ASSESSMENT OF GENERAL WELL-BEING

AND

PREVALENCE OF MENTAL HEALTH ISSUES AMONG

EARLY ADOLESCENTS

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CERTIFICATE

I hereby certify that the dissertation prepared and submitted by Jumana Haseen.A., titled *"Assessment of General Well-Being and Prevalence of Mental Health Issues among Early Adolescents"* is her original investigation, which she has carried out under my guidance and supervision.

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DECLARATION

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INTRODUCTION

CHAPTER 1

INTRODUCTION

Youngsters advance through various processes and organize their lives during their trip to adulthood. Early adolescence is broadly perceived as an essential period that will have an effect and impact on the youngster's life (Public Health England, 2015). Between the ages of 10 and 14 years, early adolescents encounter numerous progressions which may have an effect on their prosperity decidedly or adversely.

The change from primary to secondary school is a pivotal progress that offers a chance to provide help and counsel (Evangelou et al., 2008). There is great confirmation that the individuals are unequivocally impacted by factors that work amid these years, especially as they take more control of their own well-being and prosperity including settling on conclusion and decisions about their well-being. Formatively, physically, and socially, youth and puberty are seasons of incredible change, and factors that are negative to emotional wellness amid these urgent years should not go unnoticed (Coulter, 2014).

Early adolescence is viewed as the basic transitional time that occurs as a result of the large number of changes in the self and nature happening at the same time (Hamburg, 1974). According to Piaget's cognitive theory, early adolescence comes under the formal operative stage. The cognitive development and working takes an exceptionally modern shape at this phase as the child figures out how to manage deliberation by intelligent reasoning. In reality he figures out how to use the device of imagery as viably as conceivable during the time spent on idea and critical thinking. The adolescent starts to build connections between solid activities and between images. The early adolescent now starts to value that some speculative issues can be solved rationally by utilizing rules. Consequently inventive angles in the adolescent are much obvious amid this age. They might be occupied with managing things that don't exist truly (Mangal, 2002).

Pubertal increments in gonadal hormones are a sign of immaturity, in spite of the fact that there is little proof for a straight forward relationship of these hormones with behavioural change amid youth. Unmistakable formative changes are seen in prefrontal cortex and limbic mind systems of young people over an assortment of

animal categories, modifications that incorporate an obvious move to be determined amongst mesocortical and mesolimbic dopamine frameworks. Formative changes in these stressor-delicate areas, which are basic for crediting motivation remarkable quality to drugs and other boosts, likely add to the novel attributes of youthfulness (Spear, 2000).

According to Erikson's theory of psychosocial development, early adolescence is marked with the crisis of identity vs. role confusion. Issues of identity, come into power amid the adolescence, however they may keep on being re-examined and altered for the duration of the life. (Fernandez-Ballesteros, 2002). The sudden changes in their bodies and mental working and modified request of the general public force them to make inquiries of themselves like, who am I? What have I move toward becoming? Am I a similar individual I used to be? (Mangal, 2002).

Mental health is a level of psychological well- being, or a nonappearance of dysfunctional behaviour. In 2014,World Net Search , Princeton university defined mental health as the mental condition of somebody who is working at a palatable level of emotional and behavioural alteration. According to the World Health Organization (WHO), mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, inter-generational dependence, and self-actualization of one's intellectual and emotional potential, among others." (WHO, 2001).

Psychological well-being can be viewed as an insecure continuum, where a person's emotional well-being may have a wide range of conceivable values (Keyes, 2002). Mental wellbeing is by and large seen as a constructive property, regardless of whether the individual does not have any analysed psychological well-being condition. This meaning of psychological well-being features passionate prosperity, the ability to carry on with a full and imaginative life, and the adaptability to manage life's inescapable difficulties.

As a component of one's general well-being, mental and enthusiastic wellbeing or prosperity is an important condition to enable one to oversee one's life effectively. It gives him or her ability to live in satisfaction of what he or she needs to accomplish in agreement to the accessible assets. This condition likewise gives an individual the ability to be versatile to the anxieties he meets and to react to these difficulties without

compromising his prosperity. This additionally makes him productive for himself and his group. The period is critical as it influences all that one does how one rests, what one eats, the hazard one will take and the kinds of things one does to unwind and appreciate one self (Kumari, 2012).Various studies indicate that mental health and well-being are found to be associated with each other.

Worries is considered as a person's feeling of fear, or sense of distress (Griff, 2014). Borkovec and others(1983), defined worrying as a chain of thoughts and images negatively uncontrollable; it represents an attempt to engage in mental problem solving on an issue whose outcome is uncertain but contains the possibility of one or more negative outcomes: consequently worry is related to fear processes (Wells, 2002). Worries usually centre on school and social concerns. Worries mainly revolve around personal appearance, social acceptance, popularity, grades, performing in public (Fahlberg & Vera, 2012).

Sadness is a state of mournful sorrow (Pilgrim, 2009). It is a feeling that individuals of any age and societies encounter now and then. Sadness includes enthusiastic inconvenience, dormancy and absence of delight or enthusiasm for charming exercises. Amid puberty, teenagers encounter serious times of pity, which may incorporate misery and dejection, and negative emotions about one's self. If these side effects continue for over two weeks and include different indications, this might be an indication of psychological sickness (Lerner, Lerner, & Finkelstein, 2001).

Hyperactivity is characterized by higher than typical level of movement. Individuals who are hyperactive dependably appear to be in movement. They can't sit still, they may dash around or talk ceaselessly. Sitting still through a lesson can be an unimaginable errand. They may roam around the room, squirm in their seats, squirm their feet, touch everything, or boisterously tap a pencil. They may likewise feel seriously fretful (Edwards & Sheil, 2017).

Conduct is characterized as a method for acting and acting, a definition that incorporates a level of good judgment. Conduct disorders implies on several behavioural patterns that contradicts acknowledged social guidelines. In children and adolescents it may be expressed in forms of temper tantrums and persistent disobedience and persistence in such behaviour can lead to serious acts of robbery,

brutality and assault. Conduct issues is characterized by the violation of the privileges of others and social standards (INSERM Collective Expertise Centre, 2005).

Eating disorders are being more prevalent among the adolescents these days. It is a serious and often fatal illness that alters a person's eating behaviours. Fixations on nourishment, body weight, and shape may likewise flag a dietary issue. Basic eating disorders may include anorexia nervosa, bulimia nervosa, and binge-eating disorder. Individuals with anorexia nervosa may consider themselves to be overweight, notwithstanding when they are hazardously underweight. Individuals with anorexia nervosa regularly measure themselves over and again, seriously limit the measure of food they eat, and eat little amounts of certain foods only. Anorexia nervosa has the most noteworthy death rate of any psychological issue. Individuals with bulimia nervosa consume large amount of food frequently and has got a feeling an absence of control over these episodes. Individuals with binge eating disorder lose control over their diet as a result of which they tend to be obese or overweight (National Institute of Mental Health, 2013).

1.1. Relevance of the Study

Early adolescence is a critical period largely considered as a phase of identity crisis. They generally involve themselves in asking the questions like I, Me, Myself? Who am I? What decision should I make and what is my personal space and freedom?

Dr. Maria Montessori, the educator and founder of the Montessori Method of Education suggests that adolescence is characterized by a phase full of expectations, need for development of self-confidence and creativity. She suggests that the child might respond impatiently and becomes sensitive to rudeness and humiliations. When this change from child to an adolescent is not given its due diligence and care, the outcome would be disastrous.

The onset of social media and an always online- mobile community has given newer dimensions to the psychological impact of this age group. Thus an understanding on the teen years and their mental health issues is very important. There are only very few studies related to mental health issues and overall wellbeing among adolescents of Kerala. On this note this research, is an endeavour to assess, examine and discover the relationship between well-being, prevalence of mental health issues such as worries,

sadness, hyperactivity, conduct issues, and eating disorders. This Therefore this study would provide an insight on the prevalence and extent of mental health issues among adolescents.

1.2. Aim

The aim of the study was to assess the general well-being and the prevalence of mental health issues among early adolescents.

Objectives

1.2.1. General objectives

- To analyse the level of general well- being among early adolescents.
- To study the prevalence of various mental health issues during early adolescence.
- To explore the symptoms of various mental health issues among early adolescents.

1.2.2. Specific objectives

- To find out the mean difference in the score of well-being among early adolescent boys and girls.
- To determine the gender differences in the symptoms of prevalence of mental health issues among early adolescents.
- To categorize early adolescents based on their various mental health issues; worries, sadness, hyperactivity, conduct issues.
- To study the extent of mental health issues (worries, sadness, hyperactivity and conduct issues) among selected early adolescents.
- To find out the mean difference in the prevalence of selected mental health issues (worries, sadness, hyperactivity, conduct issues and eating disorders)among early adolescent boys and girls.
- To find out the correlation between overall wellbeing with that of Worries, Sadness, Hyperactivity, Conduct issues.
- To find out the relationship between the five domains of EPOCH measure of adolescent well-being and Worries, Sadness, Hyperactivity, Conduct issues.

- To analyse the relationship between the five domains of EPOCH measure of adolescent well-being.

- To analyse the relationship between various mental health issues.

- To study the influence of socio- demographic details such as type of family, number of sibling, parental education, parental occupation, family economic status on the various mental health issues.

1.3. Assumptions

- There is significant difference in Over-all well-being, Worries, Sadness, Hyperactivity, Conduct issues, Eating disorders between early adolescent boys and girls.

- There is chance for correlation between overall wellbeing and various mental health issues like worries, sadness, hyperactivity, conduct issues and eating disorder.

- There exists a correlation between various domains of wellbeing and various mental health issues.

- There is a relationship between the domains of the EPOCH measure of adolescent well-being.

REVIEW OF LITERATURE

CHAPTER 2

REVIEW OF LITERATURE

A literature review is an idea, decisive abstract of published research literature related to a subject under consideration for research (Mishra & Alok, 2011).

The literature relating to the study **"Assessment of General Well-Being and Prevalence of Mental Health Issues among Early Adolescents"** is given under the following subheadings:-

2.1 Definition, Meaning and Characteristics

    2.1.1   Early adolescents

    2.1.2   Mental Health

    2.1.3   General well being

2.2 Importance of Mental Health and Well-being among Early Adolescents

2.3 Prevalence of Mental Health Issues among Early Adolescents

    2.3.1   Prevalence of Sadness or depression

    2.3.2   Prevalence of Worries or anxiety

    2.3.3   Prevalence of Hyperactivity

    2.3.4   Prevalence of Conduct issue

    2.3.5   Prevalence of Eating disorder

2.4 Factors Influencing Mental Health and Well-being

    2.4.1   Family influences

    2.4.2   Influence of peers

    2.4.3   Influence of media

2.1 Definition, Meaning, and Characteristics

2.1.1 Early adolescence:

Authors, clinicians and theorists have slightly differ on their chronological definition of various sub stages of adolescence. In 2009, 2002, Nienstein and others; Steinberg labels early adolescence as a life stage between 10 to 13 years. Early adolescence as a period between 10 years and 14 years. (UNICEF, 2011).

Studies have reported that biology and culture are considered to be the progressive criteria for early adolescence. That is, biologically, pubertal changes starts at a mean age of 11 years (American Psychological Association, 2002). Culturally, an 11 year old who enters into adolescence are likely to be engaged in more meticulous academic expectation, romantic relationships and increased tendency to gain independence.

Major physical changes occurs during this period and these changes are quite obvious. A study conducted by Ellis & Garber(2000) suggested that the pubertal timing may vary among individuals. Puberty and development of secondary sexual features is found to act as an origin for anxiety. Some early adolescents reacts to these changes as delightfully or enthusiastically.

Even though the internal changes are less apparent, it demands for researchers' attention. Studies in neuroscience reveals that various electrical and physiological changes occur in the brain during early adolescence. These changes can have an impact on the physical, social, emotional and cognitive capability.

The early adolescent girls who undergo pubertal changes on an average of 12-18 months prior to boys also indicates similar changes in the brain development. The onset for the development of brain's frontal lobe that regulates reasoning and decision making skills is marked during the early adolescent years. The level of impulsivity and uncritical thinking pattern is observed for longer period in early adolescent boys than that of girls. This results in the general perception that girls mature much before than that of the boys.

Piaget's theory of cognitive development refers early adolescence as 'formal operative stage' characterized by abstract and logical thinking. According to Piaget,

emergence of a more scientific thought, hypothetical testing, manipulation of objects or ideas and problem solving by using abstract thinking happens during early adolescence (Urdan & Klein, 1998).

Early adolescents is a time of change, challenge and potential. According to Harter (1999) early adolescents are able to consider separate parts of their self and begin a superficial integration of their self-facets into a coherent, internally consistent and realistic self- system. This likely to be the major reason why fluctuations in the level of stability of self-evaluation reach peak during early adolescence. This is the time when early adolescents begin to show greater independence from their families and is a period when peer relations increase in importance and intensity, particularly with regard to assessments of personal competence (Brinthaupt & Lipka, 2002).

During this period, early adolescent boys and girls become much more aware of their gender identity and gender roles than during the childhood years. They gain an understanding of general expectation on how they should behave, think, feel or act so as to fit into the perceived norms of the society. The family, school and community should facilitate the early adolescents with adequate nurturance and full support. Proper awareness on self-protection against sexually transmitted diseases, early pregnancy, sexual abuse, and exploitation need to be provided at a very early stage, which otherwise can have a detrimental effect on their well- being   (UNICEF, 2011).

Changes in the physical development and cognitive functioning can contribute to psychological and social development of the early adolescents (Lovett, 1986). Erikson's psychosocial theory, highlights on "industry vs. inferiority". Early adolescents are more likely to be influenced by peers. Juvonen & Weiner (1993) believed that as early adolescents develop, separation from family and inception of some autonomy occurs. Meanwhile, they seek for peer opinions and perceptions regarding the formation of their social identity. This in turn moulds the perspectives and response to situations. However, influence of the adults, particularly parents continue to have major influence over the early adolescents (Urdan & Klein, 1998).

2.1.2 Mental Health

The World Health Organization defines mental health as a "as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (WHO, 2004). Mental health act as a key determinant for wellbeing and effectual functioning of an individual. It is not merely the absence of any mental illnesses instead it defines one's potential to maintain self-worth.

It involves proper expression of emotions and thoughts, maintenance of healthy social interactions and capability to confront daily challenges of life (Nandi, 2015). Mental health as the sensible awareness and self-evaluation of one's emotions and thought processes and effective way of thought process.

According to Rashidi (2001), mental health is also defined as an individual's ability to compromise with the world around him with maximum possibility. Absence of mental health keeps people away from advancement and additionally his capacity to perform undertakings. This prompts the disability of wellbeing and improvement of the general public and its results. This leads to the impairment of health and development of the society and its consequences (Golnezhad, 2015).

For many people, mental health problems first surface during adolescence. Many countries are seeing an increase in cases of depression, eating disorders (particularly among girls) and self-destructive behaviours. While these often stem from low self-esteem and the strong pressure to conform to unrealistic expectations, contributing factors are thought to include violence, ill treatment, abuse and neglect, and bullying (UNICEF, 2011).

Mental Health concepts consists of subjective well-being, perceived self-efficacy, independence , competence , intergenerational dependence and recognition of the ability to realize one's intellectual and emotional potential. Mental health helps an individual to achieve his or her goals. Mental health issues can effect anyone irrespective of their age, gender, social, cultural, economic or ethical backgrounds. It is very important to consider mental health and mental health disorders along with physical health, because these both are found to be highly correlated, but are often neglected in many countries of the world (WHO, 2003).

2.1.3   General Well- being

Wellbeing is defined as a sense of feeling good and functioning well and consists of individual's life experience; and a comparison of life circumstances with social norms and values. It is composed of two aspects

(i)   Subjective well-being (or personal well-being), that relates an individual's thoughts and feelings about their wellbeing. It may include dimensions like satisfaction, positive emotions, and meaning of one's life.

(ii)   Objective well-being relates to fundamental needs and rights of an individual like food, safety, physical health etc (Department of Health, 2014).

Wellbeing is concept that has emerged from Positive psychology. It has become relevant among every society and its people. As cited in Singh and Shyam (2007) well-being refers to 'being worth for the world', 'being able to cope with life and enjoying life' (Parmar & Makwana, 2016). Good functioning aims on what goes right than the absence of mental illness (Seligman & Csikszentmihalyi, 2000).

There exists an interchangeable wellbeing, utility, happiness, life satisfaction and welfare (Easterlin, 2003). Seligman's PERMA model considered positive emotions, engagement, relationships, meaning and achievement as the five important aspects of well-being. Studies conducted by Kern and colleagues in 2014, identified that there is a positive correlation between PERMA indicators and physical health/vitality, life satisfaction, etc. Based on the PERMA model, Kern and colleagues had developed the EPOCH Measure of Adolescent Well-being that focuses upon the positive psychological characteristics such as Engagement, Perseverance, Optimism, Connectedness and Happiness (Kern, 2016).

Engagement refers to being involved and highly absorbed in various activities of life (Csikszentmihalyi, 1998) . Han proposed that engagement is firmly related to various pointers of success, including life satisfaction.

Perseverance refers to the ability to pursue one's goals to completion, even in the face of obstacles. It is a sub-feature of the Big Five personality trait of conscientiousness, and comprises of the drive component of "grit" (which comprises of perseverance and passion for long-term goals) (Kern, 2016). It is defined as the stable

and continued action or belief usually over a long period and especially despite difficulties or setbacks (Jackson , 2015).

Optimism is portrayed by cheerfulness and certainty about the future, an inclination to take a positive perspective of things, and a logical style set apart by assessing negative occasions as brief, outside, and particular to circumstance (Kern, 2016).

Thomson and others(2015), conducted a study among 1250 early adolescents from 23 public elemetary schools. The study explored on the early adolescent's level of optimism, personality charecterisitcs (ie. Depressive symptoms, anxiety symptoms, self- concept, positive behaviour) and ecological assets (ie., perceived parent support, parent knowledge, dinner with an adult family member,school adult support,school connectedness, neighbourhood adult support, neighbourhood safe places). It was revealed that adolescents' optimism was strongly associated with positive self-concept, low depressive symptoms, high perceived parental support and school connectedness.

Chong & Baharudin(2017) reported that support from mother contributed to optimism, and optimism contributed to life satisfaction among early adolescent boys and had not effect on early adolescent girls.

Connectedness alludes to the feeling that one has fulfilling associations with others, trusting that one is administered to, cherished, regarded, and esteemed, and giving fellowship or support to others.

Bond et al (2007), reported that good school and social connectedness was associated with ideal outcomes in future, whereas those with low school connectednedd were at an elevated risk of anxiety or depressive symptoms.

In a study conducted among urban adolescents, between the academic years 2010-2011, it was found that early adolescent who attended schools that emphasized on performance character development showed higher levels of perseverance and connectedness across the academic year (Seider, Novick, & Gomez, 2013).

According to Wolfram (2009), happiness is psychological or enthusiastic condition of prosperity characterized by constructive or charming feelings running from

satisfaction to extraordinary joy. Happy mental states may likewise reflect judgements by a man about their general well-being (Paul, 2016). A variety of biological, psychological, economic, religious and philosophical approaches have striven to define happiness and identify its sources. Various research groups, including positive psychology and happiness economics are employing the scientific method to research questions about what "happiness" is, and how it might be attained.

2.2 Importance of Mental health and Well-being among Early Adolescents

Several mental health issues arise during the period of late childhood and early adolescence (WHO, 2017). An individual's intellectual, behavioural and emotional wellbeing is referred to as mental health (Nordqvist , 2017). A longitudinal study conducted in Australia revealed that about one third of the boys and half of the girls studying in secondary school had some symptoms of depression and anxiety. However such experiences occurred only for a short period and didn't continue in later life, which indicated that interventions can be helpful to reduce the impact of mental health issues. A survey conducted by an educational site, Mind Ed, in 2015, found that majority of adults had lack of knowledge on mental health issues among children and adolescents, for which they mistook mental health issues as bad behaviours. Therefore recognition of mental health issues and providing adequate intervention is very essential (The Lancet, 2014).

Achievement of overall wellbeing accompanied by an individual's ability to adapt, cope and make sound judgement can facilitate positive mental health during later stages of life. Mood swings are common during adolescence. Both family and friends have the responsibility of identifying the warning signs of mental health issues and promote young people to seek guidance and support in the form of psychotherapy, medication, or both from professionals if needed. Studies conducted in US reported less than fifty percent of the adolescents with mental health issues received any kind of treatment (Office of Adolescent Health,U.S. Department of Health and Human Services, 2017).

Young adolescents may be confronted with various distresses. For instance, it is likely that they may feel worried about friendships or school activities, or might face sadness with respect to death of their family member or close friend. National Institute

of Mental Health reports indicate that persistent symptoms might hamper their daily activities, personal chores (e.g. sleeping, eating) and relationship with others (Office of Adolescent Health,U.S. Department of Health and Human Services, 2017).

A longitudinal study conducted among 6th graders in an urban setting in California, in 2012 revealed that there existed an association between mental health status and social interactions. It was found that greater social integration was observed among early adolescent girls. However the girls with symptoms of depression were more socially withdrawn than that of the boys of their age (Pachucki, Ozer, Barrat, & Cattuto, 2015).

Recent studies reports that about 20% of children and adolescents face mental health illness. Suicide is considered to be third most leading reason for adolescent deaths (Belfer, 2008).

2.3 Prevalence of Mental Health Issues among Early Adolescents

Out of the world's 1.2 billion adolescents, approximately 20 percent of adolescents belonged to India. The population of Indian adolescents is about 243 million (UNICEF,India). Early adolescents comes under the population of 0-14 year old which constitute about 30.9 percent of the total Indian population (Malhotra & Patra, 2014). About seventy two percent of Indian adolescents resides in rural areas whereas about twenty nine percent resides in urban areas (Kumar, 2014).

A study conducted to estimate the prevalence and age-of-onset distributions of DSM-IV disorders revealed following results: The prevalence of anxiety disorder and impulse – control disorders was found to be approximately 28.8 percent and 24.8 percent; respectively, with a median again of onset of 11 years, and that of mood disorders was 20.8 percent (Kessler, Berglund, Jin, & Merikangas, 2005). In a study conducted among Gujarat adolescents, emotional problems were expressed more by the girls whereas boys exhibited various other mental health issues (Nair, Ganjiwale, Kharod, Varma, & Nimbalkar, 2017).

Srinath and others conducted a research in Bangalore and reported prevalence of 0.1 percent depression among 4-16 year olds. Pillai and others, in their study among adolescents residing in urban wards and rural communities, revealed that the disorders

like anxiety (1.0%), depression, behavioural disorders (0.4%) and attention – deficit disorders (0.2%) were prevalent. Amongst the 2684 adolescents, adolescents from urban wards and girls those who faced gender discrepancy were found to express high level of mental health issues (Pillai, et al., 2008).

Researchers suggested that mood disorders were prevalent among the South Indian urban adolescents. Across sectional study conducted among urban adolescents in Chennai were identified with 37.1% mild depression followed by 19.4 percent with moderate and 4.3 % with severe depression (Mohanraj & Karunanidhi, 2010) . Depression , anxiety and stress (DAS) were found to be correlated . Depression was highly found in females than males (Bhasin, Sharma, & Saini, 2010).

A similar study was conducted in Chandigarh to evaluate the mental health of school going adolescents. The result indicated that the presence of 65.53 percent , 80.85 percent and 47.02 percent of DAS respectively. A concomitant relationship of 57.65 percent was observed between anxiety and depression (Sandal, et al., 2017).

2.3.1 Prevalence of Sadness or depression

Sadness or depression is found to be one of the common mental health issue found among adolescents. Constant prevalence of sadness and desperation may lead to clinical depression (Young, et al., 1955) (Harter & Whitesell, Multiple pathways to self-reported depression and psychological adjustment among adolescents, 1966) .Reports of 2006 by National Mental Health Association reports that academic or school performance, relationship with peers and family and overall growth and development shall be affected by the prevalence of depressive symptoms.

The incidence may vary with respect to the population, the time period, the informer and the diagnostic method used. Several studies revealed that about five percent of the adolescents suffer from clinically significant depression (Rey, Bella- Awusah, & Liu, 2015).

Researches have agreed that about five percent of adolescents are subjected to clinical depressive symptoms. The lifetime prevalence of depressive disorder was found to be higher. It was suggested that about 12 percent of girls and 7 percent of boys would have got some form of depressive disorder by the age of 16 years. The

cumulative prevalence (accumulation of new cases in previously unaffected individuals, also known as lifetime prevalence) is higher. For example, by the age of 16 years 12 percent of girls and 7 percent of boys would have had a depressive disorder at some time in their lives (Costello, Mustillo, Erkanli, & Angold, 2003)

During the period of 2009-2015, the prevalence of sad or hopeless feeling had heightened from 26 percent to 30 percent. About two-fifth and one fifth of the boys reported that they experienced sadness. (Child Trends Data Bank, 2016) .

Bansal and others, conducted a cross-sectional one-time observational study using two psychological instruments GHQ-12 and BDI. The details on socio-demographic data were also collected. Results suggested 18.4 percent were depressed. A higher BDI score was related to economic issues, school punishment especially physical punishment, being mocked at school and parental conflicts which revealed depressive symptoms (Bansal, Goyal, & Srivastava, 2009).

Depression have a potential to cause morbidity in future and increases the chance for suicides. The incidence of unipolar depression increases distinctly after puberty and the prevalence exceeds four percent by the end of adolescence (Thapar, Collishaw, Pine, & Thapar, 2012).

A publication by Virginia Cooperative Extension suggested that depression was one of most common reason for hospital admissions among adolescents between 10 to 14 years, in Virginia (Ruffin , 2009).

2.3.2 Prevalence of worries or anxiety

Brown et al., (2006) investigated on the effect of gender, age and worry behaviour in US. The sample for the study were the students who visited education health centres in seven states .The data was collected via individual electronic keypads. Results indicated that boys were more anxious about their future, on the other hand girls were more concerned about their appearance or body image. The results revealed that older adolescents who had frequent interaction with parents had relatively less worries on 'being loved or honoured', whereas those who talked less to their parents and kept worries within themselves were tensed about their grades. The study also revealed that those samples who looked onto teachers, internet or friends had more worry related to

being liked, being unsuccessful etc. The study also gave suggestions on the importance of identification of worries and school- based approaches to the health educators and school staff so as to address the students' need (Brown , Teufal, Birch, & Kancheria, 2006).

A research conducted among early adolescent sample, utilized the latent growth curve modelling. The trajectories of symptoms of depression and 4 types of anxiety symptoms (General Anxiety Disorder, Physical symptoms, separation anxiety and social anxiety) were analysed. The sample were evaluated at three time points in a year period. Results revealed that the symptoms of anxiety decreased across the one year and depression remained stable. However, the individual analysis conducted revealed that there were relatively low reduction in the signs of physical, social and separation anxiety among those adolescents with high level of depressive symptoms. Unchanging relationship was indicated between depression and anxiety symptoms. The results indicated that individuals with high level of a particular mental health problem were more likely to show deviation from their average trajectory of other disorder symptoms. For instance, an individual deflection in depressive symptoms speculated deflection in the anxiety symptoms (McLaughlin & King, 2015).

Maldonado and others studied the relationship between early adolescent anxiety disorder and self-esteem development from early adolescence to young adulthood. Mean age selected for the measurement of anxiety disorder was 13 years. Results revealed that self-esteem had increased during adolescence and increased steadily in young adulthood. The samples with anxiety symptoms were found to have low level of self-esteem. The study showed that prevalence of social phobia had a greater impact on self-esteem, on the other hand, no significant impact was observed in self –esteem development due to separation anxiety (Maldonado, et al., 2013).

A longitudinal study among 113 eleven to fourteen year old middle school students. The study analyzed the gender differences in the relationship between depression and anxiety and in early adolescent boys and girls. The study focused on depressive symptoms and three aspects of anxiety (Worry and oversensitivity, social concerns and concentration , and physiological anxiety. Girls were found to exhibit more total anxiety, worry and oversensitivity than that of the boys ,which inturn, estimated symptoms of depression in the later stages.Social concerns and concentration

indicated similar forms but was not statistically significant. In both boys and girls, depressive symptoms were estimated based on the effect of physiological anxiety .Physiological anxiety predicts later depressive symptoms for both boys and girls. These findings highlight the importance of anxiety for the development of depression in adolescence, particularly worry and oversensitivity among girls.

Girls, during early adolescence undergoes a conflux of distresses at a single period which may include onset of puberty, progression to higher classes and increased risk of being sexually abused. This in turn amplify anxiety symptoms which might lead to depression. Therefore, the study suggested that early adolescent period is the right time to root out and reduce anxiety symptoms and potential depressive symptoms (Chaplin, Gillham, & Seligman, 2009)

2.3.3   Prevalence of Hyperactivity :

Attention Deficit Hyperactivity Disorder is one of the common neurodevelopmental issue faced by most children and adolescents. It is characterized by the inattention, impulsivity and hyperactivity or both.

Worldwide, a highly heterogeneous prevalence of attention deficit hyperactivity disorder (ADHD)/hyperkinetic disorder (HD) is estimated. Unfortunately, the real reason behind this difference remains poorly defined. A number of studies have been conducted to analyse the prevalence of hyperactivity disorder (Polanczyk, de Lima, Horta, Biederman, & Rohde, 2007).

A cross sectional study conducted by Osman et al.,2015), had studied on the prevalence of ADHD symptoms among the school going children and adolescents. The sample's overall incidence of ADHD was found to be 9.4 percent. About 3.5 percent, 6.9 percent and 1.0 percent of inattentive subtype, hyperactive- impulsive subtype and combined subtype respectively was observed. The study reported that prevalence rate had increased with respect to increase in age. It was reported that boys had more prevalence in the ADHD as compared to that of girls.

Pillai et al., reported the median prevalence of hyperkinetic disorder to be 0.1 percent and Srinath et al., reported it to be approximately 1.6 percent (Sharan & Sagar, 2008).

In a cohort study conducted at China, 150 children with ADHD, with a mean age of 14 years were examined to find out the outcome of hyperactivity disorder. The results indicated that they show both internalizing and externalizing disturbances. Adolescents with such disorder was found to use cigarettes and illicit drugs; had poor grades at school; approximately 7 percent had been caught by police. They were found to show difficulties in family as well as in social situations (Lam & Ho, 2010).

In a study carried out in Kanke in India, approximately 36 % of sample had ADHD (predominantly hyperactive-impulsive disorder) as a comorbid condition along with conduct issues (Sarkhel, Sinha, Arora, & DeSarkar, 2006). At age 11-17years, ADHD had ever been diagnosed in 1 in 10 boys and 1 in 43 girls. ADHD had been diagnosed significantly more frequently among participants of low socio-economic status (SES) than among participants of high SES. A diagnosis of ADHD is reported less often for migrants, they rank more frequently among the suspected cases (Schlack , Holling, Kurth, & Huss, 2007). In a cross sectional study using DSM IV criteria, conducted between the years 2002-2004, National Health and Nutrition Examination Surveys, prevalence rate was found to be 8.7 percent. This study also revealed that poor children were found to meet ADHD criteria, but only very few had received therapy (Froehlich, et al., 2007).

2.3.4   Prevalence of Conduct issue:

DSM –IV defined Conduct Disorder as the one with pervasive and persistent patterns of aggression, deception and destructive behaviour which emerges during childhood or adolescence.

Sarkhel et al.,(2006), conducted a study to find out the incidence of conduct disoder among 240 students. The study revealed that conduct disorder was observed among 4.58 percent of the sample. Boys showed more conduct issues than that of the girls.About 27 percent of the sample indicated the onset by adolescence. The severity of conduct disorder was found to be mild and moderate among 36 percent and 64 percent of the sample respectively. None of the sample indicated severe conduct disorder. The study reported that the samples with conduct issues showed were found to be involved in bullying, lying and torturing animals.

The National Comorbidity study, Merikangas, et al. ,(2010) reported that, among adolescents the lifetime prevalence of conduct disorder for 6.8 percent of the selected sample. According to Maughan the prevalence of conduct disorder varied with respect to the respondent of the survey (e.g. Parents, teachers, child or combination of notes that the prevalence of conduct disorder varies by the survey of parent, child, teacher, or combinations of the above mentioned (National Academies of Sciences, Engineering, and Medicine, 2015).

Loeber and his colleagues, in their study revealed that the conduct disorders are prevalent at a rate between 6 percent and 16 percent in males, 2 percent and 9 percent in females. It is also believed that a minor difference in the criteria for diagnosis can have an impact on the results for the prevalence of conduct issues (Nock, Kazdin, Hiripi, & Kessler, 2006).

2.3.5 Prevalence of eating disorders:

Ackard and others (2007), examined the prevalance of eating disorder among an ethnicallly diverse population based sample of 4,746 middlle school and high school students. The results indicated that about 41.5 percent of females and 24.9 percent of males reflected disturbances regarding their body shape . Among 36.4 % of the female and 23.9 percent of males concerns regarding body shape had an impact on their self esteem and indicated compensatory behaviours. Prevalence of Anorexia , Bulimia and binge eating disoder among the adolescent boys and girls was respectively 0.04 percent,0 percent 0.3 percent,0.2 percent; and 1.9 percent,0.3 percent.

Colton and others(2007) conducted a study among girls between 9- 13 years and found that approximately 14.7% of girls reported eating disturbances within one month of the survey. A national school based cross sectional survey was conducted in Germany among 1654 adolescents. The results indicated that incidence of full syndrome was 0.3% for anorexia, 0.4% for bulimia nervosa and 0.5% for binge eating disorder (Hammerle, et al., 2016).

Mammen and others(2007), conducted a study at Child and Adolescent Psychiatry Unit, Christian Medical College and Hospital, Vellore. The study revealed that the prevalence of eating disorder was lower than that of the Western countries. The study documented an emerging incidence of anorexia nervosa accompanied by psychogenic

vomiting. Our study showed that the overall prevalence of eating disorders was lower than the Western data that has focused on anorexia and bulimia nervosa.

While eating disorders (ED) can affect individuals from different age groups, the average age of onset takes place during adolescence. According to Voderholzer, last half of twentieth century, the prevalence of ED has increased. Various researches indicated 1 % and 4 % the prevalence of eating disorder fulfilled the criteria for anorexia nervosa (AN) or bulimia nervosa (BN) (Rawat & Pandya, 2016).

2.4 Factors Influencing Mental Health and Well-being

Several social, psychological and biological determinants contribute to the mental health of a person. For instance, savagery and continuous socio economic pressure can adversely affect the mental health. Frequent social changes, stressful conditions, gender differentiation, unhealthy life styles, and physical illness can contribute to poor mental health. Genetic factors comes under biological risks (WHO, 2018). Some of the factors pertinent to this study is given below.

2.4.1 Family influences

According to Shek(2005) family life quality which encompass on wellness, competence, strengths and weaknesses of the family can have an impact on the adolescent development. When parents fail to adjust to the adolescent needs in can contribute to tension, stress, and family conflicts. This in turn can affect the adolescent emotionally. Feeling of aloofness, being unsupported or not loved add on to the risk of various mental health issues. In a longitudinal study conducted by Shek (2005), family functioning had an impact on the various aspects of psychological distress, mental health, delinquency and well- being in the adolescent females. Results also indicated that good family functioning reduced the risk of being involved in delinquent behaviours.

Lee and others(2006) from their two studies reported that suicide ideation showed correlation with depression, anxiety, academic self-concept and perception on parental dissatisfaction with school performance. The correlation between test anxiety and depression was found to be very high (r=0.51). Their second study, reported that there existed a positive correlation in depression and suicide ideation with that of parent-adolescent conflict and poor family relationship.

Boughton & Lumley(2011) conducted a study on among 268 early adolescents. They were assessed for depression symptoms, emotional resilience and perceptions of parening. Results indicated that psychological control , a parenting behaviour that manipulated childreb through negative tactics such as induction of feeling of gulit, unpredictable behaviours, withdrawal of love etc can lead to family disruptions and negative adolescent developemnt.

When parents get negative response from their adolescent it is more likely that they may apply excessive parental control sao as to force respect . too much control on the behaviour might decrease the adolescent's perceived ability to become self dependent and therby it rsults in depression , behavioural issues and other mental health issues (Shek & Ng, 2014)

Studies revealed that marital disruption and development in adolescents have relationship. Family ecology theories indicate that changes in the family processes occurs as a result of marital disruption and can have detrimental effect on the development of the adolescents. In a longitudinal study conducted by Mechanic and Hansell(1989) effect of family conflict and divorce on the well being of the adolescents were analyzed . It was found that between family conflict had contributed to adolescent depression, anxiety and changes in health outcomes The study reported that poor well being was seen amongst adolescents living in families with high conflict than those living in families of divorce with low conflict.

Socio economic conditions in the family can have an influence on the parenting style, parent-child interaction, parent-child communication. A Norwegian cross sectional study conducted to analyze the relationship between social anxiety and mental health problems revealed an association with parental socio-economic status. The early adolescents in the low socio-economic status group had higher incidence of mental health issues, especially social anxiety, than those in the high socio-economic status (Karlsen, Aas, Roy, & Raanaas, 2014). Poor family economy had reluted in the mental health problems (Boe, Socio-economic status and Mental Health in Children and Adolescents, 2013). In contrast to the above study, Divya & Paul(2016) reported that there existed lack of influence of socio-economic status on well- being.

2.4.2. Influence of peers

Individuals of similar age group, who shares common interests are considered to be peers. During the early adolescent stages, individuals provide more priority for their relationship with peers. Peers are found to have a significant role in shaping the adolescent attitudes, believes and values which inturn contributes to the well being and mental health.

Depending upon the changes in the need for intimacy, the significance of frienships can vary. The need for development of sense of belonging to a group and be an participant in activities of the group, contribute to the development of well- being. Good peers help in fostering social interactions and at the same time facilitate support to keep away from socially unacceptable behaviours (Sadock, Kaplan, & Sadock, 2007). Early adolescent girls generally tend to share inner feelings, thoughts and are found to be secretive secrets.

Rasalingam and other (2016),conducted a research on the prevalence of peer victimization and its association with mental health problems. The study carried out among early adolescents (10-13years) and their parents revealed that approximately 17.6 percent of boys and 15.3 percent of girls were peer victimized. The peer victimized respondents reported high level of emotional problems, conduct issues and hyperactivity.The study emphasized on the need for interventions for strengthening peer support among the victimized early adolescents.

Shin and others (2016) reported that relationship with peers during childhood , had a significant role in contributing to adolescent internalizing problems such as shyness, anxiety, depression and physical problems. Boys who were susceptible to peer pressure showed depression symptoms.

Studies revealed that young adolescents with well connected peer relationship had postitve body perceptions of themselves (Holsen, et al.,2012; Stice & Whitenton, 2002). Ata and others (2007) reported low self esteem and social support, weight-related teasing and pressure to reduce weight had an impact on eating behaviour.The study also reported that females were at a high risk of eating behaviour than males.

2.4.3. Influence of media

Currently, media plays a significant role in an individual's actions and behaviours.Social media opens oportunities to maintain wide circle of social interactions with people in school, friends, neighbourhood, sceintists, religious groups, writers and many more. This can help the adolescents to remain enthusiastic and happy. It provides knowledge on life , culuture and religion which is considered to be a main areas of exploration during the early adolescence. A study conducted in America reported that high level of social media usage was linked to feeling of boredom or sadness and was found to have correlation with that of cyber-bullying, sexting, relationship abuse, hacking of privacy . Girls are found to experience more negative effects when compared to that of boys (aarogyam.com).

A longitudinal cohort study conducted by Primack, et al., 2009 assessed association between meida exposure in adolescence and depression in young adulthood. The study revealed that out of th 4142 participants whho were earlier not diagnosed for depression showed the symptoms of depression in the follow up check up and reported that television exposure and total media exposure in adolescence are connected to depressive symptoms in later life.

Use of media at night can interuupt sleep. Sometimes messages delivered via media instills fear , anxiety and aggression (Padhy, Khatana, & Sarkar, 2014). Becker et al., 2013 conducted a study to investigate how media multitasking contribute to depressive symptoms and social anxiety symptoms. Results indicated that high level of media usage contribute to depressive symptoms and anxiety symptoms.

Television programs that emulated the thin role models has contributed to eating disorder among teenage girls (Dietz & Gortmaker, 1985).

METHODOLOGY

CHAPTER 3

METHODOLOGY

The methodology adopted for the study entitled '**Assessment of General Well-Being and Prevalence of Mental Health Issues among Early Adolescents'** is given under the following subheadings.

3.1 Selection of Area

3.2 Selection of Sample

3.3 Selection of Tool

3.4 Collection of Data

3.5 Analysis of Data

3.1 Selection of Area

The area selected for the present study was Ernakulam city. Ernakulam city is a highly sophisticated city and consists of people coming from different social, cultural and educational backgrounds. Urbanization and changing culture along with the relationship with family, peer and media has significantly influenced the life of early adolescents. So, early adolescents were selected from two schools of Ernakulam city. The schools were selected with the aim of understanding the level of general well – being and the prevalence of mental health issues in the selected early adolescents.

3.2 Selection of Sample

The sample consisted of 120 early adolescents between the age group of 11 to 13 years studying in two CBSE schools, located in the heart of Ernakulam city. In purposive sampling method, the sample is chosen intentionally or purposefully, so that they constitute some features required for the research purpose. (Macnee & McCabe, 2008).

Early adolescents were chosen purposively from National Public School, Kaloor and Sacred Heart CMI Public School, Thevara, of Ernakulam district to constitute the sample for the study, so that they shall act as representatives of the early adolescent population. The researcher had approached certain other schools, however due to the

examinations and other activities, the schools couldn't participate in the research project. In this study, the adolescents were divided into two sub-population based on their gender. From the two schools, fifty three early adolescent boys and sixty seven early adolescent girls were selected from three grades (6th - $8^{th\ std}$) at random.

3.3 Selection of Tool

Two tools were used for the study, namely

i. Tool I : The EPOCH Measure of Adolescent Well- being
ii. Tool II: A self- designed questionnaire was used to elicit general information and specific details on the selected mental health issues from the sample.

i. Tool I : The EPOCH Measure of Adolescent Well- being

The EPOCH Measure of Adolescent Well- being was used for the study. It was developed by Margaret L. Kern, Lizbeth Benson, Elizabeth A. Steinberg and Laurence Steinberg (2016). The tool consists of self –report scales for measuring five psychological characteristics, namely Engagement (E), Perseverance (P), Optimism (O), Connectedness (C), and Happiness (H) related to well-being of an individual.

Kern and colleagues defines, 'Engagement' as the "capacity to become absorbed in and focused on what one is doing, as well as involvement and interest in life activities and tasks"; 'Perseverance' refers to the "ability to pursue one's goals to completion, even in the face of obstacles"; 'Optimism' refers to "a tendency to take a favourable view of things, and an explanatory style marked by evaluating negative events as temporary, external, and specific to situation". Hopefulness and confidence about the future are the characteristic features of optimism; 'Connectedness' refers to "the sense that one has satisfying relationships with others, believing that one is cared for, loved, esteemed, and valued, and providing friendship or support to others". 'Happiness' is conceptualized as "steady states of positive mood and feeling content with one life, rather than momentary emotion" (Kern, 2016).

The EPOCH Measure of Adolescent Well- being consisted of 20 statements across the five domains asking the respondents to describe about themselves and rate

their response on a five point scale-almost never(1);sometimes(2); often (3);very often(4);almost always(5).

The level of over-all well-being was scored as given below:

- Low well –being: Below 45
- Moderate well-being: 45-72
- High level well-being :73-100

A copy of the tool is given in Appendix I

ii. **A self- designed questionnaire** was used to elicit information on personal details and specific details on the mental health issues from the sample.

Personal details included general information of the respondents, age, gender, and type of family, number of siblings, parental education, and parental occupation.

Self- designed questionnaire on specific details was prepared based on the Strength and Difficulties questionnaire, EAT-26, PHQ-9 modified for Adolescents (PHQ-A)— Adapted. Specific details included information on the prevalence of symptoms of various mental health issues like worries, sadness, hyperactivity, conduct issues, substance/ drug usage, and eating disorder. Scoring formulated for the various disorders is given below.

- *Scoring for Worries*: Never(1), Sometime(2), Often(3);Max score:18,Min Score:6; Low level of worries (6-9),moderate level of worries(10-13), High level of worries(Above 13).
- *Scoring for Sadness*: Never(1), Sometime(2), Often(3); Max score:27,Min Score:9; Low level of sadness (9-14),moderate level of sadness (15-20), High level of sadness (Above 21).
- *Scoring for Hyperactivity*: Never(1), Sometime(2), Often(3);Max score:12,Min Score:4; Low level of hyperactivity(4-6),moderate level of hyperactivity (7-9), High level of hyperactivity (10-12).
- *Scoring for conduct issues* : Never(1), Sometime(2), Often(3);Max score:21,Min Score:7; Low level of hyperactivity(7-11),moderate level of hyperactivity (12-16), High level of hyperactivity (17-21).

A copy of the self-designed questionnaire is given in Appendix II.

3.4 Conduct of the Study

The investigator selected two schools for conducting the survey. The investigator approached the school authorities to seek permission to conduct the study. The investigator contacted the principal of each of the schools and the purpose of the study was clearly explained to the authorities. After obtaining the permission, a convenient date and time for the data collection was fixed. The investigator later went to each of the schools and collected the data from the students during the school hours, in the presence of their class teacher. Initially, a rapport was created with the students and then the investigator distributed the questionnaires amongst them. The instructions for filling the questionnaire were explained to them. The investigator also gave them the chance for clarifying the doubts (if any) regarding the various statements or questions.The filled in questionnaires were collected back for the analysis of the data.

3.5 Analysis of Data

Data collected from the study, was tabulated, consolidated and analysed using percentage analysis using Statistical Package for Social Sciences (SPSS).

EPOCH Measure of Adolescent well- being and specific details on prevalence of mental health issues was analysed using percentage analysis and was categorized based degree of level of wellbeing/level of prevalence of mental health issues(as mentioned in section 3.3).

Independent't' test was also used to assess the gender differences in the prevalence of various mental health issues between early adolescent boys and early adolescent girls.

The correlation between overall well-being and selected mental health issues; correlation between domains of wellbeing and selected mental health issues; correlation between the selected mental health issues was analysed using Pearson correlation coefficient.

To understand the level of eating disorders among the early adolescents, percentage analysis was conducted.

RESEARCH DESIGN

SELECTION OF AREA

ERNAKULAM CITY
- National Public School, Kaloor
- Sacred Heart CMI Public School, Thevara

SAMPLING PROCEDURE

Purposive Sampling

SELECTION OF SAMPLE

120 early adolescents	Age group -11-13 years

SELECTION OF TOOL

EPOCH Measure Of Adolescent Well-being	Self-Designed Questionnaire

ANALYSIS AND INTERPRETATION

Percentage Analysis	Independent ' t ' test	Correlation Coefficient

Figure 1

RESEARCH DESIGN

RESULTS AND
DISCUSSION

CHAPTER 4

RESULTS AND DISCUSSION

The data obtained from the study "**Assessment of General Well-Being and Prevalence of Mental Health Issues among Early Adolescents**" are summarized under the following headings:

4.1. Personal Profile

4.2. Family Details

   4.2.1. Parental education and Parental occupation

   4.2.2. Family annual income

4.3. Epoch Measure of Adolescent Well-Being

   4.3.1. Level of engagement, perseverance, optimism, connectedness, happiness

   4.3.2. Overall wellbeing among early adolescents

4.4. Prevalence of Worries

   4.4.1. Symptoms of worries

   4.4.2. Comparison of level of worries with respect to gender, type of family, parental education and parental occupation.

4.5. Prevalence of Sadness

   4.5.1. Symptoms of sadness

   4.5.2. Comparison of level of sadness with respect to gender, type of family, parental education and parental occupation

4.6. Prevalence of Hyperactivity

   4.6.1. Symptoms of hyperactivity

   4.6.2. Comparison of level of hyperactivity with respect to gender, type of family, parental education and parental occupation

4.7. Prevalence of Conduct issue

   4.7.1. Symptoms of conduct issues

   4.7.2. Comparison of level of conduct issues with respect to gender, type of family parental education and parental occupation

4.8. Prevalence of Eating Disorders

   4.8.1. Symptoms of eating disorder.

   4.8.2. Comparison of level of eating disorder with respect to gender

4.9. Relationship between Mental Health Issues and Well-being

4.9.1. Relationship of mental health issues with that of overall well-being, the five domains of wellbeing and the selected mental health issues

4.9.2. Relationship between the five domains of EPOCH measure of adolescent well –being

4.9.3. Relationship between the various mental health issues

4.1. Personal Profile

The personal details such as age, type of family, and number of siblings are given in table 1.

Table 1

Personal profile

Category	Boys (N1=53)		Girls (N2=67)		Total (N=120)	
	No.	%	No.	%	No.	%
Age of the respondents						
11	11	21	16	24	27	22
12	3	6	3	5	6	5
13	39	74	48	72	87	73
Type of family						
Nuclear	40	75	52	78	92	77
Joint	13	25	15	22	28	23
Number of siblings						
0	9	17	6	9	15	13
1	28	53	36	54	64	53
2	12	23	17	25	29	24
More than 2	4	8	8	12	12	10
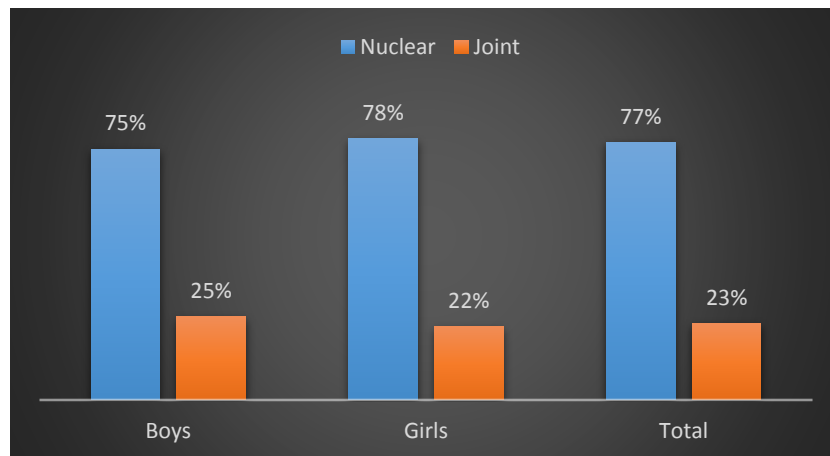
Figure 2

Type of family of the respondents

Table 1 illustrates that nearly three fourth of the students (73%) belonged to the age group of 13 years , nearly one fourth(23%) belonged to the age group of 11 years and only very few of them belonged the age group of 12 years. The table and figure 2 shows that more than three fourth of the sample (77%) hailed from nuclear family. Only 23 percent respondents belonged to joint family. A total of 53 percent of respondents had only one sibling and 24 percent of them had two siblings. 13 percent of the respondents were singletons and 10 percent had more than two siblings.

Family act as the fundamental source of social support which can contribute to low prevalence of mental disorders (Pillai, et al., 2008).Having one's family as the primary source of social support was associated with lower prevalence of mental disorders.

4.2. Family Details

Family is believed to be the basic foundation for learning in every individuals. The role of parents during the development of an early adolescent cannot be ignored.

Details about parental education, parental occupation and family annual income are given in the following tables.

4.2.1. Parental education and Parental occupation

The details on the educational qualification and occupation of the parents are given in Table 2

Table 2

Parental details

Parental education						
	Boys (N1=53)		Girls (N2=67)		Total (N=120)	
	No.	%	No.	%	No.	%
Below 10th	3	6	4	6	7	6
10th/S.S.L.C	13	25	13	19	26	22
Pre-degree/+2	11	21	8	12	19	16
Graduation & above	26	49	42	63	68	56
Mother						
Below 10th	1	2	3	5	4	3
10th/S.S.L.C	8	15	10	15	18	15
Pre-degree/+2	16	30	10	15	26	22
Graduation & above	28	53	44	66	72	60
Parental occupation						
Father						
Government	3	6	2	3	5	4
Private	12	23	12	18	24	20
Self employed	21	40	29	43	50	42
Working abroad	3	6	3	5	6	5
Engineering	1	2	8	12	9	8
Accounts	1	2	2	3	3	3
Teaching	3	6	0	0	3	3
Other	9	17	11	16	20	17
Mother						
Government	4	8	1	2	5	4
Private	6	11	9	13	15	13
Self-employed	2	4	5	8	7	6
Health care	1	2	1	2	2	2
Engineering	1	2	1	2	2	2
Accounts	0	0	2	3	2	2
Teaching	8	15	10	15	18	15
Unemployed	29	55	36	54	65	54
Other	2	4	2	3	4	3

Table 2 illustrates that the educational qualification of graduation and above was found among 60 percent of mothers and that of fathers were 56 percent. Parental education is more generally closely related to conduct issues and hyperactivity and some revealed that there is strong association between parental education and externalizing and internalizing type of mental health issues (Ford T, 2004)

Table 2 shows that majority (42%) of the fathers were self-employed (boys-40% and girls 43%). None of them worked in the field of health care. Nearly 20 percent of fathers worked in private sector jobs and very few (4%) worked in Government jobs. About seventeen percent worked in other fields of employment. Very few worked in the field of engineering (8%), accounts (3%), teaching (3%) and some works abroad (5%). None of the fathers were unemployed. The table indicates that more than half (54%) of mothers were unemployed. About fifteen percent were involved in teaching career. Mothers who works in Government, private sector and other jobs represents four, thirteen, and three percent respectively. None of them works abroad. Only very few (6%) mothers were involved in self-employment. A very few worked in the field of health care (2%), engineering (2%), accounts (2%), and some other works (3%).

Studies have found that adolescent mental health problems has been found to be associated with parental occupational status. Working status of the family seemed to be a major factor in understanding the differences in prevalence rates of mental disorders among children and adolescents (Meltzer, Gatward, Goodman, & Ford, 1999).

4.2.2. Family annual income

Table 3 and figure 2 represents the annual family income of the respondents.

Table 3

Family Annual Income

Annual Income (in Rupees)	Boys (N1=53)		Girls (N2=67)		Total (N=120)	
	No.	%	No.	%	No.	%
Below 50,000	1	2	5	8	6	5
50,000 -75,000	8	15	16	23	24	20
75000 -1 lakh	13	25	27	40	40	33
1 lakh -2 lakhs	8	15	7	11	15	13
Above 2 lakhs	23	43	12	18	35	29
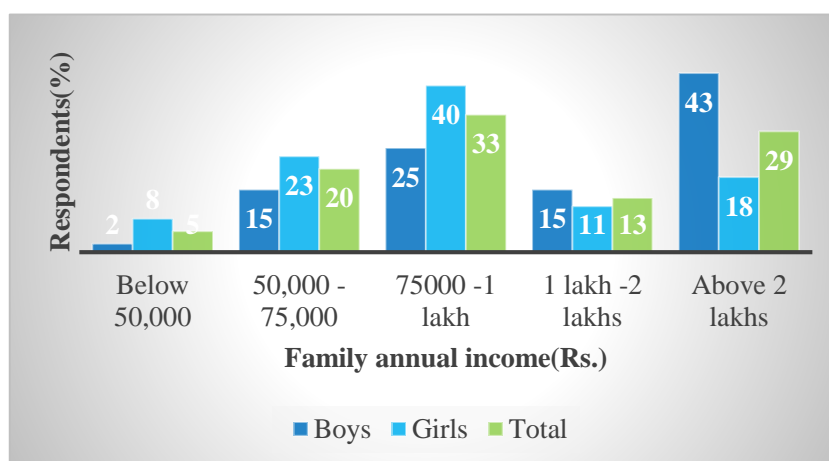
Figure 3

Family annual income of the respondents

Table 3 and figure 3 illustrate that about 33 percent of the sample hailed from families with an annual income of Rs. 75,000 to Rs. 1 lakh. About 29 percent of the sample came from a family with annual income above two lakhs rupees. Nearly thirteen percent of the respondents belonged to a family with an annual income between one Lakh and two lakh rupees. About 43 percent of the boys belonged to families with annual income of two lakh rupees and above, whereas 40 percent of the girls belonged to families with annual income between Rs.75, 000 and Rs.1, 00,000. Only five percent of the sample belonged to families with annual income below fifty thousand rupees. Very few came from family with annual income below Rs.50, 000.

Studies revealed that there are associations between the socio-economic status and mental health issues (Boe, 2013).

4.3. EPOCH Measure of Adolescent Well-Being

The following tables give information such as level of engagement, level of perseverance, level of optimism, level of connectedness, level of happiness, and over all well-being based on the response given by the sample.

4.3.1. Level of Engagement, Perseverance, Optimism, Connectedness and Happiness

The response rated on the five point scale, for the statements regarding 'engagement', 'perseverance', 'optimism', 'connectedness', and 'happiness' has been tabulated in table 4,5,6,7 and 8 respectively.

Table 4

Comparison of statements regarding the level of engagement

ENGAGEMENT	Boys(N=53)									Girls(N=67)					
	Almost never			Sometimes			Often			Very often			Almost always		
STATEMENTS	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T
When I do an activity, I enjoy it so much that I lose track of time	3	8	11	17	23	40	9	12	21	7	8	15	17	16	33
I get completely absorbed in what I am doing	1	2	3	13	22	35	8	14	22	12	10	22	19	19	38
I get so involved in activities that I forget about everything else.	5	13	18	20	20	40	9	12	21	11	15	26	8	7	15
When I am learning something new, I lose track of how much time has passed	4	6	10	17	25	42	13	15	28	6	10	16	13	13	26

*N1 =Number of boys; N2 =Number of girls ; T= Total Number of early adolescents

Table 5

Comparison of statements regarding the level of perseverance

PERSEVERENCE	Boys(N=53)									Girls(N=67)					
	Almost never			Sometimes			Often			Very Often			Almost always		
STATEMENTS	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T
I finish whatever I begin	4	0	4	19	22	41	8	21	29	10	12	22	12	12	24
I keep at my school work until I am done with it	3	1	4	18	17	36	13	23	36	11	10	21	8	15	23
Once I make a plan to get something done, I stick to it	2	5	7	14	19	33	10	15	25	10	16	26	17	12	29
I am a hard worker	1	6	7	18	23	41	14	15	29	10	10	20	10	13	23

*N1 =Number of boys; N2 =Number of girls ; T= Total Number of early adolescents

Table 6

Comparison of statements regarding the level of optimism

OPTIMISM	Boys(N=53)									Girls(N=67)					
	Almost never			Sometimes			Often			Very often			Almost always		
STATEMENTS	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T
I am optimistic about the future	2	7	9	12	23	35	8	13	21	15	8	23	16	16	32
In uncertain times, I expect the best	3	3	6	11	25	36	13	12	25	10	9	19	16	18	34
I think good things are going to happen to me.	1	4	5	12	16	28	7	11	18	13	16	29	20	20	40
I believe that things will work out, no matter how difficult they seem.	1	2	3	7	15	22	10	15	25	20	12	32	15	23	38

*N1 =Number of boys; N2 =Number of girls ; T= Total Number of early adolescents

Table 7

Comparison of statements regarding the level of connectedness

CONNECTEDNESS	Boys(N=53)									Girls(N=67)					
	Almost never			Sometimes			Often			Very often			Almost always		
STATEMENTS	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T
When something good happens to me, I have people whom I like to share the good news with.	1	1	2	8	2	10	11	3	14	7	3	10	26	58	84
When I have a problem, I have someone who will be there for me.	3	2	5	8	6	14	5	4	9	5	4	9	32	51	83
There are people in my life who really care about me.	1	0	1	6	3	9	2	8	10	2	3	5	42	53	95
I have friends that I really care about	3	4	7	2	0	2	3	6	9	7	6	13	38	51	89

*N1 =Number of boys; N2 =Number of girls ; T= Total Number of early adolescents

Table 8

Comparison of statements regarding the level of happiness

| HAPPINESS | Boys(N=53) | | | | | | | | | Girls(N=67) | | | | | |
| | Almost never | | | Sometimes | | | Often | | | Very often | | | Almost always | | |
STATEMENTS	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T	N1	N2	T
I feel happy	1	1	2	4	15	19	14	20	34	9	8	17	25	23	48
I have a lot of fun	1	3	4	10	18	28	8	11	19	12	10	22	22	25	47
I love life	1	2	3	7	12	19	5	6	11	4	4	8	36	43	79
I am a cheerful person	1	2	3	8	9	17	6	9	15	9	8	17	29	39	68

*N1 =Number of boys; N2 =Number of girls ; T= Total Number of early adolescents

Table 4 clearly indicates the statements regarding the level of engagement. In the statements, ' when I do an activity, I enjoy it so much that I lose track of time', 40 respondents (17 boys and 23 girls) rated 'sometimes' and 17 boys rated 'almost always'. For the statement 'when I am learning something new, I lose track of how much time has passed', 42 respondents(17 boys & 25girls) rated 'sometimes' and 10 respondents (4 boys and 6 girls) rated ' never'.

Table 5 represents the statements regarding the level of perseverance. For the statement, 'I finish whatever I begin', 41 respondents consisting of twenty two girls and nineteen boys rated 'sometimes'. 36 early adolescents, rated 'sometimes' and another 36 respondents   rated 'often' for the statement, 'I keep at my school work until I am done with it'. A total of 29 respondents rated 'almost often' for the statement 'Once I make a plan to get something done, I stick to it'   which indicated that they could finish the task well once they start it.   About 41 respondents rated 'sometimes', consisting of 23 girls and 18 boys for the statement 'I am a hard worker'.

Table 6 includes four statements related to 'optimism'. For the statement 'I am optimistic about the future', a total of 35 respondents rated 'sometimes' and 32 rated 'almost often'. About 25 girls rated 'sometimes' and 16 boys rated 'almost often' suggesting that they expected best even at uncertain times. 38 respondents rated 'almost often' and they believed that they could accomplish even the most difficult tasks.

Table 7 represents the level of connectedness among the early adolescents with family, friends and others around them. For almost all the statements the most respondents rated 'almost often'. For example 84 out 120 samples, of which 58 girls and 26 boys rated 'almost often' for the statement 'When something good happens to me, I have people whom I like to share the good news with'. Majority of sample responded that almost often have someone there for them at times of difficulty. More than half of the early adolescent girls suggested that they have friends that they really care about.

Table 8 represents the level of happiness. 48 early adolescents responded that they felt happy, and rated 'almost always'. For the statement 'I have a lot of fun', a total of forty seven early adolescents rated 'almost always'. 43 girls and 36 boys rated almost always for the statement 'I love life'. A total of 68 early adolescents considered

themselves as 'cheerful person'. Statistically significant positive correlations were found between happiness and the health-related variables of early adolescent boys and girls of an urban middle school (Mahon, Yarcheski, & Yarcheski, 2005).

4.3.2. Overall Well-being among early adolescents

The level of over well-being and it's comparison among the selected early adolescent boys and girls is represented in the table 9 and figure 4.

Table 9

Overall wellbeing among the selected early adolescents

Wellbeing Gender	Low level of Well being (Score=Below 45)		Moderate level of Wellbeing (Score=45-72)		High level of well being (Score=73-100)	
	No.	%	No.	%	No.	%
Boys(N=53)	0	0	21	39.6	32	60.4
Girls (N=67)	1	1.5	33	49.3	33	49.3
Total (N=120)	1	0. 8	54	45	65	54.2

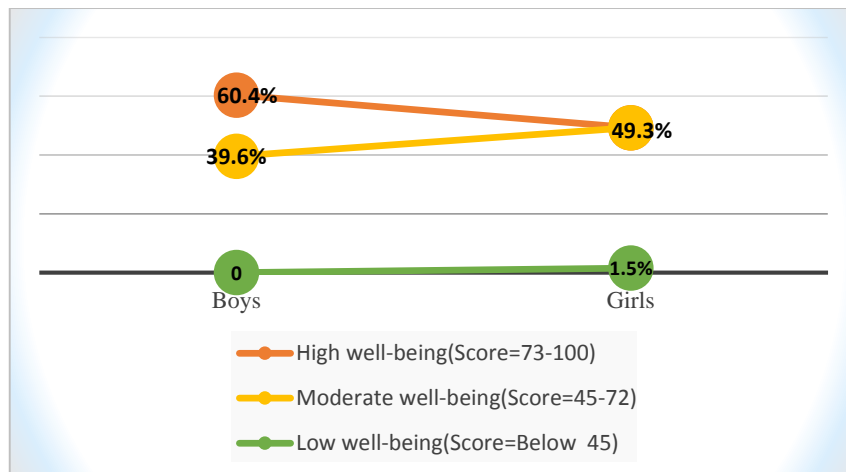| Gender of the respondent	N	Mean ± SD	t	Sig. (2-tailed)
Boys	53	3.6735±0.5740	0.8497	0.3972
Girls	67	3.5791±0.6280		

*Not significance at α =0.05 level

Figure 4

Overall well-being of the respondents

In the present study an attempt was made to find out the difference in the level of overall wellbeing among boys and girls. Table 9 and figure 4 indicates that the more than half of the selected sample (54.2%) showed high level of well-being, boys with 60.4 percent and girls with 49.3 percent. About 39.6 percent of the boys and 49.3 percent of the girls had moderate well-being.

The relationship between well-being and gender were calculated using independent t test and found to be not significant (p =0.3972). The t value obtained was 0.8497.The results presented indicates that gender differences does not influence the perception of overall well-being, i.e., there is no significant difference between adolescent boys and girls in their overall well - being at 0.05 significance level. A study conducted in Ahmedabad by Parmar and Makwana revealed that there is no significant difference in general wellbeing among adolescent boys and girls (Parmar & Makwana, 2016).

4.4. Prevalence of Worries

According to Spruijt-Metz and Spruijt, 1997, worrying have an impact on psychosocial well being in association with emotionality, ease of interaction with parents, fatigue, and alienation.

4.4.1. Symptoms of worries

Excessive level of worries can affect one's overall health and well-being. It can have negative effects such as physical ailments, irregularities in sleep or appetite, thereby it might have detrimental effects on the general performance.

Table 10 represents the response given by boys and girls to the statements regarding the various symptoms of worries.

Table 10

Prevalence of symptoms of worries

ITEM	N			S			O		
	N1	N2	T	N1	N2	T	N1	N2	T
	%	%	%	%	%	%	%	%	%
Nervousness	11	8	9	81	70	75	8	22	16
Disturbed sleep	58	45	51	38	42	40	4	13	9
Excessive thoughts	34	18	25	43	48	46	23	34	29
Trouble in relaxing	64	46	54	30	40	36	6	13	10
Irritability	23	13	18	60	58	59	17	28	23
Fear	47	22	33	45	54	50	8	24	17

*N= Never, S=Sometimes, O= Often

N1: Number of boys = 53; N2 : Number of girls=67;T: Total number of sample=120

Table 10 reveals that majority of the respondents experienced nervousness, where 47 percent of girls and 43 percent boys rated 'sometimes'. Only very few boys (4%) and girls (13%) rated 'often' for the statement on 'disturbed sleep'. Nearly half (46%) of the respondents indicated that they experience 'excessive thoughts'. About 36 percent of the respondents rated 'sometimes' indicating that they had difficulty to remain relaxed. About three fourth (71%) of the respondents suggested that they get easily annoyed or irritated. More than half (54%) of the girls responded that experienced fear 'sometimes 'and boys (47%) responded that they 'never' experienced fear.

4.4.2. Comparison of level of worries with respect to gender, type of family, parental education and parental occupation

It is quite normal to have certain degree of worry, however, as the perceived number of worries rise, it is more likely that the young person is susceptible to anxiety and depression. (Brown, Teufel, Birch, & Kancherla, 2006) . Table 11, figure 4, 5, 6, 7 illustrates the level of worries among the early adolescent boys and girls.

Table 11

Comparison of level of worries among the selected early adolescents

Level of Worries / Gender	Low level of worries (Score:6-9)		Moderate level of worries (Score:10-13)		High level of worries (Score: Above 13)	
	No.	%	No.	%	No.	%
Boys (N=53)	18	34	32	60.4	3	5.7
Girls (N=67)	11	16.4	39	58.2	17	25.4
Total (N=120)	29	24.2	71	59.2	20	16.7

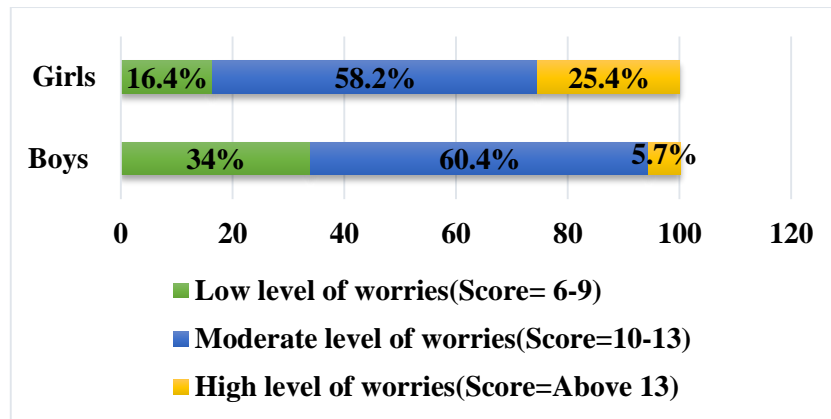| Gender of the respondent	N	Mean ± SD	t Value	p value*
Boys	53	1.7138±0.3323	-3.87595	0.000175
Girls	67	1.97512±0.3916		

*Significant at α =0.05 level

Figure 5

Comparison of level of worries among the early adolescent boys and girls

On analysing table 11 and figure 5 the level of worries among the early adolescent boys and girls, it was found that girls had a greater 'high level of worries' (25.4%) than the boys with 'high level of worries' (5.7%). About 60.4 percent of the boys and 58.2 percent girls had 'moderate level of worries'. 'Low level of worries' were found at a greater degree among boys (34%) than that of the girls(16.4%).

The study revealed that there is significant difference in worrying disorder among the early adolescent boys and girls. Here, the p value is 0.0001 which is less than the significance level 0.05. Hence the assumption stating that there is a relationship between gender and level of worries is proved.

Figure 6

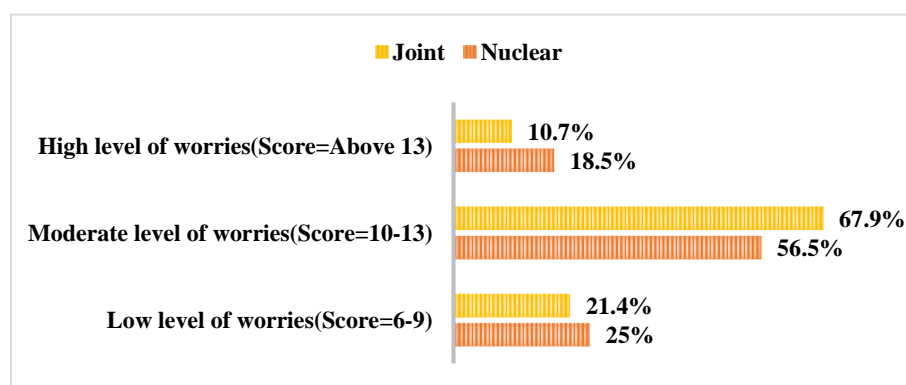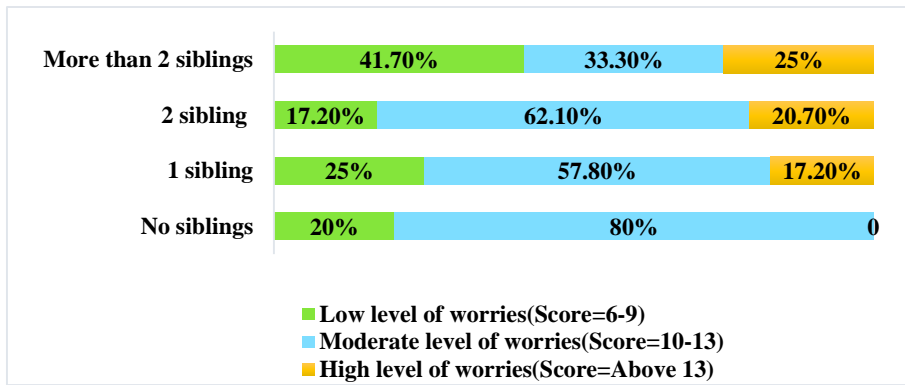**Comparison between level of worries and type of family**

Figure 7

Comparison between level of worries and Number of siblings in the respondents
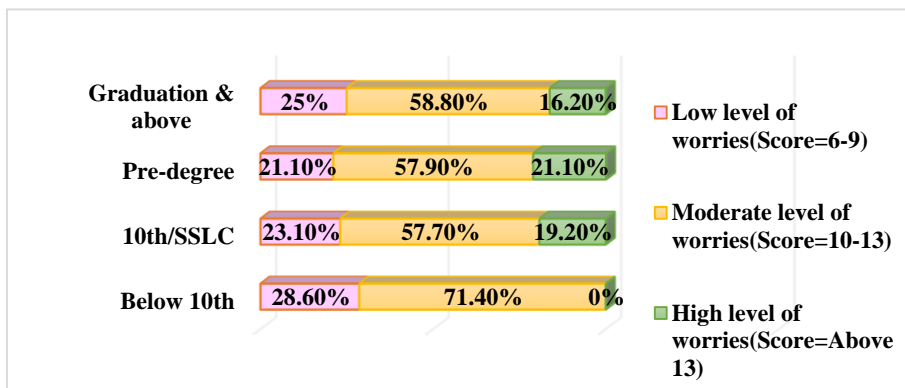

Figure 8

Comparison between level of worries and father's educational qualification in the respondents
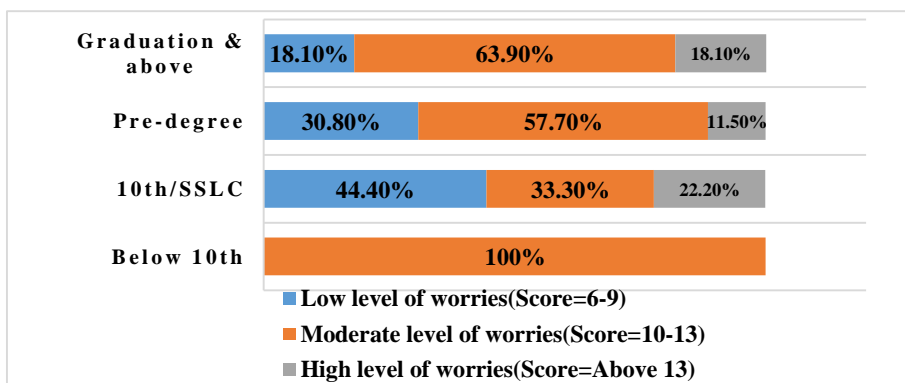

Figure 9

Comparison between level of worries and mother's educational qualification in the respondents

Figure 6 illustrates the level of worries with respect to the type of family. Early adolescents, those who hailed from joint families had 67.9 percent of 'moderate level of worries', followed by 21.4 percent of 'low level of worries' and 10.7 percent of 'high level of worries'. It was interesting to note that early adolescents who belonged to nuclear families, represented 'high level of worries' (18.5%). This might be because, the chance for sharing of thoughts, feelings and needs might me lesser in nuclear families. Moore and colleagues opined that a home set up that provide security, warmth and connected parental relationship is experienced by majority of the adolescents, if these conditions are not met it is likely that they will be more vulnerable to mental health issues (Moore, Guzman, Lippman, & Garett, 2006)

Figure 7 indicates the result obtained on the comparison between the level of worries with regard to the number of siblings. According to Verhulst and Van der Ende (1997), the adeolscents generally use their friends as frame of reference against which they judge their behaviour instaed of their siblings (Zwaanswijk, Ende, Verhaak, Bensing, & Verhulst, 2003).It is clear from the table that greater percent of ' High level of worries' was found among the sample with more than two siblings, follwed by the those early adolescents with two siblings and one sibling.The sample with no siblings had a greater percent of 'moderate level of worrries'(80%) than the sample with two siblings(62.1%), one sibling(57.8%), and more than two two siblings(33.3%).The early adolescents with more than two siblings were at a lower risk of having issues rellated to worries when compared to early adolescents with two, one, or no siblings.

Figure 8 and 9 suggests that fathers with pre-degree level of education and mothers with 10th/SSLC education qualification had greater percentage of children with 'high level of worries'. The early adolescents whose fathers and mothers with graduation and above educational qualification were found have 58.8 percent and 63.9 percent of 'moderate level of worries'. All the mothers with below 10th education had children with 'moderate level of worries'.
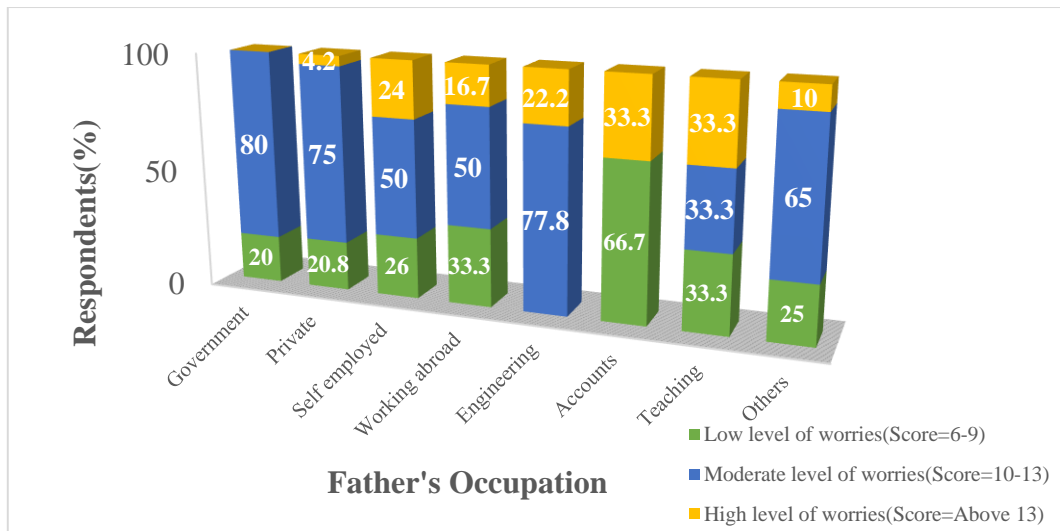
Figure 10
Comparison between level of worries and father's occupation in the respondents
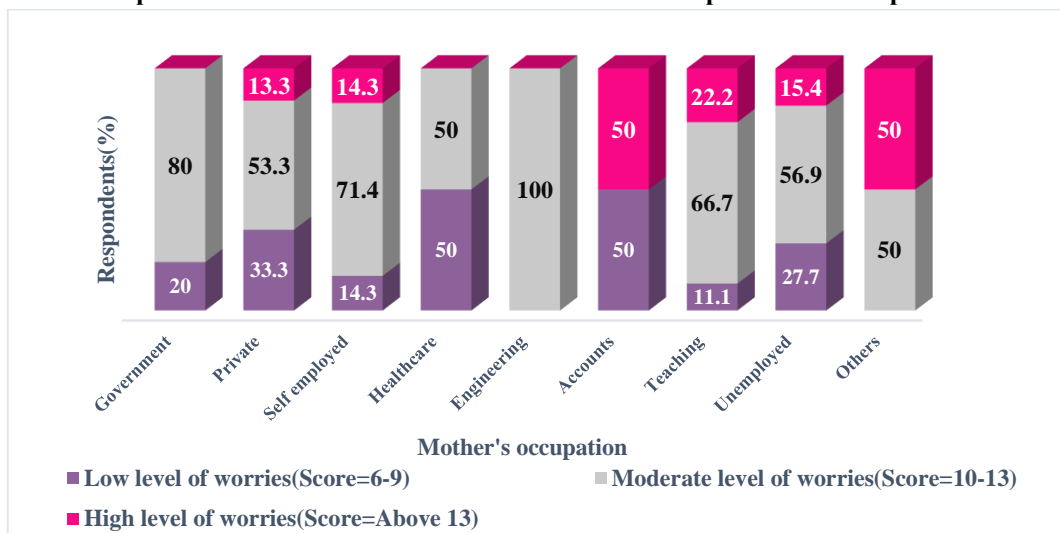
Figure 11
Comparison between level of worries and mother's occupation in the respondents

Figure 10 and figure 11 compares the level of worries among the selected early adolescents with respect to their parental occupation. Fathers working in the field of teaching (33.3%), accounts (33.3%), and mothers working in accounts (50%) and other fields of occupation(50%) had children with 'high level of worries'. Relatively high degree of 'moderate level of worries' was shown amongst early adolescents whose mothers and fathers working in fields other than accounts.

4.5. Prevalence of sadness

Sadness is considered as an emotional pain experienced by an individual due to his or her feeling of loss, deprivation, worthlessness or sorrow.

4.5.1. Symptoms of sadness

Various symptoms associated with sadness is given in table 12

Table 12

Prevalence of symptoms of sadness

ITEM	N			S			O		
	N1	N2	T	N1	N2	T	N1	N2	T
	%	%	%	%	%	%	%	%	%
Lack of interest	30	11	19	49	66	58	21	24	23
Hopelessness	59	61	60	32	28	30	9	11	10
Difficulty in falling asleep	55	62	59	40	25	32	6	12	9
Difficulty in staying awake	55	46	50	36	43	40	9	11	10
Lack of energy	25	18	21	64	63	63	11	19	16
Altered appetite	57	43	49	36	46	42	8	11	9
Poor attention	30	40	36	60	52	58	9	8	7
Loss of pace in speaking/actions	47	57	53	49	31	39	4	12	8
Self -harm/ suicidal ideation	72	66	68	21	21	21	8	13	11

*N= Never, S=Sometimes, O= Often
N1: Number of boys = 53; N2 : Number of girls=67;T: Total number of sample=120

Table 12 indicates that about 58 percent of the total sample rated 'sometimes' for the statement related to 'lack of interest'. 59 percent of the boys and 61 girls responded that they 'never' experienced 'hopelessness'. Almost fifty five percent of boys responded that they 'never' felt difficulty in falling asleep as well as in staying awake. A total of sixty three percent of early adolescents responded that they have 'sometimes' felt 'lack of energy'. About 57 percent early adolescent boys responded that they never experienced any variation in the appetite, where as 46 percent of the girls responded that they 'sometimes' had altered appetite. More than half (58%) of the sample had experienced concentration difficulties. 53 percent, 39 percent, 8 percent of the early adolescents opined that they 'never', 'sometimes', 'often' respectively. The self-harming practice or suicidal ideation was relatively low, i.e., about seventy two percent of the boys and sixty six percent of girls rated 'never' for the questions related to self – harm/suicidal ideation.

4.5.2. Comparison of level of sadness with respect to gender, type of family, parental education and parental occupation

The difference in the level of sadness with reference to gender, type of family, parental education and parental occupation is illustrated in the table 13, figure 12, 13, 14, 15 respectively.

Table 13

Comparison of level of sadness among the early adolescents

Level of Sadness / Gender	Low level of sadness (Score=9-14)		Moderate level of sadness (Score=15-20)		High level of sadness (Score=Above 21)	
	No.	%	No.	%	No.	%
Boys (N=53)	27	50.9	24	45.3	2	3.8
Girls (N=67)	30	44.8	33	49.3	4	6
Total(N=120)	57	47.5	57	47.5	6	5

Gender of the respondent	N	Mean ± SD	t value	p value
Boys	53	1.6184±0.3421	-1.01825	0.310644
Girls	67	1.6832±0.3493		

Not significant α =0.05 level

Table 13 represents the level of sadness with respect to gender. Only 3.8 percent of boys and 6 percent of the girls showed high level of sadness. Moderate level of sadness was observed among 45.3 percent of the boys and 49.3 percent of the girls. Almost half of the early adolescent boys were found to have low level of sadness and nearly 44.8 percent of the girls had low level of sadness.

On analysis, difference in 'sadness' among early adolescent boys and girls, the p value obtained was 0.3106. So we can conclude that there is no significance difference in sadness disorder of boys and girls. Since the p-value is greater than the chosen significance level ($\alpha = 0.05$), we do not reject the null hypothesis. Rather, we conclude that there is not enough evidence to suggest an association between gender and sadness.
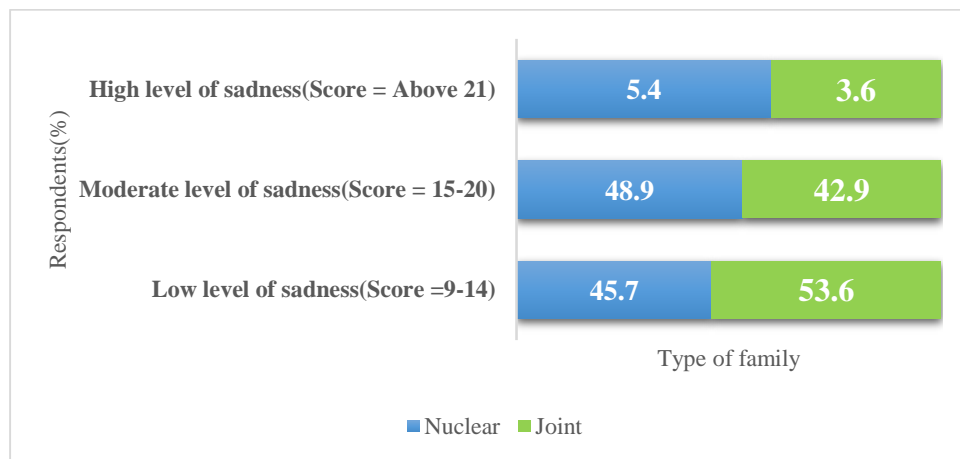
Figure 12

Comparison between level of sadness and type of family of the respondents

Figure 11 represents the level of sadness with respect to the type of family. Among the selected early adolescents with high level of sadness, 3.6 percent of belonged to joint families, 5.4 percent belonged to nuclear families. Approximately 48.9 percent of the samples with 'moderate level of sadness' and 45.7 percent of the sample with 'low level of sadness,' hailed from nuclear families. About 53.6 percent and 42.9 percent of samples hailed from joint families and had 'moderate level of sadness' and 'low level of sadness' respectively.

Figure 13

Comparison between level of sadness and Number of siblings in the respondents

Figure 14

Comparison between level of sadness and father's educational qualification in the respondents
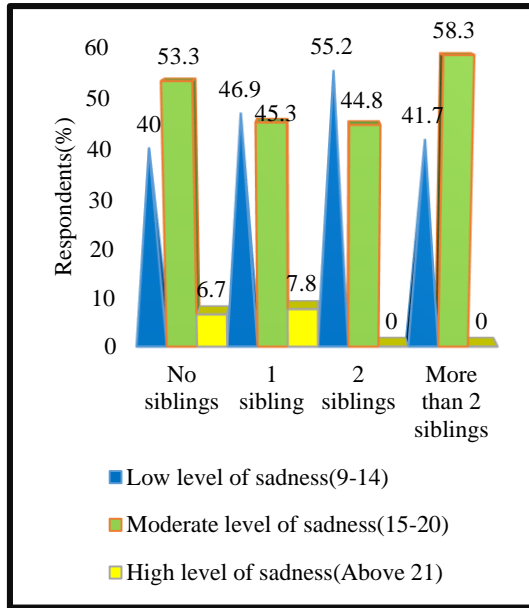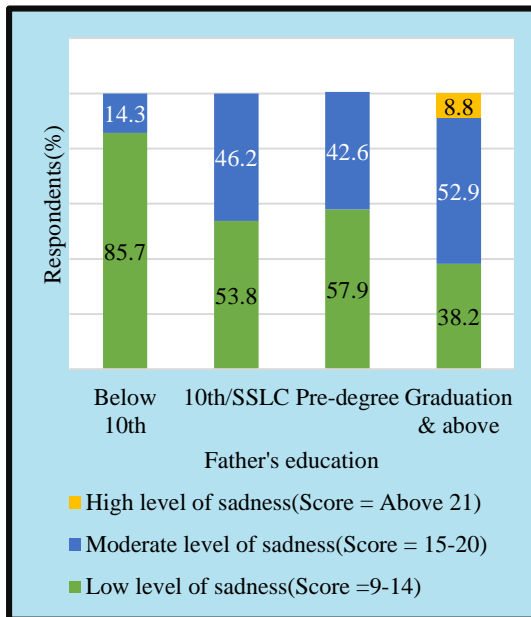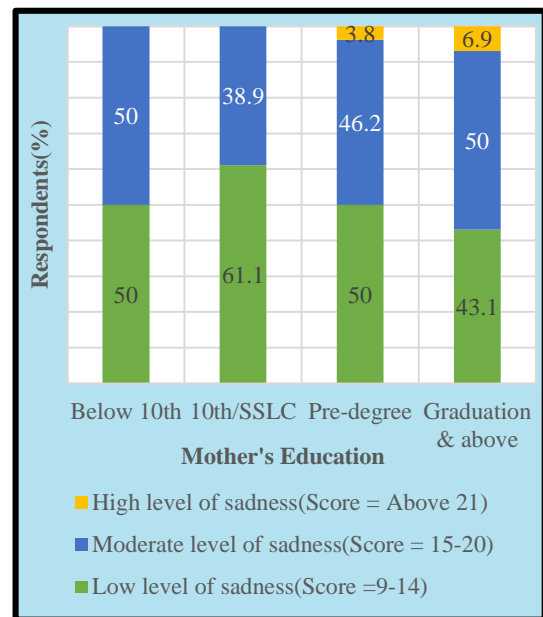

Figure 15

Comparison between level of sadness and mother's educational qualification in the respondents

Figure 13 indicates the level of sadness among the early adolescents with respect to the number of siblings. The table clearly suggests that moderate level of sadness of 58.3 percent was found among the early adolescents with more than two siblings. This was followed by sample with no siblings (53.3%), two siblings (44.8%), and one sibling (45.3%) respectively. The degree of 'low level of sadness' was found to be more among the sample with two siblings. 'High level of sadness' was found amongst sample with one siblings and no siblings respectively. It could be inferred from the table that the degree of 'high level of sadness' was not at all found in sample with two or more than two siblings.

Figure 14 and Figure 15 represents the level of sadness with respect to the educational qualification of the parents. Fathers with graduation and above educational qualification and mothers with graduation & above qualification and pre-degree, had children with highest percent of 'high level of sadness' The degree of 'Low level of sadness' was 50 percent, 38.9 percent, 46.2 percent and 50 percent respectively amongst early adolescents whose mothers with below 10th / SSLC, 10th / SSLC, pre-degree and graduation & above educational qualification respectively. The 85.7 percent of 'low level of sadness' was found among the samples with paternal education qualification of below 10th /SSLC. Fathers with below 10th education, had children with least percent of 'moderate level of sadness (14.3 %) whereas, mothers with 10th/ SSLC education qualification had least percentage (38.9%) of children with 'moderate level of level of sadness'.
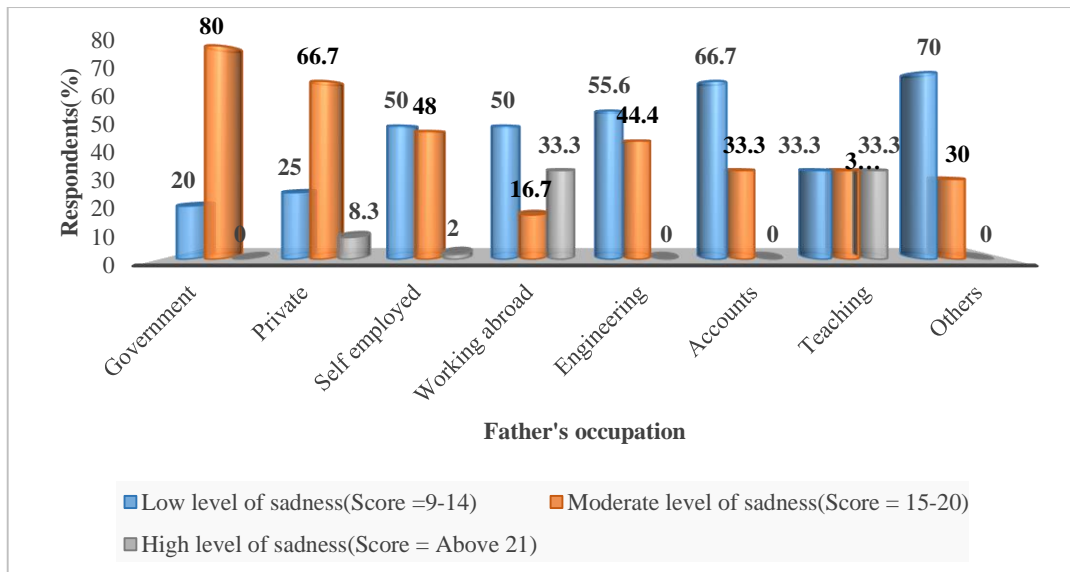
Figure 16

Comparison between level of sadness and father's occupation in the respondents
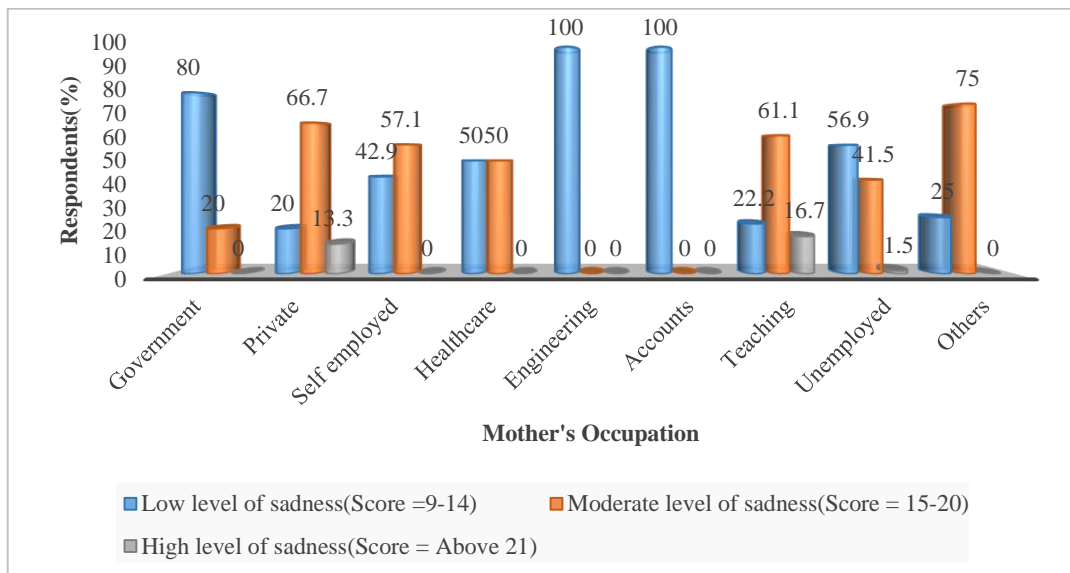
Figure 17

Comparison between level of sadness and mother's occupation in the respondents

Figure 16 and figure 17 compares the level of sadness among the selected early adolescents with respect to their parental occupation. Fathers working abroad (33.3%), working in the field of teaching (33.3%), had children with highest degree of 'moderate level of sadness'.

4.6. Prevalence of Hyperactivity

The level of hyperactivity was analysed in this study and the results are given in the following tables and figures.

4.6.1. Symptoms of hyperactivity

The symptoms associated with hyperactivity represented in table 14

Table 14

Prevalence of symptoms of hyperactivity

ITEM	N			S			O		
	N1	N2	T	N1	N2	T	N1	N2	T
	%	%	%	%	%	%	%	%	%
Fidgeting	30	42	37	49	45	47	21	13	17
Distractibility	13	12	13	49	69	60	38	19	28
Impulsiveness	45	28	36	40	52	47	15	19	18

*N= Never, S=Sometimes, O= Often; N1: Number of boys = 53; N2 : Number of girls=67; T: Total number of sample=120

Table 14 illustrates the common symptoms of hyperactivity. Nearly half (47%) of the respondents rated 'sometimes' which indicated that early adolescents find themselves always on them move and had difficulty to sit still. About forty nine percent of the boys and sixty nine percent of the girls responded 'sometimes', for the statement concerning 'distractibility', from which we can infer that that majority (60 %) had difficulty in completing their task well.

4.6.2. Comparison of level of hyperactivity with respect to gender, type of family, parental education and parental occupation

Table 15, figure 18-24 illustrates the level of hyperactivity among the early adolescents with reference of gender, type of family, parental education and parental occupation.

Table 15

Comparison of level of hyperactivity among the early adolescents

Level of hyperactivity / Gender	Low No.	Low %	Moderate No.	Moderate %	High No.	High %
Boys (N=53)	37	60.8	16	30.2	0	0
Girls (N=67)	48	71.6	19	28.4	0	0
Total(N=120)	85	70.8	35	29.2	0	0

Gender of the respondent	N	Mean	t Value	p value
Male	53	1.9496 ± 0.4995	0.555027	0.579927
Female	67	1.9004 ± 0.4678		

Not significant α =0.05 level
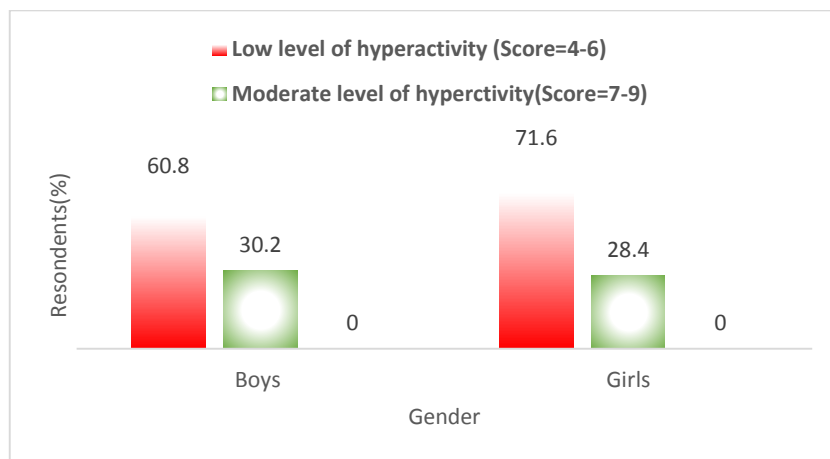
Figure 18

Comparison of level of hyperactivity among the early adolescent boys and girls

Table 15 and figure 18 represents the comparison between the gender and level of hyperactivity was studied. The degree of moderate level of hyperactivity was higher in boys (30.2%) than that of the girls (28.4%). Relatively increased percentage of 'low level hyperactivity' was observed among the early adolescent girls (71.8%).

The p-value obtained through independent t-test is greater than the chosen significance level ($\alpha = 0.05$). Therefore we do not reject the null hypothesis. Rather, we conclude that there is not enough evidence to suggest an association between gender and hyperactivity.
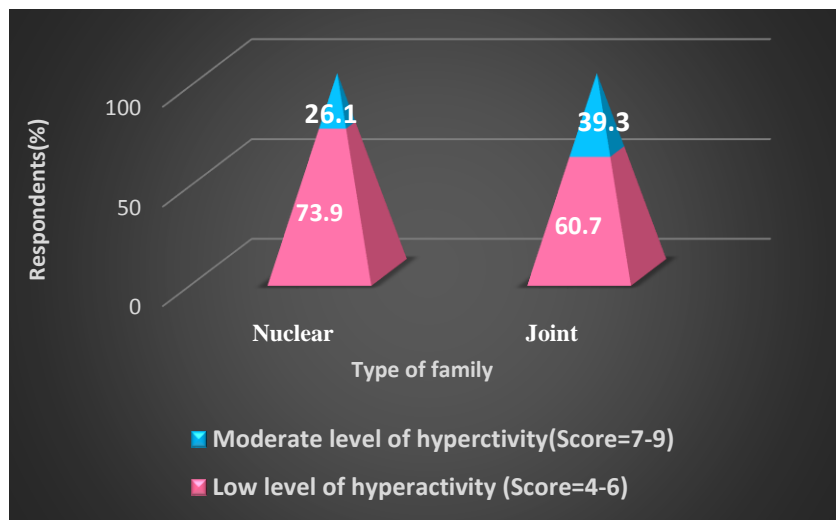
Figure 19
Comparison between level of hyperactivity and type of family of the respondents
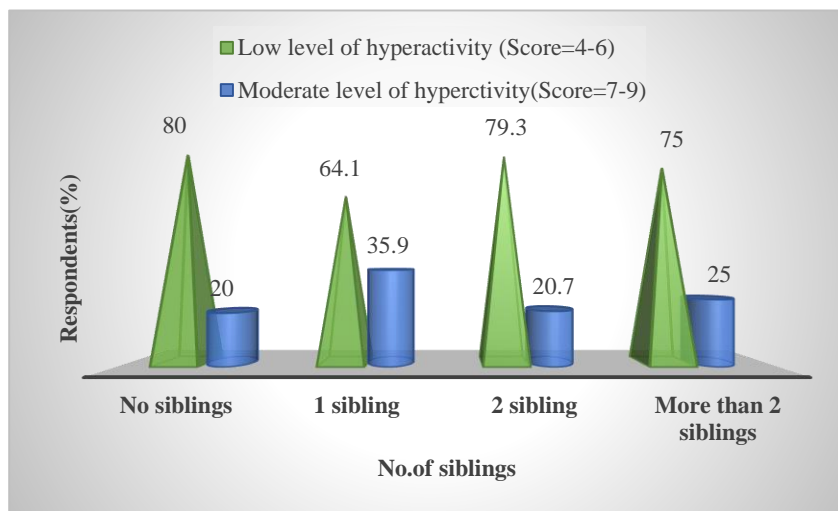
Figure 20
Comparison between level of sadness and Number of siblings in the respondents

Figure 21

Comparison between level of hyperactivity and father's educational qualification in the respondents

Figure 22

Comparison between level of hyperactivity and mother's educational qualification in the respondents
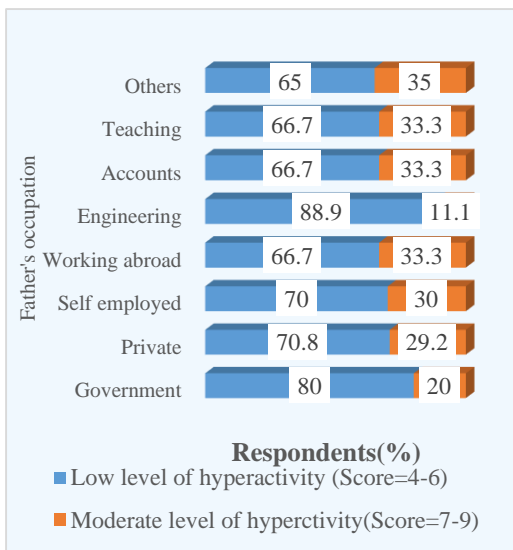
Figure 23

Comparison between level of hyperactivity and father's occupation in the respondents
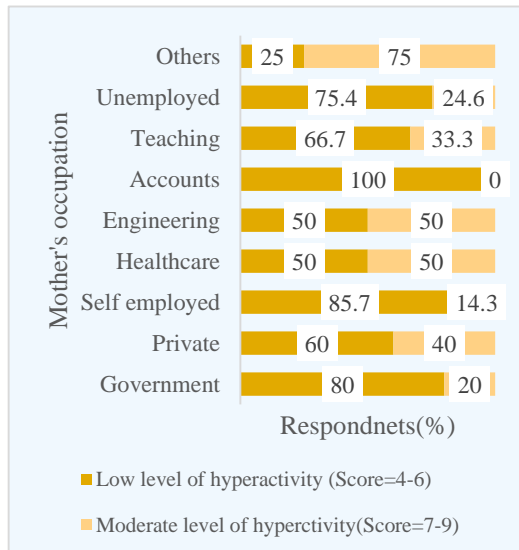
Figure 24

Comparison between level of hyperactivity and mother's occupation in the respondents

Figure 19 represents the level of hyperactivity with respect to the type of family. About 73.9 percent of the sample with low level of hyperactivity belonged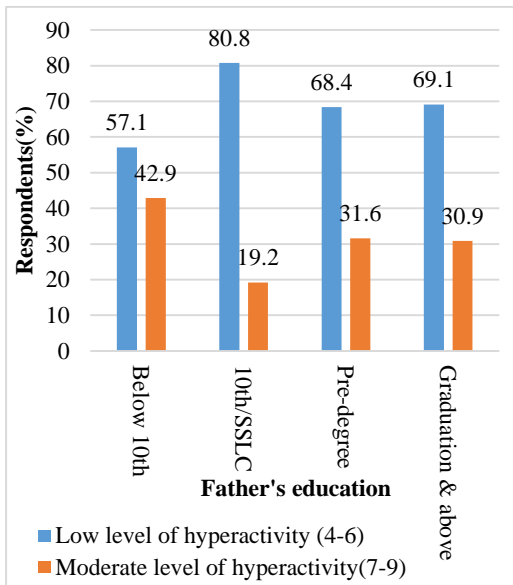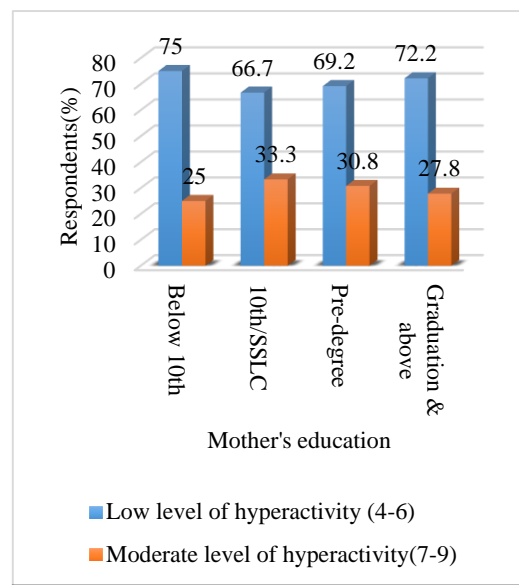 to nuclear family and 60.7 percent belonged to joint family. Moderate level of hyperactivity was higher in early adolescents who belonged to joint family (39.3%) than the early adolescents who belonged to nuclear family (26.1%)

Figure 20 indicates the level of hyperactivity among the early adolescents with respect to the number of siblings. About 80 percent of early adolescents with low hyperactivity had no siblings. The table clearly suggests that moderate level of hyperactivity of 35.9 percent is found among the early adolescents with one sibling.

Figure 21 and figure 22 represents the level of hyperactivity with respect to the educational qualification of the parents. Fathers with below 10th education, had children with highest percent of moderate level of hyperactivity (42.9 %) whereas, mothers with 10th/ SSLC education qualification had highest percentage (33.3%) of children with moderate level of hyperactivity. Hyperactivity level was generally low in the selected early adolescents. The degree of Low level of hyperactivity was seen amongst early adolescents whose fathers had 10th / SSLC as educational qualification (80.8%) and fathers with below 10th education had children with low level of hyperactivity of 57.1 percent. Low level of hyper activeness was observed among the respondents whose mothers had educational qualification of 10th /SSLC (75%).

Figure 23 and figure 24 compares the level of hyperactivity among the selected early adolescents with respect to their parental occupation. Fathers working abroad (33.3%), working in the field of teaching (33.3%), and accounts (33.3%), had children with moderate level of hyperactivity. Highest degree of moderate level of hyperactivity was shown amongst early adolescents whose mothers worked in fields other than teaching, accounts, engineering, healthcare, self-employment, private or government job.

4.7. Prevalence of conduct issues

The details on the symptoms associated with conduct issues and its level with respect to gender, type of family, number of siblings, parental occupation and parental education are given in the tables given below.

4.7.1. Symptoms of related to conduct issues

The study has made an attempt to find out the prevalence of various symptoms associated with conduct issues. The response is given in table 16.

Table 16

Prevalence of symptoms related to conduct issues

ITEM	N			S			O		
	N1	N2	T	N1	N2	T	N1	N2	T
	%	%	%	%	%	%	%	%	%
Breaking the rules & regulations	19	36	28	64	54	58	17	10	13
Stealing	89	90	89	6	10	8	6	0	3
Destruction of others belongings	72	82	78	21	15	18	8	3	5
Damaging school property	66	81	74	28	16	22	6	3	4
Physical/verbal attack	45	49	48	45	46	46	9	5	7
Cheating in exams	34	36	35	55	63	59	11	2	6
Bunking from the class	68	61	64	19	28	24	13	10	12

*N= Never, S=Sometimes, O= Often
N1: Number of boys = 53; N2 : Number of girls=67;T: Total number of   sample=120

The table 16 depicts that about fifty eight percent of the selected sample, had broken the rules and regulation at home or at school. More than half of the girls (54%) and boys (64%) rated 'Sometimes' for the same. Majority of the samples (89%) responded that they were never engaged in stealing. About seventy percent of boys and

eighty percent of girls responded 'never' for the statement concerning 'destruction of other's belongings.

About twenty percent of the sample, consisting of twenty eight percent of boys and sixteen percent of girls responded that they had damaged school's property at some time or the other. The respondents revealed that forty nine percent of the girls never engaged in physical/verbal attack. Nearly half of the boys (45%) responded that they 'never' involved in physical/verbal attacking at the same time, another forty five percent of the boys responded that they had involved in physical/verbal attack at some time or the other. Interestingly, about fifty nine percent of the sample constituting approximately 63 percent of girls and 55 percent of boys revealed that they have 'sometimes' done malpractices or cheating in examinations. However, more than three fourth (77%) of the sample responded that they never had bunked their classes.

4.7.2. Comparison of level of conduct issues with respect to gender, type of family, parental education and parental occupation

Table 17 represents the gender difference in the level of hyperactivity among early adolescents. The level of conduct issues with respect to type of family, number of siblings, parental education and parental occupation is illustrated in figures 24 to 29 respectively.

Table 17

Comparison of level of conduct issues among the early adolescents

Level of Conduct issues Gender	Low (Score=7-11)		Moderate (Score=12-16)		High (Score=17-21)	
	No.	%	No.	%	No.	%
Boys (N=53)	36	67.9	14	26.4	3	5.7
Girls (N=67)	55	82.1	12	17.9	0	0
Total(N=120)	91	75.8	26	21.7	3	2.5

Gender of the respondent	N	Mean	t Value	p Value
Boys	53	1.5534±0.4079	2.162274	0.032615*
Girls	67	1.4154±0.2906		

*Significant at α =0.05 level

Table 17 represents the gender differences in the level of conduct issues. About 5.7 percent of the early adolescent boys had high level of conduct issues. Boys (26.4%) were found to have relatively increased percentage of moderate conduct issues than that of the girls (17.9%).

Early adolescent girls (82.1%) were at a lower risk of having conduct issues when compared to that of the early adolescent boys (67.9%).

The independent t test conducted on the early adolescent boys and girls indicated p value of 0.0326 which is less than the significance level 0.05, i.e., $p < 0.05$. Here, the null hypothesis 'there is no significant difference between gender and conduct issues' was rejected. So we can conclude that there is significance difference in conduct issues among the early adolescent boys and girls.

Figure 25
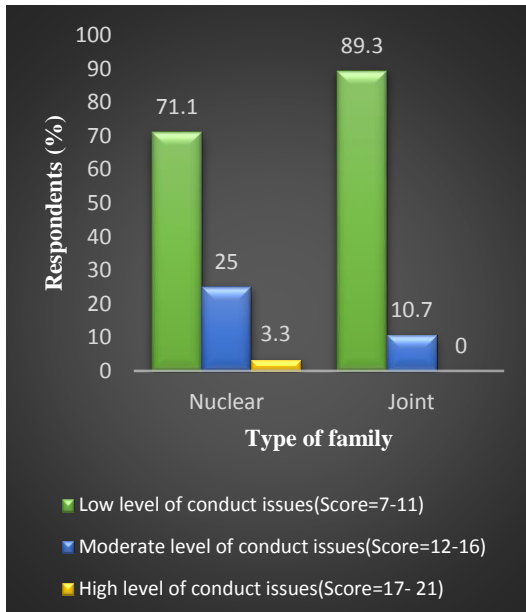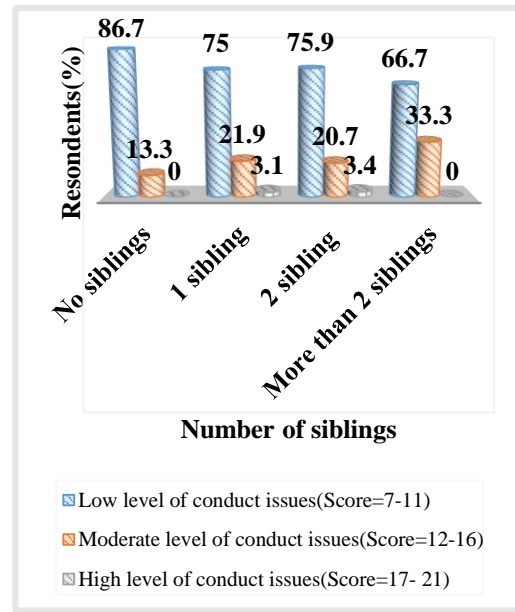**Comparison between level of conduct issues and type of family**

Figure 26
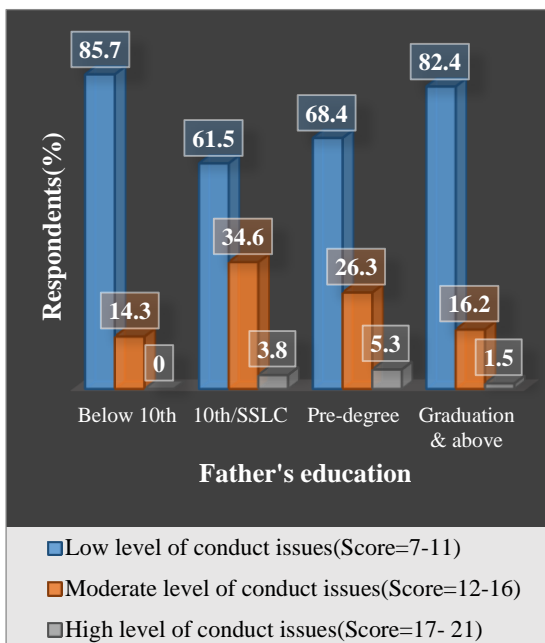**Comparison between level of conduct issues and number of siblings**

Figure 27
Comparison between level of conduct issues and father's educational qualification in the respondents
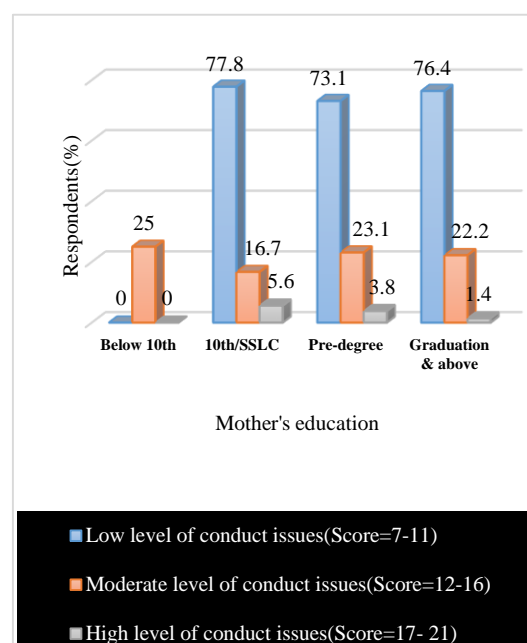

Figure 28
Comparison between level of conduct issues and mother's educational qualification in the respondents

Figure 25 indicates that clearly illustrates that low level of conduct issues was indicated amongst early adolescent, out of which majority comes from joint family(89.3%) and rest hailed from nuclear family(71.1%). Twenty five percent of the samples with moderate level of conduct issues hailed from nuclear families and approximately eleven percent of the samples belonged to joint families. High level of conduct issues was observed among the respondents who belonged to nuclear families (3.3%).

Figure 26 compares the level of conduct issues among the early adolescents, with respect to the number of siblings. About thirty three percent of early adolescents with more than two siblings had moderate level of conduct issues, followed by the early adolescents with one sibling (21.9%), two siblings (20.7%) and no siblings (13.3%) respectively. The level of conduct issues was low among the sample with no siblings (86.7%) when compared to that of samples with more than two siblings (66.7%). Those early adolescents with no siblings may have more facilities provided by the parents at home, thereby reducing the chance for getting engaged in quarrels, physical attack, or destruction of properties. High level of conduct issues with respect to the number of sibling was found to be relatively low. About 3.4percent of the samples with two siblings and 3.1 percent of the samples with one siblings indicated high level of conduct issues.

Figure 27 and 28 represents the level of conduct issues with respect to the educational qualification of the parents. High level of conduct issues was found amongst early adolescents whose fathers had an educational qualification of pre-degree(5.3%), and mothers with educational qualification of 10th/SSLC (5.6%). Mothers with below 10th education, had children with 25 percent of moderate conduct issues whereas, fathers with 10th/ SSLC education qualification had highest percentage(34.6%) of children with moderate conduct issues. It was interesting to note that, low level of conduct issues were indicated amongst early adolescents whose fathers had below 10th educational qualification (85.7%) than the fathers with graduation & above educational qualification (82.4%). Low level of conduct issues are observed among the respondents whose mothers had educational qualification of 10th /SSLC (77.8%).
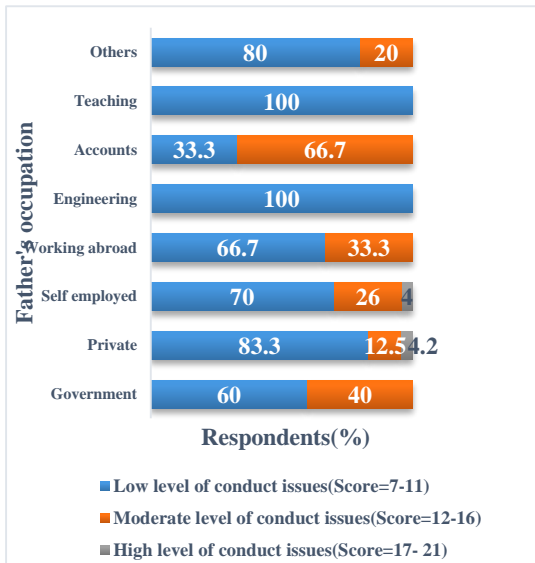
Figure 29
Comparison between level of conduct issues and father's occupation in the respondents
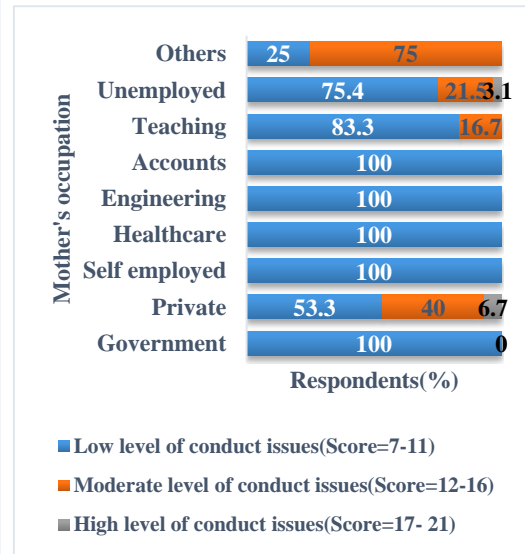
Figure 30
Comparison between level of conduct issues and mother's occupation in the respondents

The table 29 and 30 compare the level of conduct issues among the selected early adolescents with respect to their parental occupation. Fathers who worked in private job had children with high level of conduct issues (4.2%) followed by the fathers who engaged themselves in self-employment had children with high level of conduct issues (4%). The mothers who worked in private job had children with high level of conduct issues (6.7%). And mothers who were unemployed were found to have children with a high level of conduct issues (3.1%).

Moderate level of conduct issues was found amongst the early adolescents those of whose fathers worked in the field of accounts (66.7%), followed by the fathers working in Government jobs(40%),working abroad (33.3%), self-employed (26%), other jobs(20%) and private jobs(12.5%) . Moderate level of conduct issues were indicted amongst the samples whose mothers worked in private jobs and other work field .Generally, comparison between parental job and conduct issues indicated that the sample had relatively low level of conduct issues.

4.8. Prevalence of eating disorder

This study has made an attempt to analyse symptoms associated with eating disorder which is an emerging mental health concern among adolescents.

4.8.1. Symptoms of eating disorder

Table 18 represents the common symptoms associated with eating disorders. The response given by the sample on the general symptoms, symptoms associated with anorexia nervosa, bulimia nervosa and binge eating disorder is given below.

Table 18

Prevalence of symptoms of eating disorders

ITEM	Response (%)		
	Boys	**Girls**	**Total**
GENERAL SYMPTOMS			
Worry about body image	43	64	55
Pre- occupied with weight/ food/exercise	53	30	40
Avoidance of social invitation	21	8	13
Low self-confidence/self esteem	23	43	34
Consumption of large meals without	28	27	28
BINGE EATING -SYMPTOMS			
Eating when not hungry/even after	25	28	27
Consumption of large amount of food in	19	19	19
Trouble in exercising due to the body	13	8	10
ANOREXIA NERVOSA- SYMPTOMS			
Feeling fat even though thin	19	40	31
Avoid certain foods	27	28	28
Loss of weight	49	40	44
BULIMIA NERVOSA- SYMPTOMS			
Strict dieting followed by bingeing	15	5	9
Vomiting purposefully	8	0	3
Use of laxatives/ diet pills	4	0	2
Excessive exercising to control weight	45	21	32

More than half (55%) of the selected samples was worried about their about body image, out of which girls had more concern on their body image. About 40 percent of the selected early adolescents were preoccupied with exercise, and weight. Thirty four percent of the samples consisting of forty three percent girls and twenty three percent boys responded that they have low level of self- confidence, which might be the reason for which early adolescent boys and girls avoid social invitations. Almost equal number of boys and girls responded that they consume a large amount of food without gaining body weight.

The table represents the symptoms of anorexia nervosa. About forty percent of the girls responded that they felt themselves fat even when others said they are thin. A general tendency to avoid certain foods were observed among the selected samples (28%). A total of 44 percent early adolescents suggested that they have lost their weight within the past year, out of which almost half of them were the boys (49 %).

The study had investigated on the prevalence of bulimia nervosa. About 32 percent of the early adolescents engaged themselves in exercising excessively so as to reduce the weight. Mostly boys (45%) were engaged in exercise than that of the girls (21%). Only very few samples had a practice of following strict diets, using laxatives or vomiting purposefully.

4.8.2. Comparison of level of eating disorder with respect to gender

The gender differences associated with the level of eating disorder is represented in table 19.

Table 19

Gender differences in the level of eating disorders among the early adolescents

Gender of the respondent	N	Mean	t Value	p Value
Boys	53	1.7396±0.1463	-0.75975	0.448921*
Girls	67	1.7582±0.1216		

Not Significant at α =0.05 level

Here, the p value is 0.4489 which is greater than the significance level 0.05. So we can conclude that there is no significance difference in eating disorder of boys and girls.

4.9. Relationship between mental health issues and wellbeing

Based on the responses indicated by the sample, the following tables represents the correlation between overall well-being and mental health issues; correlation between the various domains of EPOCH measure of adolescent well-being; correlation between the various domains of EPOCH measure of adolescent well-being and selected mental health issues; and correlation between various mental health issues.

4.9.1. Relationship of mental health issues with that of overall well-being, the five domains of wellbeing

Table 20 illustrates on the relationship between overall well-being and mental health issues. An analysis on the relationship between the mental health issues and the domains namely engagement, perseverance, optimism, connectedness, happiness was done in this study and the results are given in the table 21.

Table 20

Correlation between Overall wellbeing and mental health issues

In this study an effort was made to estimate the relationship between the overall well-being and various mental health issues among early adolescents. The result is given below.

	Overall Well-being	Worries	Sadness	Hyperactivity	Conduct issues	Eating Disorder
Overall Well-being	1	-0.193*	-0.318**	-0.090	-0.161	0.107

*Correlation is significant at α =0.05 level; **Correlation is significant at α = 0.01

Table 20 represents the Overall wellbeing and worries have a statistically significant linear relationship. Negative correlation (r = -0.193) is observed between overall wellbeing and worries, which indicates that high level of worries can result in decrease in the level of overall wellbeing. The relationship is found to be significant at

0.05 level. It suggests that at 0.05 significance level, overall wellbeing has significant negative correlation with that of sadness(r= -0.318). However, the relationship is not as strong as that with worries.

Similarly, there is a negative relationship for overall well-being with that of hyperactivity (r= - 0.090) and conduct issues(r = -0.161). However these issues are not found cause a very severe effect on the overall well-being.

The analysis indicates that there is positive relationship between overall well-being and eating disorder. Scientifically, eating disorder is causes negative influence on the physical and mental health of an individual. However, the result obtained shows a difference in this aspect. This may be because, the respondents might be engaging themselves in various diet control or exercises and the corresponding physical appearance might be providing a sense of satisfaction for them.

Table 21

Correlation between various mental health issues and the domains of well being

Mental health Issues / Domain	Worries	Sadness	Hyperactivity	Conduct issues
Engagement	0.018	-0.22	0.050	0.023
Perseverance	-0.127	-0.246**	-0.202*	-0.307**
Optimism	-0.211*	-0.307**	-0.129	-0.114
Connectedness	-0.014	-0.203*	0.063	-0.057
Happiness	-0.332**	-0.353**	-0.101	-0.129

*Correlation is significant at α =0.05 level; **Correlation is significant at α = 0.01

The table 21 illustrates the relationship between various disorders with that of the various domains of overall well-being. Increase in hyperactivity can adversely affect the level of perseverance, which indicates the inability of an individual to complete his or her target tasks. The significance level of perseverance with that of hyperactivity was found to be highest(r= - 0.202) at 0.05 significance level. It results indicated more negative correlation with sadness(r = -0.246) than the negative correlation with conduct issues (r = -0.307) at 0.01 level of significance.

Table 21 clearly indicate that there exists a negative correlation between optimism and worries (r = -0.211) at 0.05 significance level. Also the relationship between optimism and sadness(r=-0.307), the magnitude of strength is moderate. It can be inferred that when an individual experience symptoms of worries or sadness, it is likely that the early adolescent becomes less hopeful and may experience a lack of confidence which in turn may have a negative impact on the mental health of the individual.

The study shows that the relationship between connectedness and sadness is negative (r = - 0.203) which indicates that the selected sample faces some difficulty in maintaining satisfactory relationship with others.

The study also indicates that there is a negative correlation between happiness and worries (r = - 0.332), which is followed sadness (r = -0.353). This means when there is an increase in worries or sadness, the individual may have lowered level of happiness.

4.9.2. Relationship between the five domains of EPOCH Measure of Adolescent Well –being

The study had analysed the relationship between the five domains of EPOCH measure of adolescent wellbeing. The results are given below.

Table 22

Correlation between the five domains of well being

The study has made an effort to understand the relationship between the various domains of wellbeing. The results are given below.

Domains	Engagement	Perseverance	Optimism	Connectedness	Happiness
Engagement	1	0.534**	0.400**	0.216*	0.312**
Perseverance	0.534**	1	0.581**	0.222*	0.438**
Optimism	0.400**	0.581**	1	0.275**	0.596**
Connectedness	0.216*	0.222*	0.275**	1	0.396**
Happiness	0.312**	0.438**	0.596**	0.396**	1

*Correlation is significant at α =0.05 level; **Correlation is significant at α = 0.01

Table 22 clearly indicates positive relationship between the various domains of EPOCH measure of adolescent well-being. An increase in one of the domain have a positive impact on the other domain. Engagement and connectedness had a positive correlation(r = 0. 216) at 0.05 significance level. The correlation between perseverance and connectedness was found to be positive(r = 0.222) at 0.05 significance level, from which it can be inferred that improved level of connectedness can have a positive impact on the perseverance level and vice-versa.

At 0.01 significance level, engagement had significant correlation with that of happiness(r = 0.312), optimism(r = 0.4) and perseverance (r = 0.534), which indicated that an increase in happiness, optimism or perseverance makes an early adolescent more involved in their activity (or vice- versa). Perseverance indicated more positive correlation with that of optimism (r = 0.581) at 0.01 significance level. This means, when early adolescents were persistent in the activities, they expressed positive feelings. Thus when positive feelings increases, the early adolescents were found to be more determined and did not pull back from their works. Similarly, perseverance indicated positive correlation with happiness (r=0.438); that is an increased level of happiness can be seen when the early adolescents was persistent and vice- versa. The results revealed that there existed positive correlation between optimism and happiness(r= 0.596) at 0.01 significance level, which reflected the idea that an increased level of hopefulness or confidence contributed to improved level of cheerfulness or joy. The correlation between optimism and connectedness (and vice-versa) was found to be positive that is, a sense of belonging to or affinity towards a group or person created a feeling of sanguineness.

4.9.3. Relationship between the selected mental health issues

Several researches have focused upon the mental health problems among the youth. The level of mental health issues varied significantly, based on how the mental health problems were defined and measured. (Knopf, Park, & Mulye, 2008). Table 23 illustrates the relationship between the selected mental health issues.

Table 23

Correlation between the mental health issues

Mental health issues	Worries	Sadness	Hyperactivity	Conduct issues	Eating disorder
Worries	1	0.393**	0.344**	0.015	-0.228*
Sadness	0.393**	1	0.432**	0.333**	-0.381**
Hyperactivity	0.344**	0.432**	1	0.419	-0.319**
Conduct issues	0.015	0.333**	0.419	1	-0.344**
Eating disorder	-0.228*	-0.381**	-0.319**	-0.344**	1

*Correlation is significant at α =0.05 level; **Correlation is significant at α = 0.01

Table 23 represents the relationship between the various disorders among the selected early adolescents. The results reported that mental health issues had a positive correlation between each other. In case of worries, it was shown to have a positive correlation with sadness($r = 0.393$) and hyperactivity ($r = 0.344$) at 0.01 level of significance. This indicated that as worries increased, the early adolescents more likely to experienced unhappiness. According to Rosen, ADHD affected individuals are at a higher risk for anxiety disorders. Some researchers suggest that there exists some pre-wiring in the brain that makes the child both anxious and distractible. The relationship between conduct issues and worries was found to have positive correlation, but the strength of correlation is low.

Vann opined that onset of puberty, has increased the feeling of lack of self-control which is a sensation linked o depression risk. Sadness had positive correlation with hyperactivity($r= 0.432$) vice- versa. Lack of self-control may lead to inattentiveness or impulsivity in early adolescents. The correlation of sadness with that of conduct issues is positive however the strength of relationship is relatively low ($r = 0.015$) when compared to that of worries and sadness.

A positive relationship is indicated in case of sadness with that of worries, hyperactivity and conduct issues. An increase in sadness can result in the increased level of each of the other disorders and vice versa, i.e., for example an increase in sadness can result in the existence of worries and vice versa.

The relationship of eating disorder with that of the other selected mental health issues showed a negative correlation. The relationship was found to be high with that of worries   (r= -0.228) at 0.05 level of significance; followed by hyperactivity(r= -0.319), conduct issues (r= -0.344) and sadness(r = - 0.381) respectively at 0.01 level of significance.

SUMMARY AND CONCLUSION

CHAPTER 5
SUMMARY AND CONCLUSION

The study entitled "**Assessment of General Well-Being and Prevalence of Mental Health Issues among Early Adolescents**" was conducted in Ernakulam city with 120 early adolescents. 53 boys and 67 girls were selected from two schools through purposive sampling. The tools used included EPOCH Measure of Adolescent Well-being and a self- designed questionnaire to elicit general information of the sample and details on the selected mental health issues. The main findings from the study are as follows:

- Nearly three fourth of the students (73%) belonged to the age group of 13 years, nearly one fourth(23%) belonged to the age group of 11 years and only very few of them belonged the age group of 12 years.

- More than three fourth of the sample (77%) hailed from nuclear family. Only 23 percent respondents belonged to joint family.

- A total of 53 percent of respondents had only one sibling and 24 percent of them had two siblings. 13 percent of the respondents were singletons and 10 percent had more than two siblings.

- About 60 percent of mothers and 56 percent of the fathers had an educational qualification of graduation and above.

- Majority of the fathers were self-employed (42%).

- More than half of the mothers were unemployed (54%) and 15 percent worked in the field of teaching.

- A total of 33 percent of the sample hailed from families with annual income between Rs. 75,000 and Rs. 1, 00,000. About 43 percent of the boys belonged to families with annual income of two lakh rupees and above, whereas 40 percent of the girls belonged to families with annual income between Rs.75, 000 and Rs.1, 00,000.

- Regarding the level of engagement, the a total of 40, 40, 42 of the sample rated 'sometimes' for the statements "when I do an activity, I enjoy it as much that I lose track of time', "I get so involved in activities that I forget about everything else", and "When I am learning something new, I lose track of how much time has passed"

respectively. A total of 38 respondents rated 'often' for the statement "I get completely absorbed in what I am doing".

- Regarding the level of perseverance, a total of 41, 33 and 41 respondents rated 'sometimes' for the statements "I finish whatever I begin", "Once I make a plan to get something done, I stick to it", and " I am a hard worker" respectively. Equal number of respondents (36 each) rated 'sometimes' and 'often' for the statement "I kept at my school work until I am done with it".

- Regarding the level of optimism, a total of 35 and 36 respondents rated 'sometimes' for the statements "I am optimistic about the future" and "In uncertain times, I expect the best". About 40 and 38 rated 'often' ,for the statements," I think good things are going to happen to me "and "I believe that things will work out, no matter how difficult they seem" respectively.

- Regarding the level of connectedness, majority of the sample rated 'often' for all the four statements. That is, a total of 84, 83, 95 and 89 respondents rated 'often' for the statements, "when something good happens to me, I have people whom I like to share the good news with", "when I have a problem, I have someone who will be there for me", "There are people in my life who really care about me" and "I have friends that I really care about" respectively.

- Regarding the level of happiness a total of 68 respondents rated 'often' for the statement "I am a cheerful person". 79, 48 and 47 respondents rated 'often' for the statements " I love life", "I feel happy" and " I love life " respectively.

- About 60.4 percent of the early adolescent boys had high level of overall well-being. Nearly half of the early adolescent girls had moderate (Score= 45-72) and high level of wellbeing (Score= 73-100). There existed no significant relationship between overall wellbeing and gender.

- A total of 75 percent of the sample reported that they 'sometimes' experienced symptoms of nervousness. More than half of the sample indicated that they never experienced disturbances in sleep. About 46 percent of the sample reported that they experienced excessive thoughts sometimes. About 59 percent experienced irritability sometimes and more than half said that they had fear sometimes.

- Both early adolescent boys and girls were found to have moderate level of worries. (Boys= 60.4% and girls = 58.2%). There existed a significant relationship between gender and worries.(p<0.05). Majority of the sample coming from joint families

and nuclear families had moderate level of worries. About 62.10 percent of the sample with two siblings had greater level of moderate worries. It was found that fathers with pre-degree level of education and mothers with 10th/SSLC education qualification had greater percentage of children with 'high level of worries. Fathers working in the field of teaching (33.3%) ,accounts(33.3%) , and mothers working in accounts(50%) and other fields of occupation(50%) had children with 'high level of worries'.

- Lack of interest and poor attention was rated 'sometimes' (58% each) related to the symptoms of sadness. Only 3.8 percent of boys and 6 percent of the girls showed high level of sadness. No association was found between gender and sadness (p>0.05).Majority of sample (53.6%) with low level of sadness hailed from joint families and 45.7 percent belonged to nuclear family. Moderate level of sadness of 58.3 percent was found among the early adolescents with more than two siblings. Fathers with graduation and above educational qualification and mothers with graduation & above qualification and pre-degree, had children with highest percent of 'high level of sadness'.

- About 60 percent, 47 percent and 47 percent of the sample indicated that they experienced distractibility, fidgeting and impulsivity sometimes. A total of 70.8 percent of the sample had low level of hyperactivity. There was no enough evidence found to suggest an association between gender and hyperactivity.

- About 26.1 percent and 39.3 percent of the sample from nuclear and joint family respectively had moderate level of hyperactivity. About 80 percent of early adolescents with low hyperactivity had no siblings. Fathers with below 10th education, had children with highest percent of moderate level of hyperactivity (42.9 %) whereas, mothers with 10th/ SSLC education qualification had highest percentage (33.3%) of children with moderate level of hyperactivity. Fathers working abroad (33.3%), working in the field of teaching (33.3%), and accounts (33.3%), had children with moderate level of hyperactivity. Highest degree of moderate level of hyperactivity was shown amongst early adolescents whose mothers worked in fields other than teaching, accounts, engineering, healthcare, self-employment, private or government job.

- Regarding the conduct issues, more than 54 percent suggested than they sometimes broke the rules and regulations. About 89 percent, 78 percent, 74 percent, 48 percent

and 64 percent had never engaged in stealing, destructed others belongings, damaged school property, physical or verbal attack and bunked classed respectively. About 63 percent responded that they sometimes had cheated in the examinations. There existed a significant relationship between gender and conduct issues (p<0.05).About 25 percent and 10.7 percent of the sample from nuclear and joint families respectively indicated moderate level of conduct issues.

- About thirty three percent of early adolescents with more than two siblings had moderate level of conduct issues, followed by the early adolescents with one sibling (21.9%), two siblings (20.7%) and no siblings (13.3%) respectively. High level of conduct issues was found amongst early adolescents whose fathers had an educational qualification of pre-degree(5.3%), and mothers with educational qualification of 10th/SSLC (5.6%). Fathers who worked in private job had children with high level of conduct issues (4.2%). The mothers who worked in private job had children with high level of conduct issues (6.7%).

- Regarding the symptoms of eating disorders, more than half of the sample (55%) worried about their body image. About 25 percent of the boys and 28 percent of the girls had a tendency to eat food even when they are not hungry or even after satisfied appetite. About 40 percent of the girls and 19 percent of the boys was found to have a feeling that they are fat even when others said that they were thin. Excessive exercising to control weight was observed among early adolescent boys(45%). There was no significant relationship between boys and girls in the eating disorder.

- Negative relationship was found between overall wellbeing and selected mental health issues, with worries having more correlation(r = -0.193).

- Engagement indicated a negative correlation with sadness(r = -0.22) and had positive correlation with worries, hyperactivity and conduct issues. However, the relationship was not found to be significant.

- Perseverance showed negative correlation with hyperactivity(r = -0.202) at 0.05 significance level.

- Optimism had shown a significant negative correlation with that of sadness (r = -0.307) at 0.01 significance level. It indicated a significant negative correlation with worries at 0.05 level of significance.

- Connectedness indicated significant negative correlation with sadness (r= -0.203) at α =0.05 level.

- Happiness indicated negative correlation between worries($r = -0.332$) and sadness($r = -0.353$) at $\alpha = 0.01$ level.

- Engagement and connectedness had a positive correlation ($r = 0.216$) at 0.05 significance level. The correlation between perseverance and connectedness was found to be positive($r = 0.222$) at 0.05 significance level.

- Perseverance indicated more positive correlation with that of optimism ($r = 0.581$) at 0.01 significance level.

- There existed positive correlation between optimism and happiness($r = 0.596$) at 0.01 significance level.

- It was found that a positive correlation existed with sadness($r = 0.393$) and hyperactivity ($r = 0.344$) at 0.01 level of significance.

- Sadness had positive correlation with hyperactivity($r = 0.432$) vice- versa. The correlation of sadness with that of conduct issues is positive ($r = 0.015$).

- The relationship of eating disorder with that of worries was found to be negative ($r = -0.228$) at 0.05 level of significance. There existed significant negative correlation with hyperactivity($r = -0.319$), conduct issues ($r = -0.344$) and sadness ($r = -0.381$) respectively at 0.01 level of significance.

Conclusion

The study has given an overview on the level of wellbeing and prevalence of selected mental health issues such as worries, sadness, hyperactivity, conduct issues and eating disorder among early adolescents. The symptoms of the selected mental health issues was also explored. The study has examined the correlation of wellbeing with mental health issues, correlation between the domains of wellbeing, correlation between domains of wellbeing and selected mental health issues and was found to have positive and negative correlations. More than half of the early adolescents had high level of well-being. The level of overall well- being was found to be almost similar among the boys and the girls. However, the prevalence of worries and conduct issues was found to be significant. Even though the other mental health issues like sadness, hyperactivity, and eating disorder did not show significant difference, the prevalence of the symptoms indicated in the study cannot be ignored. Adequate diagnosis at the earliest stage is recommended. Early intervention and awareness classes can be

provided for the early adolescents and for the parents at schools or community programmes. The inference of the study is more like a line-up of high alert or red signal to the early adolescent group and the society at large.

Recommendations for further research

- The study can be conducted among middle and late adolescents.
- The study could be expanded by analysing the prevalence of other mental health issues such as substance or drug usage, delinquency, obsessive compulsive disorder.
- The sample size can be increased to improve validity of the results.
- The study can be extended by comparing the parental perception and adolescent perception on the level of wellbeing and mental health issues.
- An intervention programme on ways to improve the mental health can be provided among adolescents and their parents.

Limitation of the study

- Most schools were unwilling to give permission due to the sessional examinations.
- The sample size was not large enough to reach generalized conclusion on the impact of type of family, number of siblings, parental education and parental occupation.

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APPENDICES

APPENDIX 1

EPOCH MEASURE OF ADOLESCENT WELL- BEING

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EPOCH MEASURE OF ADOLESCENT WELL- BEING
Developed by Margaret L. Kern, Lisbeth Benson, Elizabeth A. Steinberg, Laurence Steinberg

(Please attempt all questions. Kindly put a tick against your responses)

S.No		Almost Never	Someti-mes	Often	Very often	Almost Always
1.	When something good happens to me, I have people whom I like to share the good news with.					
2.	I finish whatever I begin.					
3.	I am optimistic about the future					
4.	I feel happy.					
5.	When I do an activity, I enjoy it so much that I lose track of time.					
6.	I have a lot of fun					
7.	I get completely absorbed in what I am doing.					
8.	I love life					
9.	I keep at my schoolwork until I am done with it.					
10.	When I have a problem, I have someone who will be there for me.					
11.	I get so involved in activities that I forget about everything else.					
12.	When I am learning something new, I lose track of how much time has passed					
13.	In uncertain times, I expect the best.					
14.	There are people in my life who really care about me.					
15.	I think good things are going to happen to me.					
16.	I have friends that I really care about.					
17.	Once I make a plan to get something done, I stick to it.					
18.	I believe that things will work out, no matter how difficult they seem.					
19.	I am a hard worker.					
20.	I am a cheerful person.					

APPENDIX 2

SELF- DESIGNED QUESTIONNAIRE

APPENDIX 2

SELF DESIGNED QUESTIONNAIRE

To understand the prevalence of mental health issues

(Please attempt all questions.Kindly put a tick against your responses)

I. PERSONAL DETAILS

1. **Name** :

2. **Age** :

3. **Gender** : ☐ Male ☐ Female

4. **Type of family** : ☐ Nuclear ☐ Joint

5. **Number of siblings** : ☐ No siblings ☐ 1

☐ 2 ☐ More than 2

6. **Educational Qualification of parents** :

	Below 10th	*10th*	*Pre-degree/+2*	*Graduation or above*
Father				
Mother				

7. **Parent's occupation:**

Nature of Job	*Father*	*Mother*
Government		
Private		
Self employed		
Working abroad		
Health care		
Engineering		
Accounts		
Teaching		
Unemployed		
Others(Please Specify)		

8. **Family Annual Income**

☐ **Below Rs.50, 000**   ☐ **Rs.50, 000-Rs.75000**

☐ **Rs.75, 000- 1 Lakhs**   ☐ **1lakh-2 Lakhs**

☐ **Above 2 Lakhs**

II. SPECIFIC DETAILS

1. **How would you rate the following situations?**

S.No	Question	Never	Sometimes	Often
1.	Feel nervous			
2.	Difficulty in sleeping			
3.	Worry too much about different things			
4.	Find difficulty in relaxing			
5.	Becoming easily annoyed or irritable			
6.	Feels afraid, that something bad would happen			

2. **Have you been bothered by each of the following symptoms during the last few weeks?**

S.No	Question	Never	Sometimes	Often
1.	Felt little interest or pleasure in doing			
2.	Felt unworthy and hopeless about self			
3.	Trouble in falling asleep			
4.	Trouble in staying awake			
5.	Felt tired or having little energy			
6.	Poor appetite or overeating			
7.	Trouble in concentrating on a task			
8.	Loss of pace in doing activities/ in			
9.	Thoughts of ending up life or hurting			

3. **Have you observed yourself being in the following situations?**

S.No	Question	Never	Sometimes	Often
1.	Always on the move ,can't sit still			
2.	Gets distracted			
3.	Do not think before doing something			
4.	Completes a work that was started			

4. How you ever been into following circumstances?

S.No	Question	Never	Sometimes	Often
1.	Break rules and regulations at			
2.	Steal things			
3.	Destroy other's belongings			
4.	Damage school property			
5.	Physically or verbally attack others			
6.	Cheated in school tests			
7.	Bunked classes			

5. Do you agree to each of the following questions?

S.No	Question	Yes	No
1.	Do you worry a lot about your weight and body image?		
2.	Are you excessively preoccupied with weight, food, exercise or dieting?		
3.	Do you avoid social invitations because of foods that might be served?		
4.	Do you find having low self-confidence/self-esteem?		
5.	Do you eat large meals but without gaining weight?		
6.	Do you eat even after having a satisfied appetite or eat when you are not hungry?		
7.	Do you eat large amount of food in short time?		
8.	Have you felt difficulty in exercising because of your body weight?		
9.	Do you feel that you are fat, even when others say you are thin?		
10.	Do you avoid certain foods or categories of food(Rice, dairy, meats, fats)		
11.	Have you lost your weight compared to last year?		
12.	Do you follow strict diet followed by bingeing?		
13.	Do you purposefully vomit after taking food to control your weight?		
14.	Have you ever used laxatives or diet pills or diuretics to control your weight or shape?		
15.	Do you exercise for more than 60 minutes a day to lose or to control your weight?		