29$; $p < .01$). The level of teacher awareness of mental illness and gender had a 38% interaction effect on Conduct Disorder significant at the .01 level ($F = 602.689$; $\mu = .38$; $p < .01$).

SUMMARY AND CONCLUSION

The present study entitled “*effect of teacher’s awareness of mental illness on the mental health of their students*” aimed to examine the teacher’s awareness level of mental illness and its effect on the mental health of their students. The study focused on mental illness such as eating disorder, attention deficit hyperactive disorder, conduct disorder, substance abuse, anxiety and depression.

The objectives of the study included: 1) To study any significant difference between students of Teacher with Low and High awareness of mental illness on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression; 2) To discern any significant difference on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression between male and female students; 3) To find out the relationship between Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 4) To determine the independent effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 5) To examine the interaction effect of ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

It was hypothesized that: 1) Students under teachers with high awareness of mental illness will score lower on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression than students under teachers with low awareness of mental illness; 2) Male students will score lower on Eating Disorder, Anxiety and Depression but higher on Attention Deficit Hyperactivity Disorder, Conduct Disorder and Substance Abuse, than female students; 3) There will be a positive significant relationship between Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression; 4) There will be a significant independent effect of the ‘levels of teacher’s awareness of mental illness’ and ‘gender’ on Eating

Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples; 5) There will be a significant interaction effect of 'levels of teacher's awareness of mental illness' and 'gender' on Eating Disorder, Attention Deficit Hyperactive Disorder, Conduct Disorder, Substance Abuse, Anxiety and Depression among the samples.

To achieve the objectives and hypothesis of the study, firstly, the list of high schools run by the Government of Mizoram and private or faith base were collected from the Directorate of School Education, Government of Mizoram. Secondly, 24 high schools were selected which comprised of six high schools from each Zones (three private and three government high schools) - Aizawl South, Aizawl North, Aizawl East and Aizawl West.

480 teachers from the 24 high schools selected (six high schools from each Zone) were administered the Mental Illness Inventory for Teachers (Structured questionnaire; Lalrinhlui, 2021) which was constructed by the researcher based on ICD-10 and DSM-V. Ten High Schools, out of which Five High Schools comprised of Teachers with High Awareness of Mental Illness and another Five High Schools comprising of Teachers with Low awareness of Mental illness were selected on the basis of $M \pm 2SD$ of their mental illness awareness scores.

From the ten selected high schools, 240 high school students were selected for the final count which comprised of 120 students of teachers with high mental awareness (60 male and 60 female) and 120 students of teachers with low mental health awareness (60 male and 60 female) while ensuring equal match on age, address, family income, family size, and physical health condition which was done to control extraneous variables other than teacher mental health awareness and gender effect on student's mental health.

The design of the study was a 2x2 factorial design which comprised of 2 levels of teacher's awareness of mental illness (High Awareness of Mental Illness and Low Awareness of Mental Illness) and 2 genders (Male and Female). Thus, it can be explained as such - 240 students {(120 students from the schools of teachers with high awareness of mental illness (60 male and 60 female) and 120 students from

the school of teacher's with low awareness of mental illness (60 male and 60 female students} were selected for the study.

A socio-demographic questionnaire was administered to all participants to assist in the identification of confounding variables that could affect the data. Mental Illness Inventory for teacher which was constructed by the researcher containing the symptoms of the six most common mental illnesses (Eating Disorder, Substance Abuse, Anxiety, Depression, ADHD, and Conduct Disorder) among the adolescents and it was administered for screening of the teachers' level of mental illness awareness. The Eating Disorder Examination (EDE; Fairburn et al, 1993) was used to assess cognitive symptoms for the past 28 days and were rated on a 7- point Likert scale from 0 to 6, with higher scores representing more severe pathology. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; WHO, 2003) which was developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect psychoactive substance use and related problems in primary care patients. Generalized Anxiety Disorder Assessment (GAD-7; Spitzer et al., 2006) consisting of seven items measuring worry and anxiety symptoms. The Patient Health Questionnaire (PHQ; Spitzer et al, 1999) is the 9-item depression module from the full PHQ. Major depression is diagnosed if 5 or more of the 9 depressive symptom criteria have been present at least "more than half the days" in the past 2 weeks, and 1 of the symptoms is depressed mood or anhedonia. The Disruptive Behavior Disorder Rating Scale (DBD; Pelham et al., 1992) which was developed by Pelham and his colleagues is a 45-question screening measure, designed to identify symptoms of attention deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder in children and adolescents. The present study uses the DBDRS subscales, which are Attention-Deficit/Hyperactivity Disorder subscale and Conduct Disorder subscale.

The study started with the identification and selection of samples as per objectives. Procurement of necessary permission from concerned authorities was taken for use of the selected tools in the study. After the samples were identified, necessary permission was taken, and oral and written informed consent was procured from each study sample. The purpose of the study was explained to all the study

participants and it was explained to them that they may withdraw from the study at any time without any penalty. Assurance was given to the participants that confidentiality would be maintained throughout the study. The participants were clearly informed about what they had to perform during the conduction of the scale. The demographic questionnaire was administered to all the participants and assisted in the identification of confounding variables that could affect the data. The administration of the tools was done to the selected samples with due care of instructions as given in the manual and APA Research Ethical Code (2002).

Subject-wise scores on the selected psychological scales and subscales were prepared for the whole samples. Results Analysis of the present study was done in a phased manner:

Checking of missing raw data and outlier: The raw data set was checked for missing raw data and extreme outliers. Since none was seen, further analysis was carried on.

The psychometric adequacies of the behavioural measures were analysed by employing SPSS 26 (Statistical Package for Social Sciences). Firstly, to check the psychometric adequacy of each scale used in the target population, the following were analysed: i) Reliability coefficients (Cronbach's Alpha) ii) Descriptive statistics consisting of Mean, SD, Skewness and Kurtosis were included for comparison of the test scores between the groups.

The first objective was to study any significant difference between students of Teachers with Low and High awareness of mental illness on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder, and Conduct Disorder. An independent t-test was used to ascertain this and the result indicated that Students under teachers with high awareness of mental illness scored lower on Eating disorder, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder and Conduct disorder than students under teachers with low awareness of mental health.

The second objective was to discern any significant difference on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive

Disorder and Conduct Disorder between male and female students. An independent t-test was employed and the results evinced that male students scored lower on eating disorder, anxiety and depression but higher on substance abuse, attention deficit hyperactive disorder and conduct disorder than female students.

The third objective was to find out the relationship between Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder and Conduct Disorder among the samples. The Pearsons' Correlation Coefficient was computed to determine any significant relationship between the selected mental disorders and the results confirmed that there was a positive significant relationship between Eating disorder, Substance abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder (ADHD) and Conduct disorder.

The fourth objective was to determine the independent effect of 'levels of teacher's awareness of mental illness' and 'Gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder and Conduct Disorder among the samples. One-Way ANOVA was calculated and the overall results revealed that there was a significant independent effect of the 'levels of teachers' awareness of mental illness' and 'gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder, and Conduct Disorder among the samples.

The fifth objective was to examine the interaction effect of 'level of teacher's awareness of mental illness and gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder and Conduct Disorder among the samples. The Two Way-ANOVA was employed to determine the interaction effect of 'level of teachers' awareness of mental illness and Gender' on the selected mental disorders and the findings suggested that there was a significant interaction effect of 'levels of teachers' awareness of mental illness and gender' on Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder, and Conduct Disorder among the samples.

LIMITATIONS OF THE STUDY

The present study has been conducted successfully and achieved the objectives put forth for the study. However, it is not without limitations. The sample size was limited to high school students in selected high schools located in Aizawl City only and therefore the represented samples were not adequate for generalization. The study was able to include just the level of awareness and gender as independent variables. Apart from the type of school, age group, socio demographic variables, more independent variables were not included in the present study. Qualitative study was not done except for the structured questionnaire administered to the teachers for screening high and low awareness towards mental illness.

SUGGESTIONS FOR FUTURE RESEARCH

Larger sample size from high schools located not only in Aizawl city but in other districts of Mizoram, would provide an in-depth information which will aid in the prevention, early detection and appropriate intervention for the students suffering from mental disorders.

Future research should attempt to include more independent variables such as age, childhood trauma, family dysfunction and peer pressure; and dependent variables such as other mental illnesses in order to provide a wider effect of independent variables.

A qualitative study could be performed on the teacher's awareness about mental illness and the prevalence of mental illness in the students to identify problems that happened in real life which was not covered by psychological scales.

Future study could also be directed towards developing structured teaching program on mental health awareness for both the teachers and students. This will contribute to the prevention of mental illness and promotion of mental health in adolescents by raising awareness and knowledge of key shareholders.

A study could be conducted on the prevalence of common mental disorders

on school going adolescents to identify the magnitude of adolescent mental disorders in Mizoram.

A comparative study could be conducted on the knowledge and attitude towards mental illness between government and private schools, different zones in Aizawl and different districts of Mizoram.

SIGNIFICANCE AND IMPLICATIONS OF THE STUDY

The results of the present study revealed that the level of teacher awareness of mental illness have an influence on the student's mental health. Teachers can help in improving the mental health status of students by detecting preliminary signs of mental health concerns, making appropriate referrals to health professionals, and also by creating awareness on mental health problems among adolescents. The teachers will be able to perform this role only with an increased awareness about the mental illness commonly affecting the students.

There was a significant difference between male and female students in relation to specific mental disorders. These differences highlight the vulnerability of gender in terms of prevalence, risk factors, clinical manifestations, treatment modalities and prognosis of the illness. Teachers, school authorities and parents need to keep this in mind while caring for the adolescents at risk or suffering from mental illnesses.

The present study also disclosed that there was a significant relationship between the selected mental disorders prevalent in school going children. A student suffering from one mental disorder is at risk of developing another disorder, or two or more mental disorders may coexist in the student. This will affect the prevention and intervention strategies which the school and parents has to be aware of.

The findings of the present study can be employed as bases for highlighting the need of mental health and mental illness awareness among the teachers. The capability of teachers has to be enhanced to enable them to recognize mental health problems in children when given descriptions of children exhibiting common

emotional and behavioral disorders in their students. NEP 2020 had recommended that schools should provide access to mental health professionals, including counsellors and psychologists, and ensure that they are trained to provide effective support to students. Schools should also develop and implement mental health promotion programs, including awareness campaigns and mental health literacy programs for students, teachers, and parents. Mental health education should also be included in the school curriculum to promote mental health literacy among students. Initiating and developing school- based interventions for mental illness along with training of teachers are of paramount importance for the prevention of mental illness and promotion of mental health. In line with the recommendation of NEP 2020, the findings of this study can be utilized for framing educational policy for solving youth mental problems in prevention and intervention for the target population in Mizoram and for the whole nation.

In conclusion, the study contributed to the existing academic literature about teachers' awareness about mental illness, namely, Eating Disorder, Substance Abuse, Anxiety, Depression, Attention Deficit Hyperactive Disorder, and Conduct Disorder, the effect of their awareness level on the mental health of their students. Research relating to the present study is very scarce and this will be a valuable addition to the existing literature.

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