EATING DISORDER, SELF ESTEEM AND ANXIETY AMONG YOUNG ADULTS

BY

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20PAP006

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In partial fulfillment of the requirement for the degree of

Master of Science

In

Applied Psychology

(2020-2022)

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Feeling gratitude and not expressing it is like wrapping a present and not giving it

- *William Arthur Ward*

I take this opportunity to express my gratitude to every person from whom I was fortunate to get valuable guidance and help. First of all I would like to thank God almighty, for showering his blessings to make this project a success.

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ABSTRACT

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The study on Eating Disorder, Self Esteem and Anxiety among young adults was conducted in various colleges in Coimbatore. One Hundred and fifty young adults including forty three (n=43) males and one hundred and seven (n=107) females in the age range of 19 to 29 years were selected by Random Sampling Method. All the participants were administered by Eating Disorder Inventory (David M. Garner, 1984), Rosenberg Self Esteem Scale (Dr. Florence Rosenberg, 1965) and Beck's Anxiety Inventory (Aaron T. Beck,1988). Pearson's correlation and independent sample t test was used to analyze the data. The results showed that there was no significant relationship between body dissatisfaction and self esteem whereas; there exist a significant relationship between other variables.

Keywords: Eating Disorder, Self Esteem, Anxiety, Young Adults

CHAPTER I

Introduction

Global Eating Disorder prevalence increased from 3.4% to 7.8% between 2000 and 2018 (*The American Journal of Clinical Nutrition,* 2019). Seventy million people internationally live with eating disorders (National Eating Disorders Association). Japan has the highest prevalence of eating disorders in Asia, followed by Hong Kong, Singapore, Taiwan, and South Korea (International Journal of Eating Disorder, 2015). Austria has the highest rate of prevalence in Europe at 1.55% as of 2012 (Psychology Today, 2013). Almost half of all Americans know someone with an eating disorder (South Carolina Department of Mental Health).

Eating disorders were more prevalent among young women (3.8%) than men (1.5%) in the U.S. as of 2001-2004 (Journal of the American Academy of Child and Adolescent Psychiatry, 2010). A quarter of those with anorexia are male. Men have an increased risk of dying because they are diagnosed much later than women. This could be in part due to the misconception that men do not experience eating disorders (Eating Disorders Resource Catalogue, 2014).

Globally, 13% of women older than 50 experience discarded eating behaviours (*International Journal of Eating Disorders,* 2012). The median age of eating disorder onset was 21 years old for binge eating disorder and 18 years old for anorexia and bulimia nervosa (*Journal of the American Academy of Child and Adolescent Psychiatry,* 2010). The lifetime prevalence of eating disorders in U.S. was 2.7% among adolescents as of 2001-2004 (*Journal of the American Academy of Child and Adolescent Psychiatry,* 2010). Of adolescents with eating disorders, the 17 to 18 year old age group had the highest prevalence (3%) (*Journal of the American Academy of Child and Adolescent Psychiatry,* 2010).

Binge eating disorder is the most common eating disorder in the U.S. (National Eating Disorders Association). Nearly 3% of adults experience binge eating disorder in their lifetime (*Biological Psychiatry,* 2007). American women (3.5%) and men (2%) experience a binge eating disorder during their lifetime, making binge eating disorder three times more common than anorexia and bulimia combined (*Biological Psychiatry,* 2007). Less than half (43.6%) of people with binge eating disorder will receive treatment (*Osteopathic Family Physician,* 2013).

An **eating disorder** is a mental disorder defined by abnormal eating habits that can threaten a person's health or even his/her life. Eating disorders are behavioral conditions characterized by severe and persistent disturbance in eating behaviors and associated distressing thoughts and emotions. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) classifies eating disorders formally as "feeding and eating disorders". Eating disorders can cause both emotional distress and significant medical complications and it also have the highest mortality rate of any mental disorder.

Types of Eating Disorder

According to Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Eating Disorders are classified into

- Binge Eating Disorder (BED)
- Bulimia Nervosa (BN)
- Anorexia Nervosa (AN)
- Other Specified Feeding and Eating Disorder (OSFED)
- Avoidant/Restrictive Food Intake Disorder (ARFID)
- Orthorexia Nervosa

In addition to the ones listed above, other eating disorders include

- Night eating syndrome
- Pica
- Purging disorder
- Rumination disorder
- Obesity

Binge Eating Disorder (BED)

Binge eating disorder is a serious eating disorder in which a person frequently consumes unusually large amounts of food and feels unable to stop eating. Excessive overeating that feels out of control and becomes a regular occurrence crosses the line to binge eating disorder. When a person has binge eating disorder, he/she may be embarrassed about overeating and vow to stop but they feel such a compulsion that they cannot resist the urges and continue binge eating. It is found in higher rates among people of larger body sizes.

Symptoms of Binge Eating Disorder

Most people with binge eating disorder are overweight or obese, but they may be at a normal weight. Behavioural and emotional signs and symptoms of binge eating disorder includes

- Eating unusually large amounts of food in a specific amount of time, such as over a 2 hour period
- Feeling that their eating behaviour is out of control
- Eating even when they are full or not hungry
- Eating rapidly during binge episodes
- Eating until they are comfortably full
- Frequently eating alone or in secret
- Feeling depressed, disgusted, ashamed, guilty or upset about their eating
- Frequently dieting, possibly without weight loss

Unlike a person with bulimia, after a binge, a person does not regularly compensate for extra calories eaten by vomiting, using laxatives or exercising excessively. They may try to eat diet or eat normal meals but restricting their diet may simply lead to more binge eating. The severity of binge eating disorder is determined by how often episodes of bingeing occur during a week.

Causes of Binge Eating Disorder

The causes of Binge Eating Disorder are unknown but, genetics, biological factors, long term dieting and psychological issues may increase the risk of it.

Risk Factors

Binge Eating Disorder is more common in women than in men and it often begins in the late teens or early 20's. Factors that can increase the risk of developing Binge Eating Disorder includes

Family History: A person is much more likely to have an eating disorder if their parents or siblings have or had an eating disorder. This may indicate that inherited genes increase the risk of developing an eating disorder.

Dieting: Many people with binge eating disorder have a history of dieting. Dieting or restricting calories during the day may trigger an urge to binge eat, especially if they have symptoms of depression.

Psychological Issues: Many people who have binge eating disorder feel negatively about themselves and their skills and accomplishments. Stress, poor body self image and the availability of preferred binge foods can trigger bingeing.

Complications

A person may develop psychological and physical problems related to binge eating.

- Poor quality of life
- Problems functioning at work, with personal life or in social situations
- Social isolation
- Obesity
- Medical conditions related to obesity (Joint Problems, Heart Disease, Type 2 Diabetes, Gastro Esophageal Reflux Disease (GERD) and Sleep Related Breathing Disorders).
- Co-morbidity of other psychiatric disorders includes depression, bipolar disorder, anxiety and substance use disorders.

Bulimia Nervosa

Bulimia refers to regular episodes of eating very large quantities of food that are generally highly caloric and easily ingested, followed by vomiting, fasting, vigorous exercise, or using laxatives or diuretics in an attempt to get rid of food. There are two types of bulimia

- Binge eating and some form of purging
- Non purging

Symptoms of Bulimia Nervosa

- Being preoccupied with their body shape and weight
- Living in fear of gaining weight
- Repeated episodes of eating abnormally large amounts of food in one sitting
- Feeling a loss of control during bingeing
- Forcing oneself to vomit or exercising too much to keep from gaining weight after bingeing
- Using laxatives, diuretics or enemas after eating when they are not needed
- Fasting, restricting calories or avoiding certain foods between binges
- Using dietary supplements or herbal products excessively for weight loss

The severity of bulimia is determined by the number of times a week that an individual purge, usually at least once a week for at least three months.

Causes

The exact cause of bulimia is unknown but genetics, biology, emotional health, societal expectations and other issues may increase the risk of bulimia nervosa.

Risk Factors

Girls and women are more likely to have bulimia than boys and men and it often begins in the late teens or early adulthood. Factors increase the risk of bulimia nervosa includes

Biology: People with first degree relatives with an eating disorder may be more likely to develop an eating disorder. Being overweight as a child or teen may increase the risk.

Psychological and emotional issues like traumatic events and environmental stress may trigger bulimia nervosa.

Diet: people with diet conscious can develop bulimia nervosa.

Complication

Bulimia can have numerous serious and even life threatening complications

- Negative self esteem and problems with relationship
- Dehydration
- Heart problems
- Tooth decay and gym disease
- Absent or irregular periods in females
- Digestive problems
- Psychological issues
- Drug abuse
- Self injury, suicidal thoughts or suicide

Anorexia Nervosa

Anorexia refers to an abnormally low body weight, an intense fear of gaining weight and a distorted perception of weight. People with anorexia place a high value on controlling their weight and shape, using extreme efforts that tend to significantly interfere with their lives. Anorexia is an extremely unhealthy and sometimes life threatening way to try to cope with emotional problems.

Symptoms of Anorexia Nervosa

Anorexia includes physical, emotional, and behavioural issues.

Physical symptoms

- Extreme weight loss
- Thin appearance
- Abnormal blood counts
- Fatigue
- Insomnia
- Constipation and abdominal pains
- Dehydration
- Low blood pressure
- Irregular heart rhythms
- Absence of menstruation

Behavioural Symptoms

- Severely restricting food intake through dieting or fasting
- Exercising excessively
- Bingeing and self induced vomiting to get rid of food, which may include the use of laxatives, enemas, diet aids or herbal products

Emotional Symptoms

- Preoccupation with food, which sometimes includes cooking elaborate meals for others but not eating them
- Frequently checking in the mirror for perceived flaws
- Lack of emotion
- Social withdrawal
- Reduced interest in sex

Causes

The exact cause of anorexia is unknown but biological, psychological and environmental issues may increase the risk of anorexia nervosa.

Biological: Genetic changes may make some people at higher risk of developing anorexia

Psychological: People with anorexia may have obsessive compulsive personality traits, extreme drive for perfectionism and high levels of anxiety

Environmental: Western modern culture and peer pressure plays a major role in developing anorexia nervosa

Risk Factors

Anorexia is more common in girls and women and also in teenagers. Factors that increase the risk of anorexia nervosa includes

- Genetics
- Dieting and starvation
- Emotional stress

Complications

Anorexia, at its most severe, can be fatal and death may occur suddenly even when someone is not severely underweight. Other complications include

- Anaemia
- Heart problems
- Bone loss
- Muscle loss
- Absence of period (in females)
- Decreased testosterone (in males)
- Gastrointestinal problems
- Electrolyte abnormalities
- Kidney problems
- Psychological problems

Other Specified Feeding and Eating Disorder (OSFED)

In the Diagnostic and Statistical Manual (DSM IV), OSFED has replaced as "Eating Disorder Not Otherwise Specified (EDNOS)". It is an eating disorder which includes those who do not meet the diagnostic criteria for any other eating disorder. It is the most common eating disorder which affects peoples of all genders and diagnosed mostly for adults as well as adolescents. Individuals with OSFED may have disturbed eating habits, a distorted body image, overvaluation of body shape and weight, or an intense fear of gaining weight.

Avoidant/Restrictive Food Intake Disorder

It is an eating disorder similar to anorexia but people with Avoidant/Restrictive Food Intake Disorder are not worried about their body image, shape, or size. It was previously referred to as "Selective Eating Disorder". It usually starts at younger ages and boys are more likely to have Avoidant/Restrictive Food Intake Disorder. Picky eating and general lack of interest in

eating are the main signs of ARFID. Kids with ARFID are more likely to have anxiety, OCD, ADHD. Treatment may include nutrition counselling, medical care, and feeding therapy.

Orthorexia Nervosa

Steven Bratman, American Physician coined the term "orthorexia" in 1997. It means "fixation on righteous eating", which means that involves unhealthy obsession on eating in a healthy way. A focus on healthy eating can develop into an eating disorder known as orthorexia, or orthorexia nervosa. It can have severe consequences and in some cases, orthorexia can be linked to other disorders such as Obsessive Compulsive Disorder (OCD) and other eating disorders. Orthorexia does not have official diagnostic criteria but it has common signs and symptoms like experiencing intense fear of unhealthy foods, having an obsession or preoccupation with healthy foods, avoiding social events and foods prepared by other people etc. Some of the diagnostic tools that healthcare professionals use to diagnose orthorexia are

- ORTO-15 (15-question screening tool)
- ORTO-R (newer version of ORTO-15)
- Bratman Orthorexia Test (BOT)
- Eating Habits Questionnaire (EHQ)

Treatments may include psychotherapy, gradual exposure and reintroduction to trigger foods, behaviour modification, cognitive reframing, weight restoration etc.

Common Symptoms of Eating Disorder

Symptoms of eating disorder include the following

- Dietary restriction
- Frequent weight changes or being significantly underweight
- Negative body image
- Presence of binge eating
- Presence of excessive exercise
- Presence of purging, laxatives, or diuretic use
- Excessive thoughts surrounding food, body image, and weight

Eating disorders can also have mental and physical effects in a person. It often occur along with other mental disorders, most often anxiety disorders, including**,** Body Dysmorphic Disorder (BDD), Generalized Anxiety Disorder (GAD), Obsessive Compulsive Disorder (OCD), Social

Anxiety Disorder (GAD). People with eating disorders also experience depression and have high measures of perfectionism. Its physical effects include

- Brain mass loss
- Cardiovascular problems
- Gastrointestinal problems
- Dental problems
- Disrupted sleep patterns
- Fainting spells
- Hair loss or downy hair all over the body (called **lanugo**)
- Loss of menstrual period post puberty
- Musculoskeletal injuries and pain
- Weakened bones

Medical physicians or mental health professionals, including Psychiatrists and Psychologists, can diagnose eating disorders. Lab tests to determine the diagnosis, including

- A physical exam (checking height, weight, and vital signs)
- Lab tests (blood count, liver, kidney, and thyroid function tests, urinalysis, X-ray, and an electrocardiogram)
- Psychological evaluations

There are also multiple questionnaires and assessment tools used to assess a person's symptoms, including

- Eating Disorder Inventory
- SCOFF Questionnaire
- Eating Attitude Test
- Eating Disorder Examination Questionnaire (EDE-Q)

Eating disorders occur in people of all genders, ages, races, ethnicities, and socioeconomic statuses but more commonly diagnosed in women. While eating disorders affect people of all ethnic backgrounds, they are often overlooked in non white populations. The mistaken belief that eating disorders only affect affluent white females has contributed to the lack of public health treatment for others - the only option available to many underserved and marginalized populations. And although not well studied, it is postulated that the experience of discrimination

and oppression among transgender populations contribute to higher rates of eating and other disorders among transgender individuals.

Treatment for Eating Disorders

Self Help

It includes using workbook, manual, or web platform to learn about the disorder and develop skills to overcome and manage it.

Cognitive Behavioural Therapy (CBT)

It is one of the best therapies to treat adult eating disorders. It includes

- Cognitive restructuring
- Body image exposure
- Delays and alternatives
- Food exposure
- Limiting body checking
- Meal planning
- Regular eating
- Relapse prevention
- Self monitoring

Family Based Treatment (FBT)

It is the best for treating children and adolescents eating disorders. Here, the family is the vital part of the treatment team. Parents commonly provide meal support that allows the young person to recover in their home environment. Another important element of FBT is externalizing the eating disorder.

Nutritional Therapy

Here, a certified nutritionist help a person to learn or to relearn the components of a healthy diet and motivates him/her to make the needed changes.

Weekly Outpatient Treatment

It is the usual starting point for people who have access to treatment by a team of professionals. Other successful outpatient therapies for adult eating disorders include

- Dialectical behaviour therapy
- Cognitive remediation therapy
- Interpersonal psychotherapy

Intensive Treatment

Intensive treatment occurs when a patient is in need of higher level of care. It includes intensive outpatient, partial hospitalization, residential, and hospital levels of care. In these settings, a multidisciplinary team almost always provides treatment.

Coping With an Eating Disorder

Self care of physical and mental health can help to cope with an eating disorder and instead of seeking help from professionals it's better to seek support from a trusted friend or family member who can be there until recovery. Apart from this, it is also important to make some healthy distractions that help avoiding obsessions about food and weight or experiencing the urge to turn to disordered eating or behaviour. That may include

- Explore a new hobby, like photography, painting, or knitting
- Invest in an adult colouring book
- Practice mindfulness meditation
- Take a leisurely walk
- Try a yoga class or DVD
- Writing Journal

So, getting out of eating disorder is not easy. It needs more courage, but it is possible when there are right people to support the sufferers.

Self Esteem

The word *esteem* comes from the Latin word *aestimare*, which means "to estimate or appraise". Self esteem thus refers to our positive and negative evaluations of oneself (Coopersmith, 1967). It is one's positive or negative attitude toward oneself and one's evaluation of one's own thoughts and feelings overall in relation to oneself (Rosenberg, 1965).

In other words, it is defined as an individual's subjective evaluation of his/her own worth. Self esteem encompasses beliefs about oneself as well as emotional states, such as triumph, despair, pride and shame. Changes in self esteem can occur gradually. Self esteem is defined by many factors including

- Self confidence
- Feeling of security
- Identity
- Sense of belonging

- Feeling of competence
- Self worth
- Self regard
- Self respect

Importance of Self Esteem

It is very much important because it influences an individual's adjustment to a considerable extent i.e. when he faces adjustment problems the self esteem considerably reduces.

It impacts the decision making process, relationships, emotional health and overall well being. Self esteem influences one's motivation.

Once it was believed that those who have low self esteem hold negative views about themselves but, recent research has shown that they may not be negative about themselves but they are confused about themselves. People with low self esteem

- Have less clear and certain about themselves
- Give more self contradictory view of themselves
- Limited self awareness
- Because of low self confidence and set lower goals
- Since they are confused and lack clarity about their own self they are not persistent and easily give up during the time of failure

Individuals who have low self esteem are emotionally unstable and generally display

- Unpleasant moves
- Emotional ups and downs
- Higher frequency and intensity of emotional problems
- Irritability, anger, anxiety and depression
- Alienation, insomnia and psychosomatic disorders such as migraine headaches, ulcers etc.
- Individuals who have low self esteem also have poor social skills and adjustment difficulties in social situations
- Feeling socially awkward
- Having high self consciousness
- Afraid to talking to others (even positive things)

- They have difficulties in social encounters

Likewise, people with high self esteem

- Have a firm understanding of their skills
- Maintaining healthy relationships with others
- Realistic expectations of themselves
- Able to express their needs

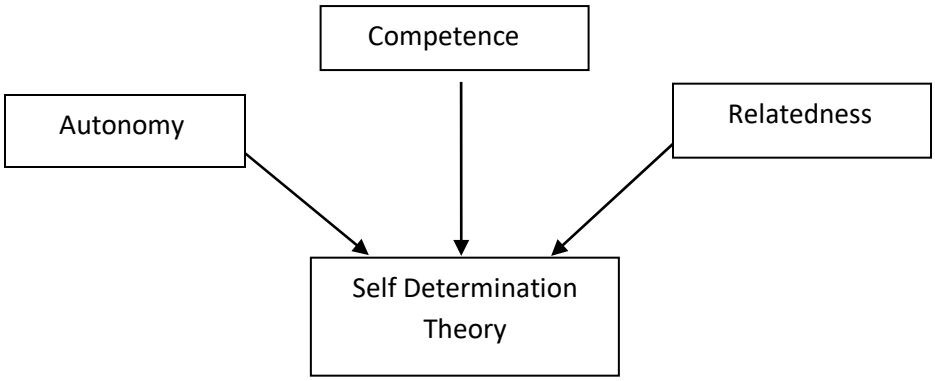
People with overly high self esteem overestimate their skills and may feel entitled to succeed, even without the abilities to back up their belief in themselves.

Theories of Self Esteem

Self Determination Theory

Self determination theory (Richard Ryan & Edward Deci, 1985) states that man is born with an intrinsic motivation to explore, absorb and master his surroundings and that true high self esteem is reported when the basic psychological nutrients or needs of life (relatedness, competency and autonomy) are in balance.

When social and environmental conditions provide proper support and opportunity to fulfil those basic needs, it enhances the personal growth, vitality and well being.



Sociometer Theory (Mark Leary & colleagues, 1995)

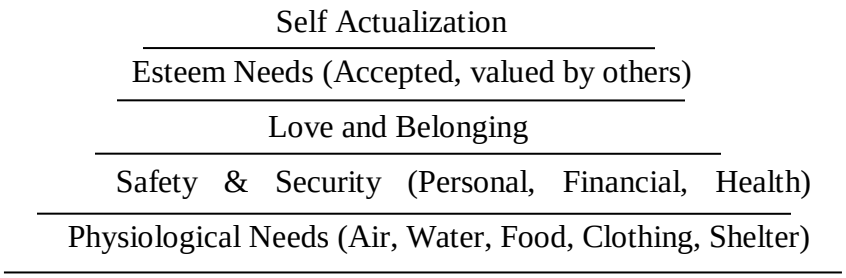
Sociometer theory (ST) states that a minimum level of social inclusion or belonging is necessary for humans to reproduce and survive with self esteem functioning as a sociometer. To be excluded from a worthwhile relationship affects self esteem more negatively than the positive impact of being included in increasing numbers of less meaningful relationships and inclusion is chosen to being just viewed positively.

The fact of changes in self esteem may be one's mood in the form of feelings of pride and high self esteem, and shame with low self esteem, translating as levels of anxiety to both trait and state self esteem.

Maslow's Hierarchy of Needs Theory (1943)

Having positive feelings about oneself is necessary for a person's overall emotional health and well being. A person may develop feelings of inferiority and negativity about their life if there is no proper fulfilment of their esteem needs.

Maslow's theory states that "healthy esteem is based on higher level needs of Self Respect and Competence". Esteem needs encompass confidence, strength, self belief, personal growthand respect from others. These needs are represented as one of the key stages in achieving contentedness or self actualization.



Factors affecting Self Esteem

Self esteem can be influenced by many factors including

- Age
- Disability
- Genetics
- Illness
- Physical abilities
- Socioeconomic status
- Thought patterns

Racism and discrimination have negative effects on self esteem. A life experience also plays a major role in affecting one's self esteem.

In general, it is a person's own experiences that occur as a foundation for developing self esteem. If a person is continuously getting criticized or negative comments from family members, friends will likely experience low self esteem.

Components of Self Esteem

Self Confidence

Self confidence is the basic foundation of self esteem. If a person feels secure with their family members or if they feel loved and when their needs are met properly, he/she is likely to develop good self esteem.

Identity

Identity is the knowledge of oneself. Identity can be anything including physical and social contact with other people, financial background or appearance etc.

Feeling of belonging

Feeling of belonging always allows us to feel understood and know that there are people who are like us and it develops the self esteem.

Feeling of competence

To feel competent, people need to have successes, failures, different experiences, etc. This feeling of competence promotes self esteem and pushes the person to accept new challenges.

Improving Self Esteem

There are some steps which helps people to improve their self esteem. They include

- Become more aware of negative thoughts
- Challenge negative thinking patterns
- Use positive self talk
- Practice self compassion

Low self esteem may lead to mental health disorders such as anxiety and depression. Learning to identify the distorted thoughts that impact a person's self worth, trying to countering negative thoughts with more realistic or positive ones, practicing positive affirmations, self forgiveness helps to improve self esteem.

Anxiety

Everyone has worries, fears and anxiety at some point in their life. But, if it goes beyond the limit it is considered as anxiety disorder. Anxiety is an intense, excessive and persistent worry and fear about everyday situations. It causes fast heart rate, rapid breathing, sweating and feeling tired may occur.

The **American Psychological Association** (APA) defines **anxiety** as "an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure". The term anxiety is usually defined as a diffuse, vague, very unpleasant feeling of fear and apprehension. People who have fears can easily state what they are afraid of and people who are anxious are not aware of the reason for their anxiety. A person who experiences anxiety may have intrusive thoughts about their future, catastrophic interpretation of past events, difficulty falling asleep at night, headaches, muscle tension and difficulty in concentrating. The characteristics of anxiety include feelings of uncertainty, helplessness, and physiological arousal.

The common symptoms of anxiety includes

- Nervousness, jitteriness
- Tension
- Feeling tired
- Dizziness
- Frequent urination
- Heart palpitations
- Feeling faint
- Breathlessness
- Sweating
- Trembling
- Worry and apprehension
- Sleeplessness
- Difficulty in concentrating
- Hyper vigilance

It is normal for a person to feel anxious when facing stressful, threatening situations, but it is abnormal to feel strong or chronic anxiety when there is no absolute cause for it. The common types of anxiety disorders include

- Generalized anxiety disorder
- Panic disorder
- Phobic Disorder
- Obsessive Compulsive disorder (OCD)

- Post Traumatic Stress Disorder (PTSD)

Generalized Anxiety Disorder (GAD)

GAD refers to prolonged, vague, unexplained, but intense fears that do not seem to be attached to any particular object. In simple words it can be defined as excessive, exaggerated anxiety and worry about everyday life events for no obvious reason. It is more common among women than men. People with symptoms of GAD tend to always expect disaster and cannot stop worrying about health, money, family, work, or school. In generalized anxiety disorder, anxiety persists for 6 months or longer and is not attributable to recent life experiences. The symptoms which are as follows may be experienced individually or in combination.

Worry and apprehensive feelings about the future, people worry about their future, for people close to them or for their valued possessions.

Hyper vigilance, Although there is no any dangers around them they constantly scan the scan the environment. They are always alert to potential threats, they experience a heightened level of awareness or arousal, and they are easily distracted from tasks on which they are working.

Motor tension, people are unable to relax, they are keyed up and visibly shaky and tense and they are easily startled.

Autonomic reactivity, people experience sweating, dizziness, pounding or racing heart, hot or cold spells, cold and clammy hands, upset stomach, light-headedness, frequent urination, lump in the throat, and high pulse and respiration rates.

Panic disorder

Panic disorder causes panic attacks which are unexpected feelings of fear when there is no absolute reason. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines it as “panic disorder is a type of anxiety disorder that is characterized by intense, recurrent, and unexpected panic attacks”. The symptoms of panic disorder are similar to those of generalized anxiety disorder. Stressful life events such as a new job, marriage or moving can trigger a panic attack. Panic disorder affects women more than men and younger age groups more than the elderly. Panic attacks range in length from a few seconds to many hours and even days.

Symptoms of Panic Disorder

- Severe palpitations
- Extreme shortness of breath

- Chest pains or discomfort
- Trembling
- Sweating
- Dizziness
- Feeling of helplessness

Individuals with panic disorder fear that they will die, go crazy, or do something uncontrolled, and they report a variety of unusual psycho-sensory symptoms.

Characteristics of Panic Disorder and Generalized Anxiety Disorder

- Clinical onset is later
- The role of heredity seems to be greater
- The ratio of women to men is greater
- Alcoholism is more common
- While depression is common in both, it is unusually more common in panic disorder

Phobic Disorder

According to the American Psychiatric Association, a **phobia** is an irrational and excessive fear of an object or situation. People who have phobic disorders know exactly what they afraid of. Phobic individuals usually do not engage in gross distortion of reality. Phobic individuals do not need the actual presence of the feared object or situation to experience intense tension and discomfort and they usually develop ways of reducing their fears. Traditionally, phobias have been named by means of Greek or Latin prefixes that stand for the object of the fear as follows:

- **Acrophobia:** fear of heights
- **Agoraphobia:** fear of open places and unfamiliar settings
- **Aqua phobia:** fear of water
- **Claustrophobia:** fear of closed places
- **Xenophobia:** fear of strangers

Specific Phobias

Specific phobias are a miscellaneous category of marked, persistent, irrational fears. It is the most common type of phobia. Some examples of specific phobias are intense fear of particular types of animals (e.g. dogs, snakes or rats), claustrophobia, and acrophobia. For peoples with specific phobia, the degree of distress varies with the prevalence of the avoided situation. A variety of therapeutic approaches have been used in treating specific phobias.

Procedures that promote associations between the fear arousing stimulus and non anxiety responses, and at the same time provide information countering mistaken beliefs about the stimulus, often have positive effects.

Social Phobias

Social phobias are less common than specific phobias but they can attack with no less force. Social phobias refer to extreme fear and embarrassment when socializing. It includes fear of public speaking, eating in public etc. People with social phobias show signs of anxiety such as intense blushing, tremors of the hand, and a quavering voices etc. These problems usually begin in late childhood or early adolescence, and may crystallize into a phobia in late adolescence.

Interpersonal Self Help Techniques

- Respond to anxiety symptoms by approach rather than withdrawal
- Greet people properly, with eye contact
- Listen carefully to people and make a mental list of possible topics of conversation
- Initiate conversation
- Speak up without mumbling
- Tolerate some silence
- Wait for cues from others in deciding where to sit, when to pick up a drink, and what to talk about
- Learn to tolerate criticism by introducing controversy deliberately at an appropriate point

Agoraphobia

Agoraphobia is the fear of open places and unfamiliar situations, which often accompanies panic attack. Agoraphobia is more common among women than men. Often, people who experience panic attacks go on to develop agoraphobia unless they are treated with certain drugs early in the disorder. Agoraphobic individuals are often clinging and dependent. Although people with agoraphobia and social phobia looks similar, it has a mild difference which means while the socially phobic individual is afraid of the scrutiny of other people, the agoraphobic individual is afraid of his or her own internal cues.

Obsessive Compulsive Disorder (OCD)

In this disorder in which people have recurring, unwanted thoughts, ideas or sensations (obsessive) that make them feel driven to do something repetitively (compulsions).

According to DSM-IV-TR, obsessions and compulsion is defined as "Obsession involves persistent and recurrent intrusive thoughts, images, or impulses that are experienced as disturbing, inappropriate, and uncontrollable". "Compulsion involves, either overt repetitive behaviour or covert mental rituals"

The five primary compulsive rituals are

- Cleaning
- Repeated checking
- Repeating
- Ordering or arranging
- Counting

Genetics, auto immune related, behavioural, cognitive and environmental factors are the causes of obsessive compulsive disorder. It comorbids with body dysmorphic disorder, hypochondria, anorexia nervosa, depersonalization, hoarding disorder, pathological gambling, sexual compulsions, self injury etc. Psychotherapy, relaxation techniques, medications, neuromodulation and transcranial magnetic stimulation (TMS) are used to treat OCD.

The most common features of obsessive compulsive disorder are

- The obsession or compulsion intrudes insistently and persistently into the individual's awareness
- A feeling of anxious dread occurs if the thought or act is prevented for some reason
- The obsession or compulsion is experienced as foreign to oneself and it is unacceptable and uncontrollable
- The individual recognizes the absurdity and irrationality of the obsession or compulsion
- The individual feels a need to resist it

Post Traumatic Stress Disorder

It is a "psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, or rape or who have been threatened with death, sexual violence or serious injury".

In post traumatic stress disorder, the stressor is outside the range of common experience. The traumas range from those that are directly experienced (e.g., being threatened with death) to those that are witnessed (e.g., a family member being threatened with death). The onset of the

clinical condition in post traumatic disorder varies from soon after the trauma to long after it has occurred. It occurs more among women than men.

Symptoms of Intrusive Thinking in PTSD

- Sleep and dream disturbances
- Awareness of ideas and feelings related to the traumatic event
- Preoccupation with the event
- Compulsive repetitions of actions related to the event

Symptoms of Denial in PTSD

- Selective inattention
- Amnesia (complete or partial)
- Use of fantasy to escape from real condition
- Withdrawal

Treatment of Anxiety Disorders

Behavioural Perspective

- **Exposure therapy,** exposing the client to stimuli that evoke discomfort until he or she becomes used to them. It is effective in treating both phobic and OCD disorders.

The three types of therapy based on exposure principle are

- Systematic desensitization
- Implosive therapy
- Vivo exposure therapy

Systematic desensitization, a series of fear arousing stimuli graded from mild to strongly fearful is used. Only when the client is comfortable with one level of fear producing stimuli is the next, slightly stronger stimulus introduced.

Implosive therapy refers to therapist controlled exposure to the imagined recreation of a complex, high intensity, fear arousing situation.

Vivo exposure, individual experiences the actual feared situation rather than imagining it under the therapist's direction. This therapy is also called as **flooding**.

- **Modelling** is often combined with exposure to anxiety provoking stimuli. While exposure therapies emphasize removing some of the overwhelming emotional response that may inhibit people who have an anxiety disorder, modelling emphasizes acquiring behavioural skills and a feeling of competence.

Cognitive Perspective

Cognitive Behavioural Therapy is based on the learning principles of extinction and reinforcement, which emphasize cognitive behaviour.

Cognitive therapists employ a number of techniques.

- Cognitive restructuring
- Thought stopping
- Cognitive rehearsal

Cognitive restructuring, calls the client's attention to the unrealistic thoughts that serve as cues for his or her maladaptive behaviour. The therapist helps clients review their irrational beliefs and expectations and develop more rational ways of looking at their lives.

Thought stopping, It works on the assumption that a sudden distracting stimulus, such as an unpleasant noise, will serve to terminate obsessional thoughts. If this procedure becomes successful with the client, it provides the client with a specific self control technique for removing an obsessional thought when it occurs.

Cognitive rehearsal, through which the client can mentally rehearse adaptive approaches to problematic situations. It is particularly useful for problems that cannot be conveniently simulated in a clinical setting (e.g. Social phobia).

There are number of drugs that used for treating specific anxiety disorders. They are

- Benzodiazepines (tranquilizing drugs such as Valium, are the most frequently prescribed drugs used in the general treatment of anxiety)
- Tricyclics (a group of antidepressant drugs also used successfully in treating OCD, especially in combination with behaviour therapy).

Need for the study

As we are moving to a changing lifestyle, it is very important to be aware of our physical and mental status to lead a happy and healthy life. Body dissatisfaction may lead to low self esteem and high level of anxiety leads to changes in our eating behaviour. Likewise, having low self esteem may have very much negative effects on our mental health. So, being aware of our eating habits and mental health helps us to have a better lifestyle. Hence, this study investigates the role of eating disorder and shows how it affects an individual's level of self esteem and anxiety which helps the people to create changes in their life style and to lead a better life.

CHAPTER II

Review of Literature

Coco, Salerno, Ingoglia and Tasca (2021) examined the method effects associated with negatively worded items of the Rosenberg Self Esteem Scale may interact the negative self evaluations experienced by patients with Obesity and Binge Eating Disorder and also examined whether negatively worded items were associated with psychological distress and eating symptoms. Five hundred and thirty three females with Binge Eating Disorder (n= 160) or obesity without Binge Eating Disorder (n=373). The study concluded that patients with Binge Eating Disorder responded more strongly to the negatively worded items of the Rosenberg Self Esteem Scale than those with obesity and the Rosenberg Self Esteem Scale negatively worded item factor was negatively associated with higher interpersonal problems, psychological distress, and binge eating.

Mattila et al. (2021) investigated on levels of Finnish Hospital Workers during COVID-19 pandemic. One thousand nine hundred and ninety five workers were administered by Generalized Anxiety Disorder – 7 among hospital staff working at two Finnish Specialized Medical Care Centres in the spring of 2020. The results indicated that 4.88% had normal anxiety, 30% had mild anxiety, 10% had moderate anxiety, and 5% had severe anxiety.

Ozamiz-Etxebarria et al. (2021) assessed the prevalence of anxiety, depression, and stress among teachers during the COVID-19 pandemic. The results showed that teachers reported 17% of anxiety, 19% of depression and 30% of stress.

Szczesniak, Mazur, Rodzen and Szpunar (2021) analyzed self promotion and self deprecation as potential mediators between life satisfaction and self esteem. Three hundred and twenty eight young adults in the age range of 18 to 35 were selected and administered by Satisfaction with Life Scale, the Rosenberg Self Esteem Scale and the Self Presentation Style Questionnaire by internet platform in Poland. The result showed that high positive correlation coefficient was obtained between self esteem and life satisfaction ($r=0.73$; $p < 0.01$), positively correlated with self promotion ($r=0.46$; $p < 0.01$), and negatively correlated with self deprecation ($r=- 0.63$; $p < 0.01$). Similarly, life satisfaction was positively associated with self promotion ($r=0.37$; $p < 0.01$), negatively with self depreciation ($r=- 0.42$; $p < 0.01$). Moreover, both self

promotion ($\beta = 0.67$; $p < 0.01$), and self deprecation ($\beta=0.58$; $p < 0.01$) acted as mediators between life satisfaction and self esteem.

Wakui et al. (2021) assessed the factors contributing to infection related anxiety and educational anxiety among teachers conducting face to face classes during the COVID-19 pandemic after schools reopened. Two hundred and sixty three primary and middle school teachers in the Shinagawa area of Tokyo (October 10-30, 2020) were administered by questionnaire comprises of type of school, sex, age, 5 Point Likert Scale related factors contributing to infection related anxiety and educational anxiety that arose due to pandemic. Majority of the participants were women (n=152, 64.1%) and the mean age was 39.8$\pm$ 11.3 years). A step wise multiple regression analysis identified six factors for infection related anxiety has significant ($R2 = 0.61$; $p = 0.01$). The result indicated that the report provided useful information by highlighting the reasons for infection related anxiety and educational anxiety that teachers experience in face to face classes during a pandemic.

Espel-Huynh, Muratore, Virzi, Brooks and Zandberg (2019) examined whether anxiety sensitivity was associated with Eating Disorder symptom severity among patients with severe Eating Disorders, and also to determine whether this relationship was mediated by experiential avoidance. The adolescent and adult females (N=625) seeking residential Eating Disorder treatment completed self report measures of anxiety sensitivity, experiential avoidance and Eating Disorder psychopathology. Linear regression evaluated the cross sectional association between Eating Disorder symptom severity and three dimensions of anxiety sensitivity and Eating Disorder symptom severity through experiential avoidance. The findings showed that the social dimension of anxiety sensitivity was positively associated with severity of Eating Disorder psychopathology, experiential avoidance mediated this association.

Xie, Xin, Chen and Zhang (2019) explored on gender differences in, and the effects of, self esteem on math anxiety. Seven hundred and fifty one Junior and Senior High School Students from China were recruited and requested to report their mathematical anxiety compared with young men; no gender difference was found in mathematical performance. Further, the pathway for, self esteem to mathematical anxiety was different for young men and young women. For young men, apart from a direct effect of mathematical anxiety, self esteem had an indirect effect on mathematical anxiety as mediated by control beliefs, text anxiety and general

anxiety. For young women, self esteem only had an indirect effect on mathematical anxiety as mediated by test anxiety and general anxiety. The results indicated that improving self esteem, test anxiety and general anxiety would be helpful for students' mathematical anxiety.

Ajmal, Batool, Abid and Iqbal (2018) evaluated on Self Concept and Self Esteem among adults. The study aimed at the disclosure of all the ways through which self concept affects the self esteem among 250 university students by administering Multiple Self Concept Scale, Rosenberg's Self Esteem Scale (Rosenberg, 1965). The result showed that self concept had significant effect on self esteem among university adults.

Paliaukiene, Kazlauskas, Eimontas and Kazlauskiene (2018) explored on Music Performance Anxiety among students of in a Higher Education Academy in Lithuania. Two hundred and fifty eight music performance arts students of the Lithuanian Music and Theatre Academy were selected for the study and administered by Kenny Music Performance Anxiety Inventory (Kenny et al, 2011). High Music Performance Anxiety was associated with less concert activity, poorer perceived performance self efficacy and lower academic achievement grades. There were no gender differences in Music Performance Anxiety. The results revealed that 20.2% of the students reported difficulties in coping with Music Performance Anxiety.

Sari, Bilek and Celik (2018) determined the level of test anxiety and self esteem in the high school students and to investigate the effect of test anxiety on self esteem. Seven hundred twenty four high school students were preparing for the University entrance examination in Bitlis were participated in the study. The participants were administered by sociodemographic details of the questionnaire, Rosenberg Self Esteem Scale and Revised Test Anxiety scale was prepared an e-questionnaire for the students to fill easily and uploaded to the Bitlis State Hospitals website. Schools were called authorities insisted the students to fill out the questionnaire on the internet. The results showed that female students had more test anxiety than male students and those who had higher self esteem had less test anxiety.

Desouky and Allam (2017) investigated on Occupational Stress, Anxiety and Depression among 568 Egyptian teachers. The selected participants were administered by Personal Data Sheet. Arabic version of Occupational Stress Index, the Arabic validated versions of Taylor Manifest Anxiety Scale and the Beck Depression Inventory. The findings showed that the prevalence of Occupational Stress, Anxiety and Depression among teachers was 100%, 67.5%

and 23.2% respectively. Occupational Stress, Anxiety and Depression scores were significantly higher among teachers above 40 years, female teachers, primary school teachers, inadequate salary, higher teaching experience, higher qualifications and higher workload. There was a low positive correlation was found between Occupational Stress, Anxiety and Depression scores.

Lipson and Sonneville (2017) analyzed the prevalence on Eating disorder symptoms among Undergraduate and Graduate students at 12 US colleges and universities. The study included a sample of 9713 students and administered by Eating Disorder Examination Questionnaire. They have used gender stratified logistic regression to estimate bivariate correlates of Elevated Eating Disorder Symptoms, Past Month Objective Binge Eating, and Past Month Compensatory Behaviours across student characteristics including Age, Degree Level, Sexual Orientation, Race/Ethnicity, First Generation Status, Citizenship, Academic and Extracurricular characteristics and with status. The results showed that the higher prevalence of objective binge eating among females relative to males (49% versus 30%, $p<0.01$), but similar prevalence of compensatory behaviours (31% versus 29%). weight status was the most consistent predictor of eating disorder risk with significantly more symptoms seen among individuals with overweight and obesity. When compare to individuals with a healthy weight, those with overweight had greater eating disorder risk (males OR = 3.5; females OR = 2.0) binge eating (males OR = 2.1; females OR = 1.9) and use of compensatory behaviours (males OR = 1.5; females OR = 1.3).

Abdollahi and Talib (2016) examined the relationship between self esteem, body esteem, emotional intelligence, and social anxiety, as well as scrutinized the moderating role of weight between exogenous variables and social anxiety, 520 university students completed the self report measures. Structural equation modelling revealed that individuals with low self esteem, body esteem and emotional intelligence were more likely to report social anxiety. The findings indicated that obese and overweight individuals with low self esteem, body esteem and emotional intelligence had higher social anxiety than others.

Bajaj, Robins and Pande (2016) explored on the mediation effects of self esteem on the association between mindfulness and anxiety and depression. Four hundred and seventeen undergraduate students were selected and assessed by mindfulness, self esteem, anxiety and depression. Correlation results indicated that mindfulness was associated with self esteem,

anxiety, and depression. Using structural equation modelling (SEM), meditational analysis showed that the meditational model was not moderated by gender and thus provided a preliminary support for the robustness of the final meditational model.

Bibi, Saqlain and Mussawar (2016) explored the relationship between emotional intelligence and self esteem among Pakistani University Students. Two hundred and fifty students were selected and administered by Rosenberg Self Esteem Scale (Dr. Morris Rosenberg, 1965) and Emotional Intelligence Scale (Wong & Law, 2002). Pearson product moment of coefficient of correlation was used in order to find out relationship of emotional intelligence with self esteem among the participants. Independent t test was used to assess gender differences in self esteem and emotional intelligence. The results proved that there was a positive relationship between self esteem and emotional intelligence; females were emotionally intelligent and it was not statistically significant.

Iannaccone, D'Olimpio, Cella and Cotrufo (2016) investigated dysfunctional eating behaviours and psychological variables typically associated to eating disturbances such as low self esteem, perfectionism, shame, perceived parental care and protectiveness in obese and normal weight adolescents. One hundred and eleven high school students (68 males; 13 to 19 years) classified as obese and 111 age, sex and social status homogeneous normal weight controls were included. The participants were asked to fill out self report measures of parental behaviour as perceived by the offspring, eating disturbance attitudes and behaviours, self esteem, perfectionism and shame. The findings showed that significant differences between the two groups in relation to dysfunctional eating behaviours emerged. Body shame had the strongest relationship to eating problems vulnerability and acted as a mediator in the relationship between low self esteem and eating disorder risk among both obese and non obese youngsters.

Achim and Kassim (2015) analyzed the association of computer anxiety and computer self efficacy. The findings showed that there was a weak (r= 0.329*) relationship between computer anxiety and computer self efficacy among employees.

Annagur, Orhan, Ozer, Yalcin and Tamam (2015) investigated on the effects of depression and impulsivity in obese people with Binge Eating Disorder. One hundred and forty nine obese participants were selected for the study and were compared to 151 non obese healthy

controls. They were assessed with the Structured Clinical Interview, Eating Attitudes Test, Beck Depression Inventory and Barratt Impulsiveness Scale – 11. The result revealed the prevalence of BED was 47.6% in the obese study participants. Obesity with Binge Eating Disorder was more common in female participants. Depressive disorder was detected in 41.2% of the obese subjects. There was no significant difference between Binge Eating Disorder (+) and Binge Eating Disorder (-) with respect to depressive disorder ($p>0.05$). The cognitive impulsivity and non planning activity scores of the depressive group were significantly higher than for the participants without depression ($p<0.05$). The cognitive impulsivity scores of depressive obese participants were significantly higher than for obese participants without depression.

Dan and Raz (2015) investigated the relationships among ADHD, self esteem, and three subscales of Test Anxiety among young adults: Cognitive Obstruction, Social Derogation, and Tenseness. Twenty five females with ADHD and thirty females' controls without ADHD were participated in the study. They were assessed by Online Continuous Performance Test, and ADHD questionnaire, a self esteem inventory, and a Test Anxiety questionnaire. The findings showed that the participants with ADHD exhibited significantly higher levels of Test Anxiety on all three subscales and lower levels of self esteem compared with controls. Self esteem served as a partial mediator between ADHD and cognitive obstruction Test Anxiety and as a full mediator between ADHD and social derogation Test Anxiety, but had no mediation effect in the relationships between ADHD and tenseness Test Anxiety.

Lin (2015) examined the mediation effects of self esteem and psychological well being for the relationship between gratitude and depression in late adolescence. Two hundred and thirty five Taiwanese University students were selected and administered by measures of gratitude, self esteem, psychological well being and depression. Path analyses indicated that self esteem and psychological well being acted as full mediators of the association between gratitude and depression. The study revealed that there was a significant path from gratitude through self esteem and psychological well being to depression and a multi group analysis found that the paths did not differ by genders.

Mustafa, Melonashi, Shkembi, Besimi and Fanaj (2015) investigated on the level of anxiety and self esteem among university students and determine links between Albania and Kosovo. The sample of the study included one twenty five students and they were assessed using

Zung Self Rating Anxiety Scale (William W. K. Zung, 1965) and Rosenberg Self esteem Scale (Rosenberg, 1965). The findings showed that 14.3% (Albania) and 32.3% (Kosovo) participants reported mild to moderate level of anxiety, only 12.9% Kosovo had marked to severe level of anxiety; 6.3% (Albania) and 1.6% (Kosovo) reported low self esteem. Self esteem and gender was significantly negatively correlated with anxiety only in Albanian participants and no significant differences in self esteem levels based on country, but students from Kosovo had significantly higher anxiety.

Niles et al. (2015) assessed the associations between severity of anxiety and depression and the presence of medical conditions in adults diagnosed with anxiety disorders. Nine hundred and eighty nine patients were participated in the study. The result showed that the severity of anxiety and depressive symptoms was strongly associated with having more medical conditions over and above control variables, and the association was as strong as that between BMI and disease.

Letitre, Groot, Draaisma and Brand (2014) investigated on the prevalence of anxiety, depression and low level of self esteem in children with well controlled asthma with that of healthy peers: case-control study. Seventy patients with well controlled asthma and 70 matched healthy controls were participated in the study and they were administered by using Validated Dutch versions of the Childhood Depression Inventory (CDI), Revised Fear Survey for Children (RFSC), Self Perception Profile for Children (SPC-C) and Adolescents (SPC-A) and State Trait Anxiety Inventory for Children (STAIC) and Asthma Control Questionnaire. The study revealed that there were no significant differences found in total scores between asthmatics and controls. There were also no significant differences between asthmatics and controls in the prevalence of scores exceeding cutoff levels for clinically relevant anxiety (13.3 vs. 13.0%, $p=0.605$), depression (12.4 vs. 5.7%, $p=0.243$) or low self esteem (21.4 vs. 12.9%, $p=0.175$). A significant correlation was found between poorer asthma control and Childhood Depression ($p=0.012$) and anxiety trait symptoms ($p<0.001$).

Paunescu, Pioigoi, Gagea and Paunescu (2014) conducted a study on the Self evaluation of self esteem among Young Adults. Fifty five students at the University of Medicine aged between 18 and 24 years were selected and administered by self esteem questionnaire (Fr. Ch Leorda and Andre, 1999). The results showed that 62% of the subject achieved between 0-7

points, 36% between 8 and 15 points, and only 2% of the study subjects scored between 16 and 21 points.

Radziwillowicz and Macias (2014) analyzed the correlations between the occurrence of overweight and obesity during adolescence and achievement motivation and self esteem levels. Seventy two persons who were overweight or obese were selected and administered by Rosenberg Self Esteem Scale and Achievement Motivation. The result showed that overweight and obese individuals were characterized by lower Self Esteem and achievement motivation than individuals with standard body weight, and who were characterized by high Self Esteem and average achievement motivation.

Reilly, Dhingra and Boduszek (2014) examined the role of teaching self efficacy, perceived stress, self esteem, and demographic characteristics (age, gender, education and years of teaching experience) in predicting job satisfaction among 121 Irish primary school teachers. The result of the study indicated that the predictor variables accounted for 22% of variance in teachers' job satisfaction. However, only perceived stress was found to explain unique predictive variance, with high levels of occupations stress related to low levels of job satisfaction.

Riggio, Galaz, Garcia and Matthies (2014) investigated on the relations between quality of relationships with mothers and communication with mothers about sex with contraceptive attitudes and sexual self esteem among emerging adults. Hundred and seventy six Undergraduate students were completed self report measures of relationships with mothers, communication about sex, and sexual self esteem. The results indicated that positive relations between quality of relationships with mothers and open, positive sex communication, for men and women, sexually and not sexually active; and between relationship qualities with mothers, sex communication with mothers, and sexual self esteem of women.

Wahid, Yusaf and Razak (2014) examined whether math anxiety and attitudes among students in higher education have an effect on their academic achievement. One hundred and twenty five first semester students were presented with a math anxiety questionnaire about their perception towards mathematics based on emotional, assessment and environmental factors. The study revealed that emotional factor was the highest score related to math anxiety followed by environmental and assessment factors and it also revealed that students performance much

depends on math anxiety, which means that the higher score in math anxiety cause lower score in math performance.

Ahmed (2012) investigated on the role of self esteem and optimism in job satisfaction among teachers of private universities in Bangladesh. The measuring instruments used in this study were Self Esteem Scale (Rosenberg's, 1965), Life Orientation Test (Scheier& Carver, 1985) and Job Satisfaction Survey (Spector, 1985). The data of the study were analyzed using Pearson product moment correlation. The findings showed that self esteem and optimism was significantly positively correlated with teacher's job satisfaction.

Devin, Zohoorian, Peymanizad and Sane (2012) explored on the relationship between organizational citizenship behaviour and self esteem among physical education teachers. The study sought to discern the relationship between Organizational Citizenship Behaviour (OCB) as voluntary acts beyond the role specifications, self esteem educational background and gender among physical education teachers. The participants were assessed by using Organizational Citizenship Questionnaire (OCB) (Podsakoff and Koys, s, 2001) and Self Esteem Questionnaire (Cooper smith's, 1990). The study concluded that organizational commitment has a significant impact on self esteem and there was a significant relationship between educational background and self esteem, but no relationship was observed between educational background and organizational commitment.

Guerdjikova, O'Melia, Mori, McCoy and McElroy (2012) described about the clinical features of elderly individuals with Binge Eating Disorders. The study included 20 elderly individuals. The result showed that elderly individuals with Binge Eating Disorders reported an average (SD = 4.5, 2.9) binge eating episodes per week.

Sawaoka, Barnes, Blomquist, Masheb and Grilo (2012) investigated on Social Anxiety and self consciousness in binge eating disorder: associations with eating disorder psychopathology. The study examined associations between social anxiety and self consciousness with Body Mass Index (BMI) and eating disorder psychopathology in Binge Eating Disorder. One hundred and thirteen overweight or obese treatment seeking men and women with binge eating disorder were selected and administered by semi structural diagnostic clinical interviews and completed a battery of self report measures. The findings showed that social

anxiety was positively and significantly correlated with shape and weight concerns and binge eating frequency. After accounting for depressive levels, social anxiety and self consciousness accounted for significant variance in eating, shape and weight concerns and overall eating disorder global severity scores. Social anxiety also accounted for significant variance in binge eating frequency after co varying for depressive levels. Social anxiety and self-consciousness were not significantly associated with Body Mass Index or dietary restraint.

Lazaro et al. (2011) investigated on Effectiveness of Self Esteem and Social Skills Group Therapy in adolescent eating disorder patients attending a day hospital treatment programme. One hundred and sixty adolescent eating disorder patients, classified as anorexia nervosa and related disorders or bulimia nervosa and related disorders were participated in the study and received structured group therapy for developing self esteem and social skills. The study revealed that bulimia nervosa and related disorders had poorer perceptions of some self esteem and social skills variables. After group therapy, both groups presented significant improvements in their perceptions of physical appearance, their self concept related to weight and shape and to others, happiness and satisfaction, social withdrawal and leadership.

Opayemi (2011) examined the significant relationship between gender, self esteem, religiosity and premarital sex among young adults. Two hundred and forty seven students from Olabisi Onabanjo University, Ago-Iwoye Ogun State were participated in the study (126 males and 121 females) were administered using demographic questionnaire, the Rosenberg Self Esteem Scale, a Religiosity Scale and the Premarital Sex Scale. The study concluded that there was no significant interaction found between religiosity and self esteem [$F(1,243) = 2.26$, $p>.05$] and it also revealed the significantly influence of religiosity on premarital sex [$t(245) = -3.32$, $p<.05$]. However, there was a significant interaction effect on religiosity and gender [$F(1,243) = 10.48$, $<.05$]. The study also concluded that the type of secondary school attended would also influence once engagement in premarital sex [$t(245) = 3.06$, $p<.05$].

Wilson et al. (2010) explored on whether patients with Binge Eating Disorder require speciality therapy beyond Behavioural Weight Loss treatment and whether Interpersonal Psychotherapy is more effective than either Behavioural Weight Loss or Self Help based on Cognitive Behaviour Therapy in patients with a high negative affect during a 2-year follow-up. Two hundred and five women and men with a body mass index between 27 and 45 who met

DSM-IV criteria for binge eating disorder were participated in the study and they were assessed by the Eating Disorder Examination. The study revealed that at 2-year follow up, both Interpersonal Psychotherapy and Self Help based on Cognitive Behaviour Therapy resulted in greater remission from binge eating than Behavioural Weight Loss. Self esteem ($p < .05$) and global eating disorder examination ($p < .05$) scores were moderators of treatment outcome. The odds ratios for low and high global eating disorder examination scores were 2.8 for Behavioural Weight Loss, 2.9 for Self Help based on Cognitive Behaviour Therapy, and 0.73 for Interpersonal Psychotherapy; for self esteem, they were 2.4 for Behavioural Weight Loss, 1.9 for Self Help based on Cognitive Behaviour Therapy, and 0.9 for Interpersonal Psychotherapy.

Catlioglu, Birgin, Cogtu and Gurbuz (2009) executed a study on the level of mathematics anxiety among preservice elementary school teachers. Two hundred and seven pre-service elementary school teachers were selected and administered by using Mathematics Anxiety Scale (Ulda, 2005). The findings showed that the level of mathematics anxiety of pre-service elementary school teachers was interpreted as low and the difference based on gender was not significant. On the other hand, there were significant differences according to class, perceived ability and perceived success levels.

Chi Liao et al. (2009) investigated on decision making in bulimia nervosa using the Iowa Gambling Task (IGT) and Skin Conductance Responses (SCR). Twenty six bulimia nervosa patients and 51 healthy controls took part in the study and 29 patients with anorexia nervosa were included for comparison. The study showed that bulimia nervosa patients performed poorly in the Iowa Gambling Task but showed no decrease in anticipatory Skin conductance responses, whereas a markedly diminished anticipatory Skin conductance response was seen in the anorexia nervosa group.

Crow et al. (2009) investigated on whether anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified are associated with increased all cause mortality or suicide mortality. Thousand and eight hundred and eighty five individuals (anorexia nervosa=177, bulimia nervosa=906, or eating disorder not otherwise specified=802) who presented for treatment at a specialized eating disorders clinic in an academic medical center were participated in the study. The result of the study revealed that crude mortality rates were 4.0% for anorexia nervosa, 3.9% for bulimia nervosa, and 5.2% for eating disorder not otherwise specified. All-

cause standardized mortality ratios were significantly elevated for bulimia nervosa and eating disorder not otherwise specified; suicide standardized mortality ratios were elevated for bulimia nervosa and eating disorder not otherwise specified.

Drosdzol and Skrzypulec (2009) evaluated the influence of infertility on the severity of anxiety and depression in infertile couples. One hundred and eighteen infertile couples and 190 fertile couples were participated and assessed by using Beck Depression Inventory (Aaron T. Beck, 1961) and Beck Anxiety Inventory (Aaron T. Beck, 1993). The result showed that infertile women (35.44%) scored above the cutoff for severe symptoms of depression, compared with 19.47% of fertile women. In anxiety evaluation, there was significant total prevalence among infertile women (15.53%). In the male group there was comparable frequency of negative results for depression and anxiety and their intensity. Among female infertile, depression occurred most frequently in combined infertility, whilst among male infertile in male infertility, with a time frame of 3-6 years causing the creation and severity of depressive symptoms.

Sassoroli et al. (2009) examined the differences about nocturnal and diurnal anxiety between patients either affected by Binge Eating Disorder (BED) or Night Eating Syndrome (NES). Fifty four patients with binge eating disorder, 13 with night eating syndrome and 16 with both binge eating disorder and night eating syndrome were selected and administered by Self Rating Anxiety Scale (SAS), Sleep Disturbance Questionnaire (SDQ) and Night Eating Questionnaire (NEQ). The study revealed patients affected by both binge eating disorder and night eating syndrome scored significantly higher on Rating Anxiety Scale than other patients. Among night eating syndrome patients, there is a correlation between a Sleep Disturbance Questionnaire subscale and two subscales of Night Eating Questionnaire. Among binge eating disorder patients, there was a correlation between Rating Anxiety Scale scores and nocturnal ingestion subscale of the Night Eating Questionnaire. Nocturnal eating is related to nocturnal anxiety among night eating syndrome patients while it is related to diurnal anxiety among patients affected by binge eating disorder.

Kim and Lennon (2007) investigated on whether the level of exposure to mass media is related to self esteem, body image, and eating disorder tendencies in a non experimental setting based on Festinger's social comparison theory. One hundred and eleven female college students were participated in the study. The study revealed that there was a significant positive

relationship between exposure to fashion or beauty magazines and overall appearance dissatisfaction and eating disorder tendencies. No relationship resulted from television exposure and also risk of eating disorder tendencies was associated with low self esteem, body dissatisfaction and overall appearance dissatisfaction.

Sena, Lowe and Lee (2007) examined the relationship between students with and without learning disabilities (LD) and different aspects of test anxiety. Seven hundred and seventy four elementary and secondary school students (195 with LD and 579 without LD) were selected and administered by the Test Anxiety Inventory for Children and Adolescents (Lowe, P.A., Lee, S.W., & DeRuyck, K.A., 2004). The results of seven multiple regression analyses revealed that learning disabilities predicted higher Cognitive Obstruction/Inattention and Worry scores and Lower Performance Enhancement/Facilitation Anxiety and Lie scores.

Firat, Tunc and Sar (2006) investigated the prevalence of dental anxiety and related factors in a Turkish population. The study included a sample of 115 dental patients consisting of 21 subjects who had phobia and of 94 patients with out phobia were assessed by Dental Fear Scale (DFS) and the Modified Dental Anxiety Scale (MDAS). The results showed that Dental Fear Score had strong correlation with the Modified Dental Anxiety Score and the Dental Fear Score had a negative correlation with education level and there was a statistically significant difference between dental phobias and the remaining groups on the Dental Fear total score.

Lyubomirsky, Tkach and DiMatteo (2006) analyzed theoretically and empirically derived similarities and differences between the constructs of enduring happiness and self esteem. Six hundred and twenty one retired employees were selected and completed standardized measures of affect, personality, psychosocial characteristics, physical health, and demographics. The data was analysed using simple Pearson's correlations, partial correlations, and hierarchical regression analyses. The results revealed that happiness and self esteem, while highly correlated ($r = 0.58$), presented unique patterns of relations with the other measured variables. The best predictors of happiness were the following: mood and temperamental traits (i.e., extraversion and neuroticism), social relationships (lack of loneliness and satisfaction with friendships), purpose in life, and global life satisfaction. By contrast, self esteem was best predicted by dispositions related to agency and motivation (i.e., optimism and lack of hopelessness).

Mitchell and Crow (2006) explored on recent publications concerning medical complications in patients with eating disorders, including anorexia nervosa and bulimia nervosa. The study showed that medical complications are common and often serious in patients with eating disorders, particularly those with anorexia nervosa.

El-Anzi (2005) examined the relationship between academic achievement and the variables such as, anxiety, self esteem, optimism, and pessimism. Four hundred male and female students in the Basic Education College in Kuwait were participated in the study. The findings showed that there was a significant positive correlation between academic achievement and both optimism and self esteem whereas the correlations were negative between academic achievement and both anxiety and pessimism.

Olmsted, Kaplan and Rockert (2005) compared the relapse rates obtained when definitions of both remission and relapse were systematically varied and to propose some consensus definitions related to relapse in bulimia nervosa. Forty six women who met criteria for bulimia nervosa before treatment and were abstinent or had low frequency symptoms after treatment were selected and assessments were conducted every 3 months for up to 19 months. The data was analyzed using Kaplan Meier survival analysis. The results revealed that relapse rates at 19 months ranged from 21% to 55% depending on the definitions of remission and relapse applied.

Masheb and Grilo (2004) examined the Health Related Quality of Life in patients with Binge Eating Disorder. Ninety four patients (73 women and 21 men), who met DSM-IV criteria and attended a medical school based programme for binge eating disorder were selected and completed the Medical Outcomes Study Form-36 Health Survey and a self report measure of Health Related Quality of Life. The results revealed that binge eating disorder patients reported worse functioning in all Health Related Quality of Life domains than US norms and in some domains of Health Related Quality of Life than obese treatment seekers. Among binge eating disorder patients, obese binge eating disorder subjects had significantly worse Physical Component summary scores than non obese binge eating disorder subjects, whereas depressed binge eating disorder subjects had significantly worse Mental Component summary scores than non depressed binge eating disorder subjects.

Olivardia, Pope, Borowiecki III and Cohane (2004) investigated on Biceps and body image: the relationship between muscularity and self esteem, depression, and eating disorder symptoms. One fifty four college men were selected and administered by using novel computerized test of body image perception, the somatomorphic matrix and also completed paper and pencil instruments assessing depression, characteristics of eating disorders, self esteem and use of performance enhancing substances. The result showed that contemporary American men display substantial body dissatisfaction and that this dissatisfaction is closely associated with depression, measures of eating pathology, use of performance enhancing substances and low self esteem. Muscle belittlement, believing that one is less muscular than he is, presented as an important construct in the body dissatisfaction of men.

Bulik and Reichborn-Kjennerud (2003) explored the extent to which binge eating disorder was associated with medical morbidity and they reviewed all existing studies on the effects of binge eating disorder on physical health. The results showed that binge eating disorder associated with medical morbidity independent of the effects of comorbid psychopathology or comorbid obesity.

Bulik, Sullivan and Kendler (2003) determined the extent of overlap between genetic and environmental factors that contribute to the liability to obesity and binge eating. Two thousand one hundred and sixty three female twins were selected and they were assessed by conducting bivariate twin modelling to explore the relation between the genetic and environmental risk factors for obesity and binge eating. Bivariate twin modelling revealed substantial heritability for obesity (0.86: CI, 0.77-0.94), moderate heritability for binge eating (0.49: 95% CI, 0.38-0.61), and a modest genetic correlation of +0.34 (95% CI, 0.19-0.50) between the two traits.

Masheb and Grilo (2003) investigated the distinction between body dissatisfaction and self evaluation unduly influenced by body shape and weight, and their longitudinal relationships to depressive symptomatology and self esteem among 97 patients with Binge Eating Disorder. The results showed that change in body dissatisfaction was significantly correlated with both change in depressive symptomatology and change in self esteem over time, whereas change in self evaluation was significantly correlated only with change in self esteem. In addition, change in shape concern, but not change in weight concern, was significantly correlated with change in self esteem only.

Alves-Martins, Peixoto, Gouveia-pereira, Amaral and Pedro (2002) analysed what strategies are pursued in order to protect self esteem when it is threatened by a negative self evaluation of school competence. Eight hundred and thirty eight secondary school students from the seventh to the ninth grades were selected and administered by using The Self Perception Profile for Adolescents (SPPA; Harter, 1988) and Scale of Attitudes towards school. The results showed that there were significant differences between the self esteem enjoyed by successful and unsuccessful students in the seventh grade; such differences disappear in the eighth and ninth grades and it also revealed success related differences in domain specific self evaluation. Students with low levels of academic achievement attribute less importance to school related areas and reveal less favourable attitudes towards school.

Barry, Grilo and Masheb (2002) examined Gender differences in patients with binge eating disorder. One hundred and eighty two adults (35 male & 147 female) were selected and administered a battery of measures to examine developmental, eating and weight related disturbances, and psychological features associated with binge eating disorder. The findings showed that men and women did not differ significantly on several developmental variables (age at first overweight, age at first diet, age at onset of regular binge eating, or number of weight cycles). Men had significantly higher current body mass index, highest adult body mass index, and were significantly more likely to be classified as obese. Men and women did not differ significantly on measures of current eating disorder features but women reported significantly greater body image dissatisfaction and drive for thinness. Men and women did not differ significantly on current depression or self esteem but men reported a greater frequency of past drug abuse problems.

Hsu et al. (2002) investigated whether extremely obese binge eating disorder subjects differ from their extremely obese non binge eating disorder counterparts in terms of their eating disturbances, psychiatric morbidity and health status. Thirty seven extremely obese subjects were selected and administered by using Eating Disorder Examination 12th edition (EDE), Three Factor Eating Questionnaire (TFEQ), Structured Clinical Interview for the Diagnostic and Statistical Manual-IV (SCID-IV), Short Form Health Status Survey (SF-36) and 24 hours Feeding Paradigm. The results showed that 25% of subjects were classified as binge eating disorder and 75% of subjects were classified as non binge eating disorder. Binge eating disorder

subjects had higher eating disturbance in terms of eating concern and shape concern, higher disinhibitions, and they consumed more liquid meal during the 24 hours feeding paradigm. No difference was found in psychiatric morbidity between binge eating disorder and non binge eating disorder in terms of DSM-IV Axis I diagnosis. The health status scores of both binge eating disorder and non binge eating disorder subjects were significantly lower than US norms on all subscales of the SF-36, particularly the binge eating disorder group.

Matos et al. (2002) analyzed on the frequency of Binge Eating Disorder or Binge Eating Episodes (BINGE), anxiety, depression and body image disturbances in severely obese patients seeking treatment for obesity. Fifty patients were selected and administered by using Questionnaire on Eating and Weight Patterns Revised, Beck Depression Inventory (BDI), State Trait Anxiety Inventory and Body Shape Questionnaire. In this population, Binge Eating Disorder and BINGE frequencies were 36% and 54% respectively. Symptoms of depression were detected in 100% while severe symptomatology was found in 84% of the areas. The frequency of anxiety as a trait was 70%, as a state, 54% and 76% of all patients reported discomfort regarding body image. The frequency of Binge Eating Disorder was higher in patients with higher anxiety scores as a personality trait (>40) but not as a state (46% vs. 13%; $p<0.05$). A high frequency of BINGE was found in those with higher scores (>140) in the Body Shape Questionnaire assessment.

Striegel-Moore, Dohm, Pike, Wilfley and Fairburn (2002) examined whether sexual and physical abuse, bullying by peers and ethnicity based discrimination were associated with an increased risk for developing binge eating disorder in black and in white women and whether any increase in risk is specific for the development of binge eating disorder. One hundred and sixty two women with binge eating disorder and 251 healthy and 107 psychiatric comparison subjects were selected and interviewed for exposure to the risk factors under investigation. The findings showed that white subjects with binge eating disorder reported significantly higher rates of sexual abuse, physical abuse, bullying by peers, and discrimination than healthy comparison subjects. Only rates of discrimination were significantly higher in white women with binge eating disorder than in matched psychiatric comparison subjects. In black women with binge eating disorder, rates of sexual abuse, physical abuse, and bullying by peers but not discrimination were significantly higher than in healthy comparison women. Rates of sexual

abuse were significantly higher in black women with binge eating disorder than in psychiatric comparison subjects.

Thompson and Chad (2002) explored on the relationships of age, social physique anxiety, and body image dissatisfaction to preoccupation with body weight and shape in young females. Height, weight, and skin fold measurements were obtained from seventy seven non obese females and they were assessed by using Social Physique Anxiety Scale (SPAS; Hart, E. A., et al, 1989), A Body Image Questionnaire and the Eating Disorder Inventory (EDI). The data was analyzed using Pearson correlations, Chi-square, and hierarchical and stepwise multiple regression. The findings showed that social physique anxiety was moderately correlated to body image dissatisfaction and body weight and shape concerns. Young females who were more anxious about their physique preferred a smaller body shape and experienced more body weight and shape concerns than those less anxious. The social physique anxiety scale was a stronger predictor for the eating disorder inventory scales Body Dissatisfaction and Drive for Thinness than the Body Image Questionnaire or age.

Corwyn (2000) explored on the factor structure of the Rosenberg Self esteem Scale (RSES; Rosenberg, 1965). Confirmatory Factor Analysis and its approach to analyze multitrait multimethod data were used to evaluate eight competing models of the factor structure of the Rosenberg Self esteem Scale. The result of the study concluded that the Rosenberg Self esteem Scale is a unidimentional construct that is contaminated by a method effect primarily associated with negatively worked items. Those results found in both adolescents and adults.

Keppel and Crowe (2000) explored on the effects of a first stroke on body image and self esteem in a population of previously neurologically intact young adults. Fourty participants with a mean age of 36.7 years were selected and administered by using Body Cathexis Scale (Secord & Jourard, 1953), Rosenberg's Self Esteem Scale (Rosenberg, 1965) and Tennesse Self Concept Scale: 2 (Fitts & Warren, 1996). The results indicated that self reported body image was significantly negatively affected following stroke in young adults, and was associated with significant reductions in all measures of self esteem. Before the stroke, only physical self esteem and boy image were correlated, however, after the stroke, all measures of self esteem correlated with evaluations of body image.

Santonastaso, Ferrara and Favaro (1999) compared the pathway to binge eating and clinical characteristics of binge eating disorder patients and nonpurging bulimics. Forty five non purging bulimics and 45 binge eating disorder patients were selected and assessed through a Clinical Interview, Eating Disorders Inventory and the Hopkins Symptom Checklist. The results revealed that in most of the nonpurging bulimics (89%), binge eating was preceded by dieting and weight loss, whereas among binge eating disorder patients the pathway to binge eating was more variable. Previous episodes of anorexia nervosa were significantly more frequent among nonpurging bulimics than among binge eating disorder patients. The two groups did not differ in other clinical and psychological characteristics, such as psychiatric symptoms, frequency of binging, and impulsivity traits. However, on many of the variables, the binge eating disorder group showed significantly greater variance.

Serpell, Treasure, Teasdale and Sullivan (1999) examined on the anorexics attitudes towards anorexia nervosa. Anorexic patients were asked to write two letters to their anorexia nervosa, one addressing it as a friend and the other addressing it as an enemy. The results showed that commonly expressed benefits of anorexia nervosa included feeling looked after or protected, gaining a sense of control, and feeling special. Perceived costs of the disorder included constant thoughts about food, feeling taken over, and the damage done to personal relationships.

Welch and Fairburn (1998) tested three hypothesis regarding smoking among women with bulimia nervosa. One hundred and two women with DSM IV bulimia nervosa, 204 matched normal controls, and 102 matched controls with affective or anxiety disorders were selected. The results showed that a higher proportion of the bulimia nervosa cases were smokers than of either comparison group. Of those smokers who had achieved a period of abstinence, bulimia nervosa cases were more likely than normal control subjects to have resumed smoking, and more likely to attribute their resumption to concern about their weight.

Carlat, Camargo and Herzog (1997) analyzed the Eating Disorders among 135 Male Patients. The goal of the study was to better understand the etiology, clinical characteristics, and prognosis of eating disorders in males. As a result, 135 males with eating disorders were identified, of whom 62 were bulimic, 30 were anorexic, and 43 met criteria for an eating disorder not otherwise specified.

Tiller et al. (1997) investigated the social support networks of patients with Anorexia Nervosa (AN) and Bulimia Nervosa (BN). Fourty four patients with anorexia nervosa, 81 patients with bulimia nervosa, and 86 polytechnic students were selected and measured through Significant Others Scale. The results revealed that eating disorder patients had smaller social networks than the students. Anorexia nervosa patients were significantly less likely than bulimia nervosa patients to have a spouse or partner as a support figure. Both anorexia nervosa and bulimia nervosa patients reported less actual emotional and practical support than students. Anorexia nervosa patients perceived their social support to be adequate, whereas bulimia nervosa patients were dissatisfied with their support. Patients set lower ideals for support than the students. Social support was not correlated with duration of illness.

Goldfein, Walsh, Devlin, Lachaussee and Kissileff (1993) examined the eating behaviour of individuals with the newly proposed diagnosis, binge eating disorder. Twenty obese women (10 with binge eating disorder & 10 without binge eating disorder) were selected and served standardized meals. The result showed that obese subjects with binge eating disorder consumed significantly more calories than did obese subjects without binge eating disorder and there were also significant differences between the two groups on several of the self report measures.

CHAPTER III

Method

The present study was carried out involving the following steps:

- Objectives
- Hypotheses
- Area
- Sample
- Tools
- Analysis of data

Objectives

- To find the correlation between Eating Disorder, Self Esteem and Anxiety
- To find the difference among gender in Eating Disorder, Self Esteem and Anxiety

Null Hypothesis

H1: There will be no significant relationship between Bulimia and Anxiety

H2: There will be no significant relationship between Bulimia and Self Esteem

H3: There will be no significant relationship between Bulimia and Body Dissatisfaction

H4: There will be no significant relationship between Body Dissatisfaction and Anxiety

H5: There will be no significant relationship between Body Dissatisfaction and Self Esteem

H6: There will be no significant difference between male and female young adults in Eating Disorder, Self Esteem and Anxiety

Area

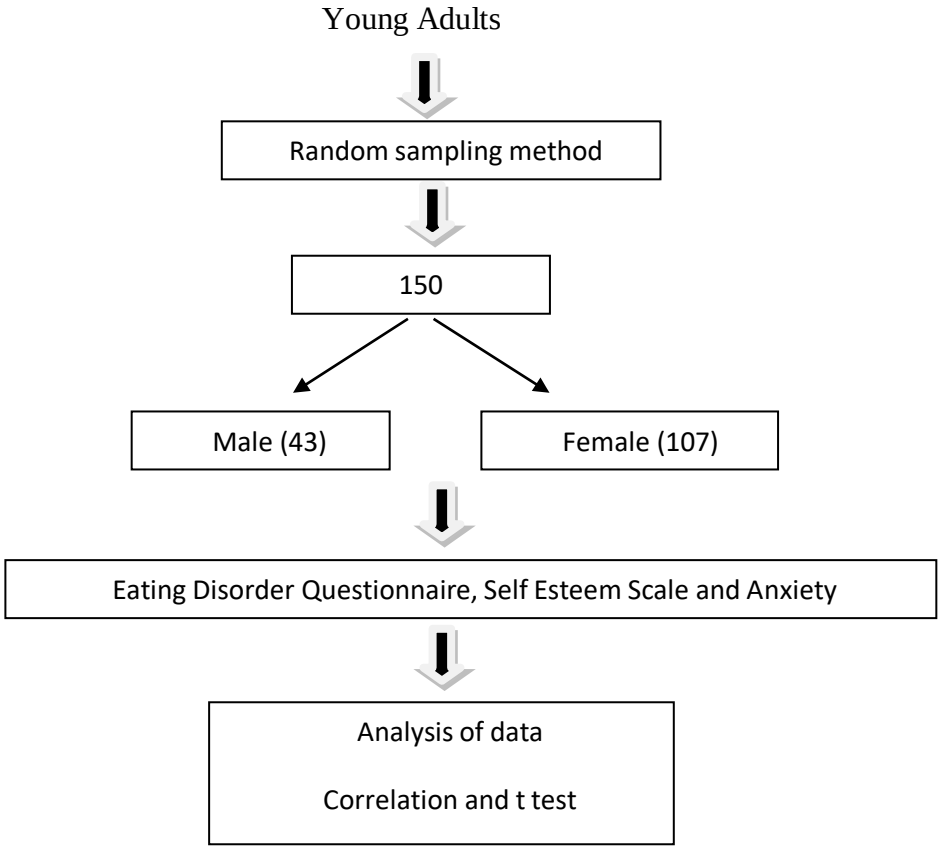
The study was carried out in various places in Coimbatore. The reason for selecting this area as follows:

- Availability of participants in the selected area
- Willingness and cooperation of the young adults
- The permission from the authorities

Sample

One hundred and fifty young adults in the age range of 19 to 29 were selected by random sampling method.

Research Design



Inclusion criteria

- Participants in the age range of 19-29 years were selected
- Both male and females were included
- Willingness to participate

Exclusion criteria

- If the participants had any major psychological problems were excluded
- Not willing to participate
- Participants with high self esteem, low anxiety and low problem in eating disorder was excluded

Tools

- Eating Disorder Inventory constructed by David M. Garner (1984), to assess the level of eating disorder among the participants
- Self Esteem Scale constructed by Dr. Florence Rosenberg (1965), to assess the level of self esteem among the participants
- Beck's Anxiety Inventory constructed by Aaron T. Beck (1988), to assess the level of anxiety among the participants

Eating Disorder Inventory

It was constructed by David M. Garner (1984), classified into two parts. Part A consists of 25 items and Part B consists of 9 questions. There are six possible responses to each statement ranging from "Always" (A) to "Never" (N). The reliability of these index scores collected from eating disorder patients appears excellent (Cronbach's alpha=0.90, to 0.97; test-retest r=0.98). The EDI-3 yields adequate convergent and discriminant validity. Many studies have used the EDI-3 version, yet the first one to independently test the factor structure, the internal consistency as well as discriminative and cross cultural validity.

Self Esteem Scale

It was constructed by Dr. Florence Rosenberg (1965), consists of 10 items. There are four possible responses to each item ranging from "Strongly Agree" to "Strongly Disagree". The scoring key and norms are provided by the author. The Rosenberg Self Esteem Scale presented high ratings in reliability areas; internal consistency was 0.77, minimum Coefficient of Reproducibility was at least 0.90. A varied selection of independent studies each using such samples as – parents, men over 60, high school students, and civil servants – showed alpha coefficients ranging from 0.72 to 0.87 (all fairly high). Test-retest reliability for the 2 week interval was calculated at 0.85, the 7 month interval was calculated at 0.63. The Rosenberg Self Esteem Scale is closely connected with the Coopersmith Self Esteem Inventory.

Beck's Anxiety Inventory

It was constructed by Aaron T. Beck (1988), consists of 21 items. There are four possible responses to each item ranging from "Not at all" to "Severely". The scoring key and norms are provided by the author. Two studies were conducted to further psychometric research on the recently developed Beck Anxiety Inventory. In study 1 the test-retest reliability and internal consistency of the scale were examined with a sample of 40 outpatients having anxiety disorders. The Beck Anxiety Inventory proved highly internally consistent (cronbach's alpha = 0.94) and acceptably reliable over an average time lapse of 11 days (r=0.67). Study 2 was conducted to assess the convergent and discriminant validity of the Beck Anxiety Inventory that is anxiety and depression and in comparison to the widely used Trait Anxiety measure from the State Trait Anxiety Inventory.

Institutional Humans Ethics Committee

The project entitled on eating disorders, self esteem and anxiety among young adults was submitted to institutional human ethics committee and the approval number is AUW/IHEC/A.PSY-21-22/XPD-05.

Analysis of Data

The data was analyzed statistically using Correlation and t test

CHAPTER IV

Results and Discussion

The study on Eating Disorder, Self Esteem and Anxiety among young adults was conducted in various places in Coimbatore, Tamilnadu. One Hundred and Fifty participants including males and females were selected and administered by Eating Disorder Questionnaire (David M. Garner, 1984), Rosenberg Self Esteem Scale (Dr. Florence Rosenberg, 1965) and Beck's Anxiety Inventory (Aaron T. Beck, 1988). The age range of the participants was from 19 to 29 years.

The data of the study are analyzed, tabulated and discussed below

Table I

Demographic data of the participants

(N=150)

Gender		Number	Percentage
Gender	Male	43	29
	Female	107	71
Family Type	Joint	24	16
	Nuclear	126	84

Percentage is rounded off

Table I shows the demographic profile of the participants. Majority of the participants belongs to the age group of 22 to 26. Majority of the participants were females (71%) and 29%; were males. Majority of the participants belongs to Nuclear family (84%) and 16% belongs to joint family.

Table II

Correlation between Bulimia and Anxiety among Young Adults

(N= 150)

Variables		**Bulimia**	**Anxiety**
Bulimia	Pearson correlation	1	0.34 **
	Sig. (2-tailed)		0
Anxiety	Pearson correlation	0.34 **	1
	Sig. (2-tailed)	0	

**** = Significant at 0.01 level**

Table II indicates the correlation between bulimia and anxiety, which was found to be significant at 0.01 level. It is easy to identify and recognize the heightened anxiety for those who have struggled with bulimia, because it involves regular episodes of eating very large quantities of food that are generally highly caloric and easily ingested, followed by vomiting, fasting, vigorous exercise, or using laxatives or diuretics in an attempt to get rid of food; living in fear of gaining weight.

Hence the Null Hypothesis H1 stating, **"There will be no significant relationship between Bulimia and Anxiety among Young Adults"** is rejected.

Table III

Correlation between Bulimia and Self Esteem among Young Adults

(N=150)

Variables		**Bulimia**	**Self Esteem**
Bulimia	Pearson Correlation	1	0.17 *
	Sig. (2-tailed)		0.04
Self Esteem	Pearson Correlation	0.17 *	1
	Sig. (2-tailed)	0.04	

*** = Significant at 0.05 level**

Table III indicates the correlation between bulimia and self esteem, which was found to be significant at 0.05 level. People who suffer from eating disorder like bulimia will commonly show signs of low self esteem. Even though when individuals are at a normal weight or even dangerously underweight there often occurs a belief that they are overweight. Hence, their low self esteem plays a big part in reinforcing negative thought patterns and continuing the destructive cycle of an eating disorder.

Hence the Null Hypothesis H2 stating, **"There will be no significant relationship between Bulimia and Self Esteem among Young Adults"** is rejected.

Table IV

Correlation between Bulimia and Body Dissatisfaction among Young Adults

(N=150)

Variables		Bulimia	Body Dissatisfaction
Bulimia	Pearson Correlation	1	0.38 **
	Sig. (2-tailed)		0
Body Dissatisfaction	Pearson Correlation	0.38 **	1
	Sig. (2-tailed)	0	

**** = Significant at 0.01 level**

Table IV indicates the correlation between bulimia and body dissatisfaction, which was found to be significant at 0.01 level. People often think that eating disorders develop because they are worried about their weight or unhappy with the way their body looks. The way individuals thought about their body image could change over the course of the illness. When people had been ill with an eating disorder for a while, weight loss could become an obsessive habit and about achieving a certain number rather than about the weight or the way they already looked.

Hence the Null Hypothesis H3 stating, **"There will be no significant relationship between Bulimia and Body Dissatisfaction among Young Adults"** is rejected.

Table V

Correlation between Body Dissatisfaction and Anxiety among Young Adults

(N=150)

Variable		Body Dissatisfaction	Anxiety
Body Dissatisfaction	Pearson Correlation	1	0.31 **
	Sig. (2-tailed)		0
Anxiety	Pearson Correlation	0.31 **	1
	Sig. (2-tailed)	0	

**** = Significant at 0.01 level**

Table IV indicates the correlation between bulimia and body dissatisfaction, which was found to be significant at 0.01 level. For some individuals, the struggle with anxiety can be internalized and projected through poor body image and some people may even feel intense anxiety about their bodies or find that body distortions prompt anxiety and worry. Such dissatisfactions with body are also characterized by anxiety and a fear of interacting with other people or engaging in social activities.

Hence the Null Hypothesis H4 stating, **"There will be no significant relationship between Body Dissatisfaction and Anxiety among Young Adults"** is rejected.

Table VI

Correlation between Body Dissatisfaction and Self Esteem among Young Adults

(N=150)

Variables		**Body Dissatisfaction**	**Self Esteem**
Body Dissatisfaction	Pearson Correlation	1	0.15
	Sig. (2-tailed)		0.07
Self Esteem	Pearson Correlation	0.146	1
	Sig. (2-tailed)	0.074	

Table IV indicates the correlation between bulimia and body dissatisfaction, which was not found to be significant. As there is enough awareness in current generation regarding body image, there seems to be some amount of self acceptance which paves way for a good level of value and respect towards oneself.

Hence the Null Hypothesis H5 stating, **"There will be no significant relationship between Body Dissatisfaction and Self Esteem among Young Adults"** is accepted.

Table VII

Level of Significance among the gender in Eating Disorder, Self Esteem and Anxiety among Young Adults

(N=150)

Variables	Gender	N	Mean	Standard Deviation	t
Bulimia	Male	43	6.86	5.99	1.63 N.S
	Female	107	5.24	5.27	
Body	Male	43	14.09	6.49	0.42 N.S
Dissatisfaction	Female	107	13.49	8.42	
Self Esteem	Male	43	24.56	2.14	1.27 N.S
	Female	107	25.00	1.84	
Anxiety	Male	43	17.16	13.29	1.43 N.S
	Female	107	14.27	10.24	

N.S – Not Significant

Table VI shows the gender differences in eating disorder, self esteem and anxiety among young adults. The statistical values indicate that there are no major gender differences in eating disorder, self esteem and anxiety. Eating disorders are serious psychiatric illnesses that impact both males and females. Anxiety is the most common thing which is strongly associated with eating disorder and low self esteem occurs commonly in patients with an eating disorder, especially with anorexia nervosa and bulimia nervosa. Whether it is a male or female, if they are aware of their eating behaviours and if they maintain proper eating habits, it would obviously help them to manage their level of anxiety and lead them to have desirable level of self esteem.

Hence the Null Hypothesis H6 stating **"There will be no significant gender differences in Eating Disorder, Self Esteem and Anxiety among Young Adults"** is accepted.

CHAPTER V

Summary and Conclusion

A study on Eating Disorder, Self Esteem and Anxiety among Young Adults was carried out involving following objectives:

- To determine the relationship between demographic variables on Eating Disorder, Self Esteem and Anxiety among Young Adults.
- To explore the relationship on Eating Disorder, Self Esteem and Anxiety among Young Adults.

The current study on understanding relation between eating disorder, self esteem and anxiety among young adults proposed to find the gender difference and relationship among the chosen variables. The researchers reviewed various related literature and understood the concept related to three variables and considered gender to be a grouping variable, eating disorder as the independent variable and self esteem and anxiety to be the dependent variables. The study was conducted in Coimbatore by Random Sampling Method. The participants were young adults. One hundred and fifty participants were selected for this present study. The participants were in the age group of 19 to 29 years. The tools used for the study were Eating Disorder Inventory developed by David M. Garner; Self Esteem Scale developed by Dr. Florence Rosenberg; Beck's Anxiety Inventory developed by Aaron T. Beck. The survey was collected in person through questionnaires. Participants were asked to tick yes or no in the consent form in the agreement of participating in the study on "Eating Disorder, Self Esteem and Anxiety among Young Adults" and they are requested to fill each statement according to the instructions provided to them. Thus the data collected from the participants were subjected to statistical analysis. The data was analyzed using SPSS (Statistical Package for the Social Science). Statistical methods such as Pearson correlation and t-test were used to find the results of the study.

Conclusion

From this research study, the following conclusion has been arrived.

- There was a significant relationship between bulimia and anxiety; bulimia and self esteem; bulimia and body dissatisfaction and body dissatisfaction and anxiety which were significant at 0.01 levels.
- There was no significant relationship between body dissatisfaction and self esteem.
- There was no significant difference between males and females in eating disorder, self esteem and anxiety.

Implications

- Awareness programme can be conducted to prevent eating disorders.
- Despite the shortfalls in life, building positive relationships, being optimistic can help an individual to improve self esteem.
- Anxiety can be reduced by physical activity, a healthy diet, regular sleep and relaxation exercise.

Recommendations

- Sample size can be increased.
- More number of variables can be included.
- The participants from various localities can be included.

Limitations

- The sample consisted in the age group of 19 to 29 years.
- The tools used for the study consisted of 70 items in total due to which the participants slightly felt difficult to perform the test till the end.
- Misunderstanding of the respondents regarding the questions might have influence the results.

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Annexure I

Informed Conformed Form

Use of questionnaires for adults

You are being invited to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. The purpose of the study is to find the correlation between Eating disorder, Self Esteem and Anxiety among Young Adults.

STUDY PROCEDURE

You will be given three tests of paper-pencil type along with socio demographic profile. You need to respond to all the items in the tests. There is no risk in undertaking the study. There will be no direct benefits to you for your participation in the study. Your responses to the question will be anonymous and kept confidential. Your participation in the study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign this form. You are free to withdraw at anytime and without giving any reason. There are no costs to you for your participation in this study.

CONSENT

"By signing this consent form, I confirm that I have read and understood the information and have the opportunity to ask questions. I understand that my participation is voluntary and I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study conducted by Ms. Evanjalin, R. (II M.Sc. Applied psychology).

Name of the participant:

Signature :

Place :

Date :

Annexure II

Socio Demographic Profile

NAME :

AGE :

GENDER : M/F

EDUCATION :

AREA : Rural/ Semi Urban/ Urban

FAMILY : Nuclear/ Joint

I assure that the data collected will be used only for the study and will not be used for any other purposes and confidentiality will be maintained throughout and even after the study

Annexure III

Eating Disorder Questionnaire

(David M. Garner, 1984)

The following statements and questions ask about your attitudes, feelings, and behaviors. Some of the questions relate to food, eating, and attempts to control your weight; others ask about your feelings about your body shape and weight. Please answer all of the questions the best that you can. There is no right or wrong answers.

PART A

S.no	Statements	Always	Usually	Often	Sometimes	Rarely	Never
1	I eat sweets and carbohydrates without feeling nervous.						
2	I think that my stomach is too big.						
3	I eat when I am upset.						
4	I stuff myself with food						
5	I think about dieting						
6	I think that my thighs are too large						
7	I feel extremely guilty after overeating						
8	I think that my stomach is just the right size						
9	I am terrified of gaining weight						
10	I feel satisfied with the shape of my body						
11	I exaggerate or magnify the importance of weight						
12	I have gone on eating binges where i felt that i could not sleep						
13	I like the shape of my buttocks						

14	I am preoccupied with the desire to be thinner						
15	I think about bingeing (overeating)						
16	I think my hips are too big						
17	I feel bloated after eating a normal meal						
18	I eat moderately in front of others and stuff myself when they're gone						
19	If I gain a pound, I worry that I will keep gaining						
20	I have the thought of trying to vomit in order to lose weight						
21	I think that my thighs are just the right size						
22	I think my buttocks are too large						
23	I eat or drink in secrecy						
24	I think that my hips are just the right size						
25	When I am upset, I worry that I will start eating						

PART B

1. What is your age? ----------

2. What is your gender?----------(Male / Female)

3. What is your height? ----------

4. What is your current weight? ----------

5. What is your highest weight ever? ----------

6. What year was that? ----------

7. What is your lowest weight ever? ----------

8. What year was that? ----------

9. What is your desired weight? ----------

In the past 3 months, how often have you.....

1. Gone on eating binges (eating a large amount of food while feeling out of control)?
2. Made yourself sick (vomited) to control your weight?
3. Used laxatives to control your weight or shape?
4. Exercised 60 minutes or more to lose or control your weight?
5. In the past 6 months, have you lost 20 pounds or more?

Never	Once a month or less	2-3 times per month	Once a week	2-6 times per week	Once a day or more
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
No	Yes				

Annexure IV

SELF ESTEEM SCALE

(Dr. Florence Rosenberg, 1965)

The scale consists of 10 items. Please go through each item carefully and select one option among the 4 that suits you the best. There is no time limit, but do it as quickly as possible.

S.no	Items	Strongly agree	Agree	Disagree	Strongly disagree
1	On the whole, I'm satisfied with myself				
2	At times, I think I am no good at all				
3	I feel that I have a number of good qualities				
4	I am able to do things as well as most other people				
5	I feel I do not have much to be proud of				
6	I certainly feel useless at times				
7	I feel that I am a person of worth, at least on an equal pace				
8	I wish I could have more respect for myself				
9	All in all, I am inclined to feel that I am a failure				
10	I take a positive attitude toward myself				

Annexure V

BECK'S ANXIETY INVENTORY

(Aaron T. Beck, 1988)

This inventory consists of 21 items. Please read each item carefully and select one option among the 4 that suits you the best. There is no time limit, but do it as quickly as possible.

S.no	Items	Not at all	Mild	Moderate	Severe
1	Numbness or tingling				
2	Feeling hot				
3	Wobbliness in legs				
4	Unable to relax				
5	Fear of the worst happening				
6	Dizzy or lightened				
7	Heart pounding or racing				
8	Unsteady				
9	Terrified				
10	Nervous				
11	Feelings of choking				
12	Hands trembling				
13	Shaky				
14	Fear of losing control				
15	Difficulty breathing				
16	Fear of dying				
17	Scared				
18	Indigestion or discomfort in abdomen				
19	Faint				
20	Face flushed				
21	Sweating (not due to heat)				

INSTITUTIONAL HUMAN ETHICS COMMITTEE

Avinashilingam

Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956) Re-accredited with 'A++' Grade by NAAC.
Recognised by UGC Under Section 12 B
Coimbatore-641 043, Tamil Nadu, India

26th Febraury 2022

To
Ms.Evanjalin.R
Department of Applied Psychology
Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore – 641 043

Dear Evanjalin.R,

Ref: Your proposal No. IHEC/21-22/A.PSY-05 entitled "Eating Disorders, Self Esteem and Anxiety among Young Adults" submitted for approval of IHEC.

The Institutional Human Ethics Committee of our University hereby grants approval to your research proposal No. IHEC/21-22/A.PSY-05 entitled "Eating Disorders, Self Esteem and Anxiety among Young Adults" submitted by you. The Approval number for the same is AUW/IHEC/A.PSY-21-22/XPD-05.

We wish you all the best in your research endeavours.

Regards,

S. Uma Mageshwari

Dr.S.Uma Mageshwari
Member Secretary

Institutional Human Ethics Committee