

Comparative Study

A Study to Assess Eating Disorders & Body Image in Delhi

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ABSTRACT

A comparative study was conducted among individuals of Delhi, India to measure eating disorder and body image in some parts of Delhi region. As body image and eating habits are important facets of an individual's life, the objective was to compare eating disorder and body image between the age group of 20 to 25 years. For this study, total 60 people were selected randomly from the population of Delhi with equal representation of gender. For this study, scale by scale by Body Self Image Questionnaire by David A. Rowe, Jeri Benson and Ted A. Baumgartner (1999), body image examination questionnaire were used for the assessment. The data was statistically analyzed by using mean standard deviation, t test method was used to assess the level of eating disorders and body image between all three groups. The results of the findings are as follows: 1. The study showed that there is no significant difference among body image of the respondents across age. Females scored higher than males. 2. The study showed that there is significant difference among body image of the respondents across gender. Females scored higher than males. The conclusion is that in each dimension the score of females were higher than the scores of male samples and significant difference was found across age group of 20 to 25 years in body image and eating disorder between males and females.

Keywords: *Eating Disorders, Body Image*

Body image is basically how an individual perceives his or her body. Nowadays, people give so much importance to the beauty of the human body. Society, media, social media, and popular culture often shape these views, and this can affect how a person sees their own body. Body image can be positive or negative both. Body image is a key feature of the personality of any person. The younger generation focuses more on their body image than people in late adulthood and old age. So, eating disorders are one of the most common psychiatric problems faced by adolescents and young adults. Eating disorders and subthreshold eating conditions are prevalent in adolescent age and girls and were strongly associated with various psychological, behavioral, and socio-environmental domains. Due to social stigma and social expectations, adolescents and females are more aware about their body. This affects their health consciousness and wellbeing directly and indirectly.

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BODY IMAGE

Body image refers to a person's emotional attitudes, beliefs, and perceptions of their own body. Experts describe Trusted Source it as a complex emotional experience. Body image relates to following aspects:

- what a person believes about their appearance
- how they feel about their body, height, weight, and shape
- how they sense and control their body as they move

A person's body image will range from positive, or satisfaction with their body, to negative, or dissatisfaction with their body. A negative body image can contribute to body dysmorphic disorder (BDD), eating disorders, and other conditions. Body image is the main characteristic of human personality, which tells about the person's wellbeing and health. A person's thoughts related to physical appearance and shape of the body is included in the concept of body image. The term 'Body image' has been defined in numerous ways. Cash and Pruzinsky (1990) define body image as an individual's belief, way of thinking, and outlook about their physical appearance in overall ways, including exterior, ethnicity, groups of age, beliefs and sexual attractiveness. Body image is having various dimensions consisting of emotional and cognitive contexts simultaneously. Personal perception and self-belief about physique come under cognitive reflection of body image, whereas, emotions related to outer appearance and physical aspects come under emotional reflection of body image. Thoughts about ease and uneasiness are related to body satisfaction and body dissatisfaction respectively. Body image is conceptualized as a personal understanding or interpretation of one's own physical attractiveness and outer look of body shape, as well as the feeling of personal judgment of physique.

Banfield and McCabe (2002) found body image as a multidimensional perspective; in which mainly three contexts have been seen, i.e. cognitive functioning towards body image, person's behaviors towards nutritional intake and perception about physical attractiveness. In the cognitive functioning of body image, various views and thoughts related to shape of physique, as well as feelings towards outer look of the body shape are included. However, behavior towards nutritional intake involves a person's effort to have nutritious food intake and consumption to stay healthy. On the other hand, perception of physique includes a person's subjective views about self-image and objectified body consciousness in different concerns. Females, who have more focus on their body shape and figure, are more involved in behaviors related to grooming body image and dieting for better body shape. Body image is not fixed, whereas, it can change in excess of occasion or in some months. In a previous study, Cash and Pruzinsky (1990) explained that a person's body image can change through the effect of mass media by affecting physical outer appearance, sexual attractiveness and belief about obesity or weight concerns. Grogan (1999) concluded from various researches that body image is prejudiced by a lot of variables such as, peer groups, friend circle, home environment, family members, colleges and societal norms. When someone becomes grown-up the effects on body image may revise and expand into more weak or strong. Therefore, transformation in body image or body shape might happen during a lifetime. Females with poor body image accept depressing thoughts related to their physique. In another earlier research, Cash, Ancis, and Strachan (1997) studied the pessimistic thoughts that only some females have regarding their physical attributes, excluding other females having depressing thoughts related to physique causing huge anguish and trouble in their daily lifestyle. As a poor body image becomes rigorous, it might give way to numerous disorders, such as, bulimia nervosa, anorexia nervosa, binge eating disorder etc.

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Poor body reflection can also cause nervousness, hopelessness, lower self-esteem, depressive thoughts and lower sexual pleasure. Though, Cash (1999) found that physical appearances which do not measure up to the social standards, lead to lower self-esteem. The relationship between body image and self-esteem is well established. However, Lightstone (2001) acknowledged that body image is psychological in nature and is much more influenced by self-esteem than by actual physical attractiveness as judged by others. Lightstone further postulated that body image is inborn and not learnt, the learning occurs in the family and among peers. But these only reinforce what is expected culturally. On the other hand, Cash, Anis & Strachan (1997) support the outcome that bodily image is associated with personal worth of a person. Though, they accomplished that a poor sense of body image enhances low level of self-esteem. Whereas, Cash, Anis & Strachan (1997) confirmed that an individual's feelings about bodily shape and familiarity of their physical shape from early days to teenage affects the observation about their physical appearance when they reach old age.

Lightstone (2001) gives definition about body image, which is as follows, "body image involves our perception, imagination, emotions, and physical sensations of and about our bodies." Body image is not rigid, but always changing; subject to change in mood, atmosphere and experience. In further terms it can be said that the feelings of recognition about physical appearance, thoughts about outer looks and feelings about self-attractiveness is something personal for everyone and it can alter during the life span.

There are various aspects in body image which are defined as follows :

The way you see yourself (Perceptual) The way you see your body is not always a correct representation of what you actually look like. For example, a person may perceive themselves to be fat when in reality they are underweight. How a person sees themselves is their perceptual body image.

The way you feel about the way you look (Affective) There are things a person may like or dislike about the way they look. Your feelings about your body, especially the amount of satisfaction or dissatisfaction you experience in relation to your appearance, weight, shape and body parts is your affective body image.

The thoughts and beliefs you feel about your body (Cognitive) Some people believe that they will feel better about themselves if they are thinner. Others believe they will look better if they develop more muscle. The way you think about your body is your cognitive body image.

The things you do in relation to the way you look (Behavioural) When a person is dissatisfied with the way they look, they may employ destructive behaviours such as excessive exercising or disordered eating as a means to change appearance. Some people may isolate themselves because they feel bad about the way they look. Behaviours in which you engage as a result of your body

image encompasses your behavioural body image. When a person has a positive body image, they understand that their sense of self-worth does not depend on their appearance. Having a positive body image includes following aspects:

- accepting and appreciating the whole of one's body, including how it looks and what it can do
- having a broad concept of beauty

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- having a body image that is stable
- having inner positivity

A person with a negative body image feels dissatisfied with their body and their appearance. The person may feel following:

- compare themselves with others and feel inadequate when doing so
- feel ashamed or embarrassed
- lack confidence
- feel uncomfortable or awkward in their body
- see parts of their body, such as their nose, in a distorted way

In some cases, having a negative body image can lead to the development of mental health issues, such as depression. A person may also pursue unnecessary surgery, unsafe weight loss habits such as crash dieting or an inappropriate use of hormones to build muscles. There is a strong link between eating disorders and negative body image, according to the NEDA.

SOCIAL MEDIA'S ROLE IN BODY IMAGE

Nowadays people of every age is very much affected by social media. Many of the messages portrayed in the media connect appearance, thinness and weight loss with health, success and status. These messages are everywhere for example, when people are celebrated or praised for losing weight, foods that are labelled as “good” and “bad”, diet challenges or cleanses that are trending, etc. This focus and false value on appearance can stigmatize people and cause feelings of shame. Social media is full of beauty and health products advertisements, blogs, videos etc.

In reality, everybody has its own naturally healthy weight range, and wellness is possible at any size. It's also OK (and healthy and normal!) for your body and weight to change over time. It's impossible for us to know how healthy or capable someone is based on their body size, even if media messaging tries to convince us otherwise. It's completely understandable to feel more accepting of your body on some days than others. Everybody has value and deserves care but social media influences people in negative way as there are post portrayed useless weightloss products, tablets, powders, gummies etc which ultimately affects negatively.

UNREALISTIC BEAUTY STANDARDS'S ROLE ON BODY IMAGE

In this modern world various media has created unrealistic beauty standards. Many individuals are mentally and physically struggling to keep a healthy mind and body. Men and women often harm themselves by trying all sorts of diets or taking all sorts of pills to look like their favorite influencers and celebrities, unfortunately often times the look of the people they idealized is the result of medical procedures. In fact, more and more influencers and celebrities change the way they look, with the help of medical procedures. For example, the “plump lip” trend appeared years ago advertised by celebrities which resulted in an increase of 759% in botox procedures since the 2000s. We can also notice that the images that are posted every day on social media are idealized and unrealistic resulting from society's unreasonably high expectations.

BODY SIZE & MISCONCEPTIONS

As well as being dissatisfied with their body sizes, exposure to idealized images of thin bodies is associated with overestimation of one's own body size. Recent research suggests

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that this exposure to images of thin bodies may cause a recalibration of the visual perceptual mechanisms that represent body size in the brain, such that the observer sees subsequently-viewed bodies, including their own bodies, as heavier than they really are, a process known as "visual adaptation". There is evidence that individuals who are less satisfied with their bodies may spend a disproportionate amount of time directing their visual attention towards unusually thin bodies, resulting in an even greater overestimation of the size of subsequently-viewed bodies. Further evidence suggests that a similar mechanism may be at play in people (particularly young men) who underestimate their muscularity, such as those suffering from muscle dysmorphia. The nature of the interaction between body size and shape misperception and body dissatisfaction is not yet fully understood, however.

BODY SHAMING & IT'S EFFECTS ON BODY IMAGE

Body shaming is the act of deriding or mocking a person's physical appearance. The scope of body shaming is wide, and can include, although is not limited to fat-shaming, shaming for thinness, height-shaming, shaming of hairiness (or lack thereof), of hair-color, body-shape, one's muscularity (or lack thereof), shaming of looks (facial features), and in its broadest sense may even include shaming of tattoos and piercings or diseases that leave a physical mark such as psoriasis. Sometimes body shaming can extend to a perception that one does not sufficiently display masculinity or femininity. For example, men with wide hips or prominent breasts or lack of facial hair are sometimes shamed for appearing feminine. Similarly, women have been body-shamed for their lack of femininity for appearing to have a man-bulge, or for having broad shoulders, traits that are typically associated with men. Suicide because of the bodyshaming is the fourth leading cause of death in 15–19-year-olds. Extensive levels of body-shaming can have negative emotional effects, including a reduction in self-esteem and other issues such as eating disorders, anxiety, body image disturbance, body dysmorphic disorder and depression. Also, body shaming can lead to serious depression, especially when people feel their body can not meet social criteria. So, we can say that body shaming does affects negatively in matter of body image.

FILMS & FASHION INDUSTRY EFFECTS ON BODY IMAGE

Film and Fashion industry insiders argue that clothes hang better on tall, thin catwalk models, but critics respond that an overemphasis on that body type communicates an unhealthy and unrealistic body image to the public.

Fashion magazines directed at females subtly promote thinness and diet practices, and teenagers heavily rely on them for beauty and fashion advice. Seventeen magazine in particular recorded one of the highest number of articles devoted to appearances; 69% of girls reported that it had influenced their ideal body shapes. 50% of advertisements featured also used beauty appeal to sell products. The U.S. Department of Health and Human Services reported that 90% of teenage girls felt a need to change their appearances, and that 81% of 10-year-olds were already afraid of being fat. According to a survey by the Manchester Metropolitan University, "self-esteem and views of body image suffered after the participants were shown magazine pictures of models, suggested that media portrayal of images can prolong anorexia and bulimia in women and may even be a cause of it. According to a survey in 2014 survey of 13- to 17-year-old Americans found that 90% "felt pressured by fashion and media industries to be skinny", and that 65% believed that the bodies portrayed were too thin. More than 60% habitually compared themselves to models, and 46% strove to resemble models' bodies. So, we can say that films and fashion industries sometimes negatively effects body image.

BODY IMAGE & WOMEN

Society often judges the women by their appearances, including their ages, skin tones, clothes, weight or sizes. Many advertisements promote insecurities in their audiences in order to sell them solutions for example in India fair & lovely face creame, ponds white beauty face creame, etc are used by high number of women in order to fair their complexion, and so may present retouched images, sexual objectification, and explicit messages that promote "unrealistic beauty images" and undermine body image, particularly in female audiences.

Body dissatisfaction creates negative attitudes, a damaging mentality, and negative habits in young women. The emphasis on an ideal female body shape and size is especially psychologically detrimental to young women, who may resort to grooming, dieting, and surgery in order to be happy. A negative body image is very common among young adult women. "The prevalence of eating disorder development among college females is especially high, with rates up to 24% among college students." Body dissatisfaction in girls is associated with increased rate of smoking and a decrease in comfort with sexuality when they're older, which may lead them to consider cosmetic surgery.

Global eating disorder rates such as anorexia and bulimia are gradually rising in adolescent girls. The National Eating Disorders Association, reported that 95% of individuals who suffer from an eating disorder are aged 12 to 26, and anorexia is the third-most-common illness among teenagers. Teenage girls are most prone "to internalize negative messages and obsess about weight loss to obtain a thin appearance".

The pressure on women and girls "to cope with the effects of culturally induced body insecurity" is severe, with many reporting that "their lives would be better if they were not judged by their looks and body shape, as this is leading to low self-esteem, eating disorders, mental health problems and depression."

"Cultural messages about beauty i.e. what it is, how it should be cultivated, and how it will be rewarded) are often implicitly conveyed through media representations of women."

Women who compare themselves to images in the media believe they are more overweight than they actually are. One reason for this is because "idealised media images are routinely subjected to computer manipulation techniques, such as airbrushing (e.g. slimming thighs and increasing muscle tone). The resulting images present an unobtainable 'aesthetic perfection' that has no basis in biological reality."

According to a study by Heidi Posavac, Steven Posavac, and Emil Posavac stated that young women who are already content with their bodies are generally unaffected by media images of models and other attractive women". They concluded that only those who are dissatisfied with their bodies prior to viewing advertisements will then feel poorly after seeing advertisements featuring thin, attractive women.

According to a study by study by Myers and Biocca found that some young women actually feel thinner after viewing advertisements featuring thin, idealized women.

EATING DISORDERS

Eating disorder is a cluster of situations that can be defined as abnormal eating behavior which can involve excessive or insufficient food intake. As per DSM-IV eating disorders are

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a rigorous disturbance in eating habits. Eating disorders predominantly affect females but also affect males. Incidence of eating disorders is increasing in the whole world and westernization is directly proportional to incidence of eating disorders. Ability to understand the central process of appetite has become better since leptin was discovered. Eating disorders are a range of psychological conditions that cause unhealthy eating habits to develop. They might start with an obsession with food, body weight, or body shape. In severe cases, eating disorders can cause serious health consequences and may even result in death if left untreated. In another words eating disorder is a compulsion in which the main problem is a person eats in a way which disturbs their physical health. The eating may be too excessive compulsive over-eating, too limited (restricting), may include normal eating punctuated with episodes of purging, may include cycles of bingeing and purging, or may encompass the ingesting of non-foods. Those with eating disorders can have a variety of symptoms. However, most include the severe restriction of food, food binges, or purging behaviors like vomiting or over-exercising. The causes of eating disorders are not clear, although both biological and environmental factors appear to play a role. Cultural idealization of thinness is believed to contribute to some eating disorders. Individuals who have experienced sexual abuse are also more likely to develop eating disorders. Some disorders such as pica and rumination disorder occur more often in people with intellectual disabilities. Estimates of the prevalence of eating disorders vary widely, reflecting differences in gender, age, and culture as well as methods used for diagnosis and measurement. In the developed world, anorexia affects about 0.4% and bulimia affects about 1.3% of young women in a given year.

Binge eating disorder affects about 1.6% of women and 0.8% of men in a given year. According to one analysis, the percent of women who will have anorexia at some point in their lives may be up to 4%, or up to 2% for bulimia and binge eating disorders. Rates of eating disorders appear to be lower in less developed countries. Anorexia and bulimia occur nearly ten times more often in females than males. The typical onset of eating disorders in late childhood to early adulthood. Rates of other eating disorders are not clear.

Types of Eating Disorders:

Following are the major types of eating disorders

AN (Anorexia Nervosa): It is the most well known eating disorder. It generally develops during adolescence and tend to affect people very much. The definition of anorexia nervosa is ‘lack of appetite induced by nervousness’. In this disorder patients live in fear of gaining weight. It causes hypothalamic amenorrhea. A very few patients can have anorexia unconsciously then this is known as ‘atypical eating disorder’. There are many harmful effects over the body like bone loss, skin integrity loss, stress to heart and also causes chances of myocardial infarction too. People with anorexia generally view themselves as overweight, even if they’re dangerously underweight. They tend to constantly monitor their weight, avoid eating certain types of foods, and severely restrict their calories. There are two subtypes of AN: the restricting type, and the binge-eating/purging type. The restricting type describes presentations in which weight loss is attained through dieting, fasting, and/or excessive exercise, with an absence of binge/purge behaviors. The binge-eating/purging type describes presentations in which the individual suffering has engaged in recurrent episodes of binge-eating and purging behavior, such as self-induced vomiting, misuse of laxatives, and diuretics. The severity of AN is determined by BMI, with BMIs below 15 noted as the most extreme cases of the disorder. Pubertal and post-pubertal females with anorexia often experience amenorrhea, or the loss of menstrual periods, due to the extreme weight loss these individuals face. Although amenorrhea was a required criterion for a diagnosis of

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anorexia in the DSM-IV, it was dropped in the DSM-5 due to its exclusive nature, as male, post-menopausal women, or individuals who do not menstruate for other reasons would fail to meet this criterion. Females with bulimia may also experience amenorrhea, although the cause is not clear.

Types of Anorexia nervosa are as follows

Restricting eating disorder: In this type the patient restricts the quantity of food which is eaten and also restricts the calorie intake. Avoiding food behavior is also present in the patient in the presence of other people. At the time of eating patients eat food extremely slowly and cut food in very small pieces and also throw food without the knowledge of others. People with ARFID have an inability to eat certain foods. "Safe" foods may be limited to certain food types and even specific brands. In some cases, individuals with the condition will exclude whole food groups, such as fruit or vegetables. Sometimes excluded foods can be refused based on color. Some may only like very hot or very cold foods, very crunchy or hard-to-chew foods, or very soft foods, or avoid sauces. Most people with ARFID will still maintain a healthy or typical body weight. There are no specific outward appearances associated with ARFID. Sufferers can experience physical gastrointestinal reactions to adverse foods such as retching, vomiting or gagging. Some studies have identified symptoms of social avoidance due to their eating habits. Most people with ARFID would change their eating habits if they could.

Binge eating disorder (BED): In this type the patient eats food in large amounts as compared to a normal person in a normal situation. Sometimes efforts to purge are also found in these patients. This is more common than anorexia or bulimia. This type is not restricted to any category or any age group. These binges are also associated with feelings of guilt and depression. They feel guilty for binge eating and beat themselves up for lack of self-control. These types of patients also have high weight and become obese too. Symptoms include eating much faster than normal, eating until feeling uncomfortably full, eating a large amount when not hungry. It involves various complications like Obesity, tooth decay, diabetes, non-alcoholic fatty liver disease, acid reflux, heartburn, amenorrhea, disruptions in sleep. It also involves risk factors like Low self-esteem, family history of eating disorders, childhood abuse or trauma, anxiety, depression, drug and alcohol use. Binge eating is one of the most prevalent eating disorders among adults, though there tends to be less media coverage and research about the disorder in comparison to anorexia nervosa and bulimia nervosa. Binge eating disorder commonly develops as a result or side effect of depression, as it is common for people to turn to comfort foods when they are feeling down.

Common symptoms of anorexia nervosa include followings:

- being considerably underweight compared with people of similar age and height
- very restricted eating patterns
- an intense fear of gaining weight or persistent behaviors to avoid gaining weight, despite being underweight
- a relentless pursuit of thinness and unwillingness to maintain a healthy weight
- a heavy influence of body weight or perceived body shape on self-esteem
- a distorted body image, including denial of being seriously underweight

BN (Bulimia Nervosa): Patients suffering from this type of eating disorder have recurrent eating food habits in large amounts (binge eating) and also leads to compensatory behavior like purging. Methods used for purging are vomiting (self-induced), laxative overuse, and

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exercise in excess. Meaning of bulimia is derived from Greek 'Bulus' (ox), limos "hunger". People with bulimia frequently eat unusually large amounts of food in a specific period of time. Each binge eating episode usually continues until the person becomes painfully full. During a binge, the person usually feels that they cannot stop eating or control how much they are eating. Binges can happen with any type of food but most commonly occur with foods the individual would normally avoid. Individuals with bulimia then attempt to purge to compensate for the calories consumed and relieve gut discomfort. Common purging behaviors include forced vomiting, fasting, laxatives, diuretics, enemas, and excessive exercise. Symptoms may appear very similar to those of the binge eating or purging subtypes of anorexia nervosa. However, individuals with bulimia usually maintain a relatively normal weight, rather than becoming underweight.

Eating disorders not otherwise specified (EDNOS): This is a type of eating disorder which do not meet DSM- IV criteria for any type of eating disorder. These are the types in which eating disturbances that cause marked distress and impairment in important areas of functioning but that do not meet the full criteria for any of the other diagnoses. The specific reason the presentation does not meet criteria for a specified disorder is not given. For example, an USFED diagnosis may be given when there is insufficient information to make a more specific diagnosis, such as in an emergency room setting.

Compulsive overeating (COE): In this type of eating disorder the patient does not have binge eating episodes but has recurrent purging in the fear of gaining weight. Patient eats a large amount of food when he is feeling out of control and unable to restrict himself. occurs when an organism consumes more calories in relation to the energy that is expended via physical activity or expelled via excretion, leading to weight gain and often obesity. Overeating is the defining characteristic of binge eating disorder. This term may also be used to refer to specific episodes of over-consumption. For example, many people overeat during festivals or while on holiday.

Drunkorexia: This term is recently discovered and represents the relationship between alcohol consumption and physical activity, which is commonly characterized by purposely restricting food intake in order to reserve food calories for alcoholic calories, exercising excessively in order to burn calories from drinking, and over-drinking alcohol in order to purge previously consumed food.

Pica: It is a compulsive craving to eat non nutritious food like chalk, paint, plaster, soda, chips etc. These patients are unable to differentiate between nutritious and non-nutritious food. Individuals with pica crave non-food substances, such as ice, dirt, soil, chalk, soap, paper, hair, cloth, wool, pebbles, laundry detergent, or cornstarch .

Pica can occur in adults, as well as children and adolescents. That said, this disorder is most frequently observed in children, pregnant women, and individuals with mental disabilities (12Trusted Source). Individuals with pica may be at an increased risk of poisoning, infections, gut injuries, and nutritional deficiencies. Depending on the substances ingested, pica may be fatal. However, to be considered pica, the eating of non-food substances must not be a normal part of someone's culture or religion. In addition, it must not be considered a socially acceptable practice by a person's peers or society.

PERSONALITY TRAITS & EATING DISORDER

There are various childhood personality traits associated with the development of eating disorders. During adolescence these traits may become intensified due to a variety of physiological and cultural influences such as the hormonal changes associated with puberty, stress related to the approaching demands of maturity and socio-cultural influences and perceived expectations, especially in areas that concern body image. Eating disorders have been associated with a fragile sense of self and with disordered mentalization. Many personality traits have a genetic component and are highly heritable. Maladaptive levels of certain traits may be acquired as a result of anoxic or traumatic brain injury, neurodegenerative diseases such as Parkinson's disease, neurotoxicity such as lead exposure, bacterial infection such as Lyme disease or parasitic infection such as *Toxoplasma gondii* as well as hormonal influences. While studies are still continuing via the use of various imaging techniques such as fMRI, these traits have been shown to originate in various regions of the brain such as the amygdala and the prefrontal cortex. Disorders in the prefrontal cortex and the executive functioning system have been shown to affect eating behavior.

TEENAGERS & EATING DISORDER:

Teenagers can be especially susceptible to eating disorders because of hormonal changes during puberty and social pressure to look attractive or thin. These changes are normal, and your teenager may only practice unhealthy eating habits every once in a while. The common symptom of eating disorder in case of teenager begins when they become to obsess over their weight, appearance, or diet, or starts consistently eating too much or too little, they may be developing an eating disorder. Abnormal weight loss or weight gain may also be a sign of an eating disorder, especially if teenager frequently makes negative comments about their body or perceived size.

PEER PRESSURE & EATING DISORDER

According to a study by Eleanor Mackey and co-author, Annette M. La Greca of the University of Miami, studied 236 teen girls from public high schools in southeast Florida and found that "Teen girls' concerns about their own weight, about how they appear to others and their perceptions that their peers want them to be thin are significantly related to weight-control behavior", says psychologist Eleanor Mackey of the Children's National Medical Center in Washington and lead author of the study. "Those are really important."

According to one another study, 40% of 9- and 10-year-old girls are already trying to lose weight. Such dieting is reported to be influenced by peer behavior, with many of those individuals on a diet reporting that their friends also were dieting. The number of friends dieting and the number of friends who pressured them to diet also played a significant role in their own choices.

RISK DUE TO EATING DISORDER

Eating disorders result in about 7,000 deaths a year as of 2010, making them the mental illnesses with the highest mortality rate. Anorexia has a risk of death that is increased about 5 fold with 20% of these deaths as a result of suicide. Rates of death in bulimia and other disorders are similar at about a 2 fold increase. The mortality rate for those with anorexia is 5.4 per 1000 individuals per year. Roughly 1.3 deaths were due to suicide. A person who is or had been in an inpatient setting had a rate of 4.6 deaths per 1000. Of individuals with bulimia about 2 persons per 1000 persons die per year and among those with EDNOS about 3.3 per 1000 people die per year.

REVIEW OF LITERATURE

The present chapter provides a brief review of literature related to the main variables under investigation. It also gives us an idea about the ongoing research in the present area. The following studies provide us with the knowledge of the general conceptualization and specific challenges which can be expected in the ongoing research, and also helps the investigator to understand the problem from different dimensions.

According to a study by Gupta and Gupta (2020) stated that the body image pathology in eating disorders, which classically manifests as dissatisfaction with shape of body and having an abnormal body weight which can generalize to other aspects of body image including cutaneous body image. As eating-disordered patients typically tend to minimize or deny their condition, a distorted cutaneous body image may be the only telling sign of an underlying eating disorder. A significantly higher frequency of Cutaneous Body Image dissatisfaction has been observed among eating disordered patients (79–81%) versus nonclinical community-based controls (52– 56%), respectively. A higher amount of Cutaneous Body Image dissatisfaction is observed with higher scores on ratings of eating disorder-related psychopathology. Patients with a distorted Cutaneous Body Image may seek treatment for minimal or even nonexistent dermatologic disease, tend to have unrealistic expectations of what treatment has to offer, and often are at higher risk for suicide. If the underlying eating disorder and body image pathology are not addressed, such patients may end up receiving excessive or unnecessary treatments for their dermatologic complaints.

According to a study by Cash, T. F. (2019) stated that a hallmark of cognitive behavioral perspectives is the strong reliance on psychological science to test the validity of the hypotheses and applications that are theoretically derived. This article conveys key concepts and processes inherent in integrated cognitive behavioral conceptions of body image. This perspective elucidates the multidimensionality of the body image construct, namely that body image is not a singular phenomenon, rather it refers to a number of interrelated variables.

According to a study by Hosseini SA and Padhy RK (2019) stated that Body image is the subjective picture of individuals of their own body, irrespective of how their body actually looks. Body image is a complex construct comprising thoughts, feelings, evaluations, and behaviors related to one's body. Body image misperception is common in the general population and is also a core component of several serious diseases, including body dysmorphic disorder, anorexia nervosa, and bulimia nervosa. Distortions in body image are unpleasant and can have tragic results. Poor body image can affect physical and psychological health and can influence self-esteem, mood, competence, social functioning, and occupational functioning.

According to a study by Dabbaghian, Mago, Fritz and Alimadad (2012) investigated obesity in teenagers and children. They found out that obesity is a global concern for both developed and developing countries. The pervasiveness is mainly disturbing in developed countries, like the United States of America, where around “one in three school-aged adolescents (ages 12-19) is overweight or obese”. Reviews found that an increase in weight in teenagers is associated with ‘energy imbalance’ worsened by unsuitable aspects related to school food, such as the presence of unhealthy food options. A well-known association exists among the food environment, at present, there is a need for research to find the effect of the social environment and related communications of school going teenagers. A quantitative approach is used in this paper to discover how social interactions between high school going teenagers

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have an effect on eating behavior and choice of food. It is found that students will modify their eating attitude and behavior from bad to healthy as an outcome of affirmative social and ecological influences. There is also one characteristic feature that has been noticed: teenagers with identical eating behaviors are predisposed to make groups, represented by well defined clusters. Change of unhealthy and healthy consumption behavior is non-linear, with a clear critical point where the opposite influences are balanced. The social setup of people is essential to grasping the eating attitudes and obesity in adolescents and even in the population at large. Including contextual and personal determinants observed in actual datasets in our representation will to a great extent improve calibration of potential models.

Wilfley, Vannucci and White (2010) reported that obesity and other disturbed eating behavior patterns are common and are linked with injurious bodily, mental, and societal implications. A steep rise in childhood obesity has formed a huge need for clinical psychologists and mental health workers to help adolescents in the management of eating patterns and weight related issues. It is necessary for all health care providers to be aware about consequences and causes of eating disorders and weight issues. They may use intervention approaches based on evidence and facts. Family based behavioral treatments based on social and ecological factors have been found to be most effective in weight loss treatment. To treat a wide variety of 'eating disorders' and problems associated with weight and body image, patients at first go to medical settings in the healthcare system. Mental healthcare professionals in medical settings can easily assess different kinds of eating disorders and body shape and weight related problems in people. After assessment they can provide an appropriate evidence related intervention approach. Moving ahead, intervention providers and researchers must work with each other to find answers to questions related to different kinds of eating disorders and problems related to shape or weight in the youth. This will help in achieving major milestones in the prevention and treatment of these problems in this population.

According to a study by Ruth H. Striegel-Moore PhD, Francine Rosselli PhD, Nancy Perrin PhD, Lynn DeBar PhD, G. Terence Wilson PhD, Alexis May MA, Helena C. Kraemer PhD (2009) stated that among the 3,714 women and 1,808 men who responded, men were more likely to report overeating, whereas women were more likely to endorse loss of control while eating. Although statistically significant gender differences were observed, with women significantly more likely than men to report body checking and avoidance, binge eating, fasting, and vomiting, effect sizes "Number Needed to Treat" were small to moderate.

According to a study by Tylka T.L (2010) stated that Body image is a multidimensional construct with positive and negative features. Yet, theory, research, and practice have focused on understanding, preventing, and healing its negative features. In the first edition of this handbook. Cash and Pruzinsky recognized this lopsided approach, labeling it "pathology-driven." They called for a paradigm shift to examine the experience of positive body image and identify factors that promote and emerge from it. Ten years later, there are a handful of published studies on positive body image. This chapter synthesizes these findings and discusses how positive body image can be assessed and promoted—all in hope of encouraging additional research in this area. This research is imperative, as understanding positive body image is crucial for prevention and treatment efforts. Without this knowledge, current interventions designed to reduce negative body image may result in neutral body image. Practitioners need to take treatment even further—to help people appreciate, respect, celebrate, and honor their body.

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Benninghoven, Raykowski, Solzbacher and Jantschek (2007) observed that distorted physical shape and body image is a key attribute of people having 'eating disorders'. Attitudinal, perceptual and cognitive biases play a major role in the growth of "eating disorders." Concept of body image has mainly 2 different mechanisms: one is an "attitudinal component" and other is "perceptual component." However, these two mechanisms have to be considered together in clinical settings and in research. Body image concept includes globally accepted subjective, cognitive, emotional and behavioral dimensions in it. Mostly psychological tests and questionnaires are developed to measure attitudes regarding body image. Distortion in perception of body image is studied by evaluating differences between ideal, perceived and actual body image. However, many different methods are available to measure this difference between body image contexts. Calculation of body image shows discrepancies due to methods of body image measurement, which is based on adequate anthropometric indices. On the other hand, traditional methods of body image measurement use "body calipers" for assessing width of body at specific bodily parts to differentiate sizes with the person's perceived body image. Similar method is used while the person is told to judge his/her own ideal and perceived body images on videos through monitor screens. Researchers can compare findings with real imagery taken with the help of videos and digital photographs. The methods, which are used in this comparison basically, have one dimension. At present, more sophisticated multidimensional comparison methods of body image have been developed. There is a requirement of more comprehensive "anthropometric techniques" like a measurement of physical composition to detect types of muscularity and obesity evaluation in the body. Skin fold thickness analysis and bio impedance analysis has shown consistent results in this regard.

Berkman, Lohr and Bulik (2007) examined confirmation on factors related with conclusion among people having bulimia nervosa (BN), anorexia nervosa (AN) and binge eating disorder (BED). Outcomes were found to change according to sociological and demographic changes. At follow-up, people with Anorexia Nervosa were more likely than comparison to be dejected, have autism spectrum disorder and Asperser's syndrome and experience anxiety disorders including obsessive compulsive disorder. The death risk was significantly higher than predicted in the population and there was a high risk of suicide. Only consistent factors across various research concerning poorer Bulimia Nervosa outcomes were related to depression. A huge chunk of the population continues to endure eating disorders over a prolonged period of time but Bulimia Nervosa was not linked with improved mortality risk. Data was inadequate to draw conclusions concerning factors related to Binge Eating Disorder outcomes. No data was found to evaluate results based upon sociological and demographic characteristics in various disorders. Outcome showed that the effectiveness of the body of literature was reasonable for factors related to "Anorexia Nervosa" and "Bulimia Nervosa" outcome, whereas, fragile for "Binge Eating Disorders".

Good looks, "body image" and body mass considerations for females in the teenage years is explored. Males are also found to be conscious about body image and attractiveness in adolescence. Anderson-Fye and Eileen (2004) explored "beauty to be an important female characteristic, though it can take many forms."

According to a study published by Geoffrey H. Cohane, Harrison G. Pope Jr. (2005) Stated that boys generally displayed less overall body concern than girls, many boys of all ages reported dissatisfaction with their bodies, often associated with reduced self-esteem. Whereas girls typically wanted to be thinner, boys frequently wanted to be bigger. However,

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most studies failed to distinguish between “bigness” due to increased muscle and that due to fat.

According to a study by Ruth H. Striegel-Moore, Debra L. Franko (2003), stated that similar to the early studies of bulimia nervosa (BN), the first generation of epidemiologic studies of BED is limited in scope or methodology. They focus on prevalence rates and provide only basic demographic characteristics and often use less than optimal sampling or assessment methods.

According to a study by Striegel-Moore, Ruth H., Bulik, Cynthia M. Stated that sociocultural risk factors and biological factors have progressed on parallel tracks and propose that major advances in understanding the etiology of eating disorders require a new generation of studies that integrate these domains. They discuss how more sophisticated and novel conceptualizations of risk and causal processes may inform both nosology and intervention efforts.

According to International journal of obesity (2001) stated that in community samples, the prevalence of BED has been found to be 2–5%, in individuals who seek weight control treatment the prevalence is 30%. BED is more equal in gender ratio than bulimia nervosa. Eating disorder treatments such as cognitive behavior therapy (CBT) or interpersonal psychotherapy (IPT) improve binge eating with abstinence rates of about 50%. Antidepressants are also effective in reducing binge eating, though less so than psychotherapy. Standard weight loss treatments including bariatric surgery do not seem to exacerbate binge eating problems. Thus, both eating disorder and obesity treatments seem to be beneficial in BED.

According to a study by Askevold F. (1975) stated that number of female patients with different somatic complaints were investigated in his study. A specific patterning of body image related to the localization of somatic complaints is revealed. Anorexic and obese patients have an overall larger body image while the distortions in other conditions mostly go on the elevation in the vertical axis.

According to a study by Thomas F Cash (1994) stated that among 279 college women. Results support a distinction between evaluative or affective and cognitive-behavioral investment components. Multiple regression analysis further indicated that the optimal prediction of negative body-image affect requires both evaluative and investment aspects of body image.

According to a study by Alan Feingold, Ronald Mazzella (1998) stated that 222 studies of past 50 years stated that analysis shows dramatic increases in the numbers of women among individuals who have poor body image. Moreover, these trends were found across multiple conceptualizations of body image, including self-judgments of physical attractiveness.

According to an article published by American Psychiatric Association, (2000) stated that individuals who are suffering from various kinds of eating disorders have possibilities of having more awareness about their physique and appearance. Their consciousness seems to mainly be about body shape and weight of body.

According to a study by Olivardia, R., Pope, H. G., Mangweth, B., & Hudson, J. I. (1995) briefly assessed the characteristics of 25 men with eating disorders compared to 25 normal

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men and 33 women with bulimia nervosa. Ss completed the Diagnostic Survey for Eating Disorders– Revised, Structured Clinical Interview for DSM-III-R, Eating Attitudes Test, and Eating Disorder Inventory. Men with eating disorders closely resembled the women with eating disorders but differed sharply from the comparison men in phenomenology of illness, rates of comorbid psychiatric disorders and dissatisfaction with body image. Homosexuality did not appear to be a common feature of men with eating disorders. Childhood physical and sexual abuse appeared slightly more common among the eating-disordered men than among the comparison men.

According to a study by Wertheim, E. H., & Paxton, S. J. (2011) stated that, Adolescence is an important time in an individual's life as it signals a transition from childhood to adulthood. For adolescent girls, a range of body and social changes take place during and following puberty that can strongly influence their body image.

According to a study by Levine, M. P., & Chapman, K. (2011) stated that Institution of a market- based mass media in two vastly different cultures, Fiji and the Ukraine, preceded increases in internalization of the slender beauty ideal and in body dissatisfaction among adolescent girls. This correlation supports several well-established sociocultural models that link media, as well as parent and peer, influences to negative body image and disordered eating behavior. Exposure of mass media contributes to negative body image.

According to a study by Cafri, G., Yamamiya, Y., Brannick, M., & Thompson, J. K. (2005) stated that Various factors have been implicated in the development of body image dissatisfaction. Especially important are three constructs: awareness of a thin ideal, internalization of a thin ideal, and perceived pressures to be thin. Using meta-analysis, we calculated the strength of the relationships between each of these constructs and body image, and we evaluated the differences in magnitude across the average effect sizes. We also tested the moderating effects of age and ethnicity, and we compared the average effect sizes with those from meta-analyses of prospective and experimental studies in order to determine whether the effect sizes differed by study design. The results indicated the following: all three sociocultural factors had statistically significant relationships with body image; internalization and perceived pressures have a significantly stronger relationship to body image than does awareness; the effect sizes from cross-sectional studies were significantly larger than those of both longitudinal and experimental studies; and neither age nor ethnicity was a statistically significant moderator of the relationship between awareness and body image or that between internalization and body image.

According to the study by Timothy A. Brown Thomas F. Cash & Peter J. Mikulka (2011) stated that using Body-Self Relations Questionnaire (BSRQ), an attitudinal body-image instrument. Random stratified samples, drawn from a national survey, included 1,064 females and 988 males. In order to evaluate the replicability of the BSRQ factor structure, separate split-sample factor analyses (principal components with varimax rotation) were conducted for each sex. Largely consistent with the conceptual basis of the BSRQ, the resultant factors derived from each analysis were: Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Health Evaluation, Health Orientation, and Illness Orientation. Subsequent concordance analyses revealed marked stability of the factor structure both within and between sexes. Females demonstrated somewhat greater differentiation of body-image attitudes than did males.

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According to a study by Duane A Hargreaves, Marika Tiggmann (2006), on the topic 'Body Image is for Girls': A Qualitative Study of Boys' Body Image stated that participants (aged 14 to 16 years) said that they are satisfied with their appearance, but some conceded their physical appearance to be more important than they like to admit. Boys do not believe that the mass media influences their body image and said they do not talk about body image because it is a feminine or gay issue.

According to a book by Jillian Croll stated that 50-88% of adolescent girls feel negatively about their body shape or size, 49% of teenage girls say they know someone with an eating disorder, Only 33% of girls say they are at the "right weight for their body", while 58% want to lose weight. Just 9% want to gain weight, Strikingly, while only 30% of older adolescents surveyed consider their current size acceptable to them, 85% of females and 95% of males considered their current size socially acceptable for others, Over one-third of males think their current size is too small, while only 10% of women consider their size too small and further described in his book that Going through puberty can amplify body image concerns. Puberty for boys brings characteristics typically admired by society— height, speed, broadness, and strength. Puberty for girls brings with it characteristics often perceived as less laudable, as girls generally get rounder and have increased body fat. These changes can serve to further enhance dissatisfaction among girls.⁷ Going through puberty later or earlier than peers can have an impact on body image as well as psychological health. Generally, early development for girls and late development for boys present the greatest challenges to healthy body image.

According to a study by Hans-Christoph Steinhausen MD, Dipl. Psych., PhD (2009) stated that in north America Both Anorexia Nervosa (AN) and Bulimia Nervosa (BN) are marked by a serious course and outcome in many of the afflicted individuals. In AN, there are an almost 18- fold increase in mortality including a high suicide rate, chronic courses in approximately 20 per cent of the cases, and more than half of the patients showing either a complete or a partial eating disorder in combination with another psychiatric disorder or another psychiatric disorder without an eating disorder. Mitigating factors of the outcome include onset of the disorder during adolescence and longer duration of follow-up. Vomiting, bulimia and purgative abuse, chronicity, and obsessive-compulsive features represent unfavourable prognostic factors in various studies. The longer-term outcome of BN is only slightly better result as compared to AN; however, the rate of mortality is low. Diagnostic crossover from bulimia nervosa to other eating disorders is a rather rare phenomenon, whereas the high rates of partial eating disorders may explain a large proportion of chronic courses. Social adjustment and the quality of personal relationship normalize in the majority of the affected patients. At present, the study of prognostic factors in bulimia nervosa does not allow any definite conclusions.

According to a study by Hans Wijbrand Hoek, Daphne van Hoeken (2003) stated that An average prevalence rate for anorexia nervosa of 0.3% was found for young females. The prevalence rates for bulimia nervosa were 1% and 0.1% for young women and young men, respectively. The estimated prevalence of binge eating disorder is at least 1%. The incidence of anorexia nervosa is 8 cases per 100,000 population per year and the incidence of bulimia nervosa is 12 cases per 100,000 population per year. The incidence of anorexia nervosa increased over the past century, until the 1970s.

According to a study by Devra L. Braun, Suzanne R. Sunday, Amy Huang, Katherine A. Halmi stated that Males were significantly more likely than females to have a later onset of

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their eating disorder (20.56 vs. 17.15 years), and to be involved in an occupation or sport in which weight control influences performance. There were no significant gender differences in other characteristics or comorbid diagnoses. Males constituted an increasing percentage of total admissions between 1984 and 1997 ($r = .692, p = .009$).

According to a study by Wendy Spettigue, M.D., F.R.C.P.C. and Katherine A. Henderson, Ph.D. (2004) stated that the role of the media in providing a social context for the development of eating disorders, the role of the media in the etiology of eating disorder pathology, the ways in which the media is used by patients suffering from eating disorders, and the role that awareness of the media can have in the treatment and prevention of eating disorders. And final conclusion states that the media does contribute to the development of eating disorders.

According to a study by Merry N. Miller and Andrés J. Pumariega (2005) stated that, Cultural beliefs and attitudes have been identified as significant contributing factors in the development of eating disorders. Rates of these disorders appear to vary among different racial/ethnic and national groups, and they also change across time as cultures evolve. Eating disorders are, in fact, more prevalent within various cultural groups than previously recognized, both within American ethnic minorities and those in other countries. This review examines evidence for the role of culture as an etiological factor for the development of eating disorders. Historical and cross-cultural experiences suggest that cultural change itself may be associated with increased vulnerability to eating disorders, especially when values about physical aesthetics are involved. Such change may occur across time within a given society, or on an individual level, as when an immigrant moves into a new culture. Further research into the cultural factors that promote the development of eating disorders is much needed. Understanding how cultural forces contribute to the development of disorders is needed so that preventive interventions can be created.

According to an article by American academy of paediatrics stated that Primary prevention combined with early recognition and treatment helps decrease morbidity and mortality in adolescents with eating disorders.

According to a study by Françoise Ringer, Patricia McKinsey Crittenden stated that the results their study indicated that all women with an eating disorder were anxiously attached. About half used an extreme coercive Type C strategy while most of the others combined coercion with an extreme dismissing Type A strategy. The content of the AAIs suggested lack of resolution of trauma or loss among the mothers and also of hidden family conflict between the parents. This in turn elicited extreme strategies for generating parent-child contingency from the daughters. The participants were 62 young women with an eating disorder (19 with anorexia nervosa, 26 with bulimia nervosa and 17 with bulimic anorexia). Attachment was assessed using the Adult attachment interview (AAI), classified using Crittenden's Dynamic-Maturational Method.

According to a study by Barbara Pendleton Jones, Connie C. Duncan, Pim Brouwers & Allan F. Mirsky (2008) stated that cognitive functions were investigated in four groups of women: 30 underweight anorexics, 38 normal-weight bulimics, 20 long-term weight-restored anorexics, and 39 normal controls. A manova was used to examine performance on five neuropsychological domains derived from prior principal components analyses of a comprehensive neuropsychological battery. Underweight anorexics performed more poorly than normal controls in four of five neuropsychological domains (focusing/execution,

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verbal, memory, and visuospatial), while normal-weight bulimics showed poorer performances only in focusing/execution. The absolute differences in scores between eating disorder groups and normal controls were for the most part small, suggesting subtle rather than frank cognitive difficulties. Poorer neuropsychological test performance was associated with anxiety but not depression as measured by the Tryon, Stein, and Chu Tension scale and scale 2 of the MMPI respectively. The findings support previous reports of attentional difficulties in eating disorders but do not support the hypothesis of differential right-hemisphere dysfunction in eating disorders.

Eating disorders have been associated with developing nations going through fast social changes, including participation in global economy and heavy media exposure. San Andreas, Belize, a community with many risk factors having cross cultural influences has shown commendable resistance to documented patterns.

Beauty pageants for girls and women are ubiquitous, and have only recently been superseded by schooling in providing instrumental access to upward mobility for young women. Girls from a wide variety of socio-economic, cultural and regional backgrounds take part and win in beauty pageants, which further strengthens the notion that beauty is pluralistic. Body shape is found to be a very important aspect among an adolescent female's "body image", according to public appraisal towards attractiveness. It is also studied how young women go through global cultural changes with respect to body ideals and practices. The defensive 'ethno psychology', epitomised by the phrase, "Never Leave Yourself," is found to mediate global messages regarding the girl's body, thus creating a special and rare case where young women seem to be content with their bodies, in spite of socio-cultural changes connected with body image and eating distress elsewhere. This data indicates an interactive process where young women interpret and select global messages of beauty and bodies that go hand-in-hand with a strong regional ethno- psychology.

Rational/Significance of the Present Study

There have many research of eating disorders and body images on individuals outside India. But very few studies have been done in India regarding this matter. This study will be conducted among 20 to 25 age group people to assess the level of eating disorder and self-body image related to it in delhi India. This study will create a better understanding of eating disorder effects on life and stress. As stress and life satisfaction are Important facet of our lives. They both have physiological and psychological effects on everyone.

Body image is the feeling about body self-image, body perception, and body control of a person. It is the opinion that an individual has about his/her own physical appearance and the judgment or way of thinking that results from that observation. The attitude may be positive, negative or both based on the person and the environment. The positive image of the body can be seen when an individual values and has admiration about one's own body. For prevention of eating disorders and to enhance wellbeing and health consciousness, it is important that the person has positive body image.

The perception of a person with a negative body image is distorted. A person having negative body image has a higher probability of developing eating disorders. They are also likely to go through thoughts of hopelessness, loneliness, low confidence, poor health consciousness and poor wellbeing. Although body image is commonly formed in 'late childhood' and 'adolescence' however body dissatisfaction may have consequences on persons of various age groups. It is common in adolescents and youngsters and in women. It

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is also found that teenage girls have a higher chance to feel body dissatisfaction than teenage boys. Adolescents and young adults are more prone to eating disorders and poor body image which can lead to low health consciousness and poor wellbeing in them.

Thus; the present study is an aim to understand the examination and comparison between body image and eating disorders across 20 to 25 years male and females.

The main reason is to find out the comparative results across concerned age group and gender, so that the researcher can measure the difference of having poor body image and eating disorders between male and females. These types of studies can be really helpful in treating individual suffering from eating disorders and negative body image problems.

Problem of the Statement: Following is the problem of statement for present study
“BODY IMAGE AND EATING DISORDERS ACROSS GENDER IN THE AGE GROUP OF 20-25 YEARS”

METHODOLOGY

Methodology is the backbone of any research endeavour. It is the blueprint used by the researcher to examine and explore the variables of interest. It plays a leading role in carrying out the research study systematically and objectively.

Methodology refers to systematic research and planning. Scientific investigation involves careful and proper adaptation of research design, use of standardized tools and tests, sampling techniques, sound procedures for collecting data, its careful study and tabulation and then, finally application of appropriate statistical tests. These steps basically enhance the predictive value of findings; thus, the findings may be generalized to predict the behaviour of the population from which the sample has been drawn. Following methodology is used for present study.

Objectives

Following are the main objectives of the present research study

- To study and compare body image of the respondents across gender in Delhi.
- To study and compare eating disorders of the respondents across gender in Delhi.
- To better understand eating disorders and its effects on various aged people.
- To know if there is any correlation between eating disorder and negative body image.

Hypothesis

A hypothesis is a tentative and testable statement which needs to be study. It is basically a prediction about possible outcomes of the result of a study. It predicts the relationships between two or more variables. Based on the objectives of the research, the following hypotheses have been formulated

- There would be no significant difference among body image of the respondents across gender.
- There would be no significant difference among eating disorders of the respondents across gender.

Sample

Sample is the small portion of population. It is not possible to conduct study for entire population. The nature of population was 20 to 25 years aged group people in India, delhi.

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As it is difficult to study entire population, The total sample size was 60 Respectively with equal representation of concerned groups. Age of samples was only limited to 20 to 25 years for this study, years and not more than 25 years and below 20 years. Due to limited time and scope of the study samples were selected according to convenience of samples and researcher.

60 participants were given the two questionnaires and asked to complete it within time with assured privacy.

SCORING – Scoring was done on standard scoring norms of these tools. Every sample's test took atleast 40 minutes. Total scores of each test was considered as final scores of inventories.

VARIABLES –

In research science, variable refers to factors or conditions that can change during the course of experiment. In researcher attempt to change only one of these variables at a time so that their is no confusion about what needs to be changed. Variables can be two or more. Variables are generally used in psychology experiments to determine if changes to one thing result in changes to another. Variables plays a significant role in the process of research in psychology. Variables can be further classified into dependent, independent, and controlled. Following are the variables of this study. Variables under study in this research are as follows

- Dependent Variable – Body Image, Eating Disorder
- Independent Variable – Gender, Age

Operational Definitions:

- **Body Image:** The body image is the mental representation of one's body in both static and action aspects. It contains both cognitive and affective elements, such as how the body is perceived and known, and how the body is experienced and felt.
- As far as this research study is concerned, Body Self Image Questionnaire scale will be used which was developed by David A. Rowe, Jeri Benson and Ted A. Baumgartner in 1999. It was developed to assess the self-body image of a person in many concerns. There are thirty-nine items in the test which measure nine dimensions related to the self- body image of a person. These nine dimensions are: Overall Evaluation (OAE), Fat Evaluation (FE), Attention to Grooming (AG), Health/Fitness Evaluation (HFE), Health/Fitness Influence (HFI), Social Dependence (SD), Height Dissatisfaction (HD), Negative Effect (NA) and Investment in Ideas (II).
- **Eating Disorder:** An eating disorder is a mental disorder defined by abnormal eating habits that negatively affect a person's physical or mental health.
- As far as this research study is concerned, Eating Disorder Examination – Questionnaire (EDE-Q) will be used which measures past month cognitive subscales related to ED: restraint, eating concern, shape concern, and weight concern, as well as behavioral symptoms related to these concerns (e.g., frequency of binge eating, vomiting, use of laxatives or diuretics, and over exercise)
- **Gender:** Gender is the state of being male or female in relation to the social and cultural roles that are considered appropriate for men and women.
- **Age:** In this research study age is defined as participant's age measured in years. The population of the study consists of the participants with age range of 12 to 25 years.

RESEARCH TOOLS

Research tools are inventories and questionnaire which are used to collect data and conduct a study. To fulfill the aims and objectives of the study following were used –

- **Eating Disorder Examination Questionnaire (EDE-Q 6.0)**

The Eating Disorders Examination Questionnaire (EDE-Q) is a self-report questionnaire based on the Eating Disorders Examination Interview. The questionnaire includes twenty-eight questions related to the respondent behaviors over the past 4 weeks (28 days) which may be indicative of an eating disorder and with height and weight. The EDE-Q is the questionnaire form of the EDE, and both are considered the ‘gold standard’ measures of ED psychopathology. It provides a measure of the range and severity of eating disorder features. It can also generate operational eating disorder diagnoses. It is used in most treatment studies and in many other investigations of eating disorder psychopathology. This would be used to assess young adults.

Subscale Items

- Restraint – 1, 2, 3, 4, 5
- Eating Concern – 7, 9, 19, 20, 21
- Shape Concern – 6, 8, 10, 11, 23, 26, 27, 28
- Weight Concern – 8, 12, 22, 24, 25

The EDE, and its self-reported versions, EDE-Q, generate two types of data. First they provide frequency data on key behavioral features of eating disorders in terms of number of episodes of the behavior and in some instances number of days on which the behavior has occurred. Second, they provide subscale scores reflecting the severity of aspects of the psychopathology of eating disorders. The subscales are Restraint, Eating Concern, Shape Concern and Weight Concern. To obtain a particular subscale score, the ratings for the relevant items (listed below) are added together and the sum divided by the total number of items forming the subscales. If ratings are only available on some items, a score may nevertheless be obtained by dividing the resulting total by the number of rated items so long as more than half the items have been rated. To obtain an overall or "global" score, the four subscales scores are summed and the resulting total divided by the number of subscales (i.e. four). Subscale scores are reported as means and standard deviations.

The reliability and validity (i.e., discriminant, criterion, and convergent) of this measure are widely tested and supported. Specifically, the EDE-Q, including subscales, shows good internal consistency and test-retest reliability.

Internal consistency was high for both the EDE-Q and all subscale scores. Test–retest reliability was good to excellent (0.66–0.83) for global and subscale scores, and for items assessing key behavioral features of eating disorders (0.55–0.91). Patients with an eating disorder displayed significantly higher EDE-Q scores than controls, demonstrating the good criterion validity of the tool.

- **Body Self Image Questionnaire** by David A. Rowe, Jeri Benson and Ted A. Baumgartner (1999) Body Self Image Questionnaire scale was developed by David A. Rowe, Jeri Benson and Ted A. Baumgartner in 1999. It was developed to assess the self body image of a person in many concerns. There are thirty nine items in the

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test which measure nine dimensions related to self body image of the person. These nine dimensions are:

1. Overall Evaluation (OAE) – 10, 17, 26, 32
2. Fat Evaluation (FE) – 7, 14, 18, 22, 29, 35, 39
3. Attention to Grooming (AG) – 6, 12, 20
4. Health/Fitness Evaluation (HFE) – 3, 13, 21, 28, 34, 37
5. Health/Fitness Influence (HFI) – 23, 30, 36
6. Social Dependence (SD) – 4, 8, 15
7. Height Dissatisfaction (HD) – 2, 25, 38
8. Negative Effect (NA) – 5, 11, 19, 27, 33
9. Investment in Ideas (II) – 1, 9, 16, 24, 31

It is a five point rating scale ranging from 1 to 5 , in which 1 for ‘not at all’, 2 for ‘slightly’, 3 for ‘ about halfway’, 4 for ‘mostly’ and 5 for ‘completely’.

The internal consistency reliability of the questionnaire is .68 to .92.

Research Procedure

This research study was conducted among the individuals of Delhi. Data was collected from approximately 60 participants using self-administered questionnaires.

Firstly, the investigator tride to establish rapport with the individuals and tell them about the purpose of visit and give an orientation about the tools that administered. Individuals were also assured that their responses would be kept confidential and will be used for research purposes only.

The tools were be administered one by one and all the instructions were explained to the samples. The samples were instructed that there are no right or wrong responses and they could take their own time in deciding any option by going through each and every item. They were also instructed not to waste too much time on any one item. Samples were also informed that data collected will securely stored by the researcher.

Data analysis

Data analysis was done in terms of the means and standard deviations identifying trends and distributions of scores. The data analysis will be done with the help of SPSS Ver 22 and parametric tools mentioned below along with the hypothesis :

Standard deviation analysis – It is one of the basic statistical tools which is widely used in the analysis and interpretation of the main data. The standard deviation is a summary measure of the differences of each observation from the mean. If the differences themselves were added up, the positive would exactly balance the negative and so their sum would be zero. Consequently, the squares of the differences are added. The sum of the squares is then divided by the number of observations minus one to give the mean of the squares, and the square root is taken to bring the measurements back to the units.

T-test – the independent samples t-test have been used when two separate sets of independent and identically distributed samples were obtained one from each of the two populations being compared. A t-test is a statistical test that is used to compare the means of two groups. It is often used in hypothesis testing to determine whether a process or treatment actually has an effect on the population of interest, or whether two groups are different from one another.

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Karl Pearson Method - Karl Pearson's coefficient of correlation is an extensively used mathematical method in which the numerical representation is applied to measure the level of relation between linearly related variables. The coefficient of correlation is expressed by "r".

RESULTS AND DISCUSSIONS

The main aim of this present study is to examine the eating disorder and body image in some parts of Delhi, India between the age group of 20 to 25 years. The mean, Standard deviation t test were used to analyse the data. Results and discussions of the present study are as follows.

Table 1 showing data on Body image across gender

	N	Mean	Standard devi.	T
Females	30	63.83	14.51	4.54
Males	30	47.67	12.99	

As per the table 1 it is clear that mean score 63.83 for females is higher than mean score of males which is 47.67 which means that there is significant difference among body image of the respondents across gender. So, first hypothesis is accepted.

Graph presentation of table 1:

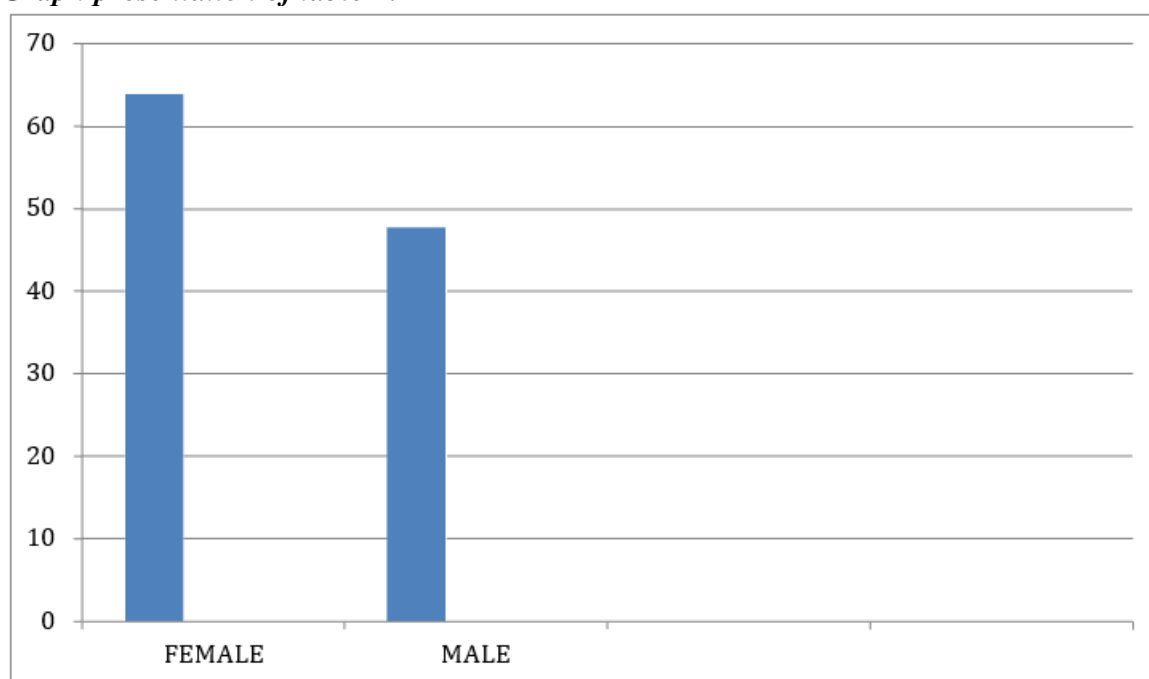


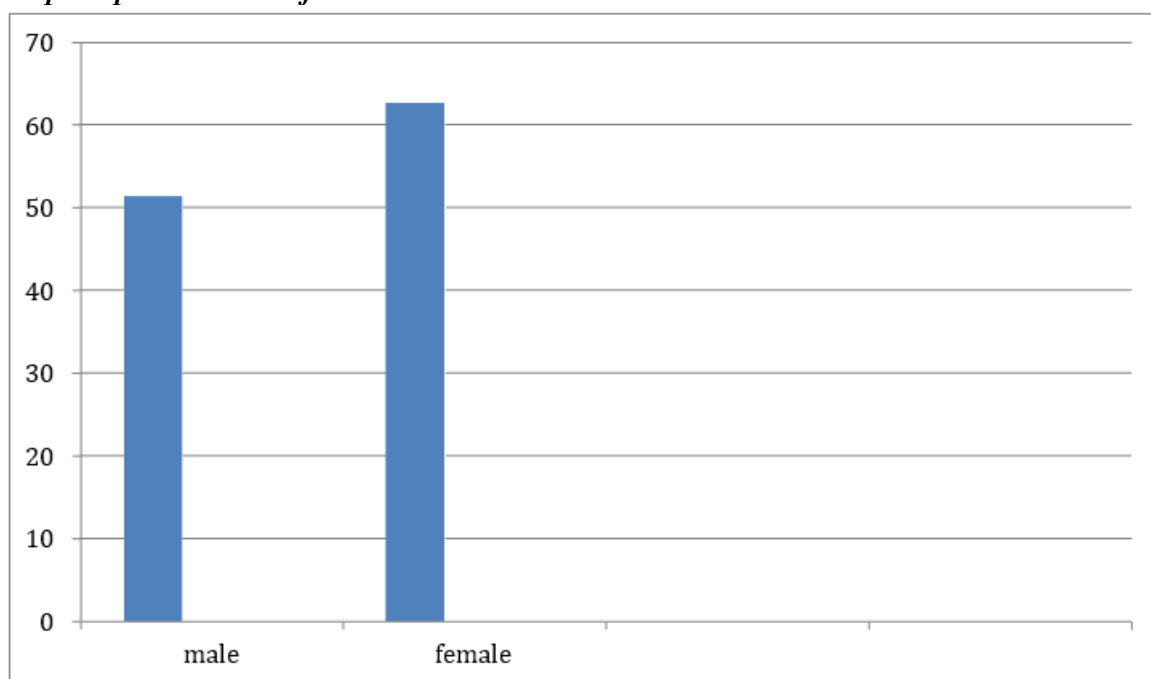
Table 2 showing data of Eating Disorder across gender

	N	Mean	Standard devi.	T
Males	30	51.30	16.345	2.96
Females	30	62.51	12.790	

As per the table 2 it is clear that mean score 62.51 for females is higher than mean score of males which is 51.30 which means that there is significant difference among eating disorder of the respondents across gender. Females score more than males on eating disorder scale among the age group of 20 to 25 years. So, second hypothesis is also accepted.

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Graph representation of table 2



CONCLUSIONS

The main aim of this present study was to examine the eating disorder and body image in Delhi, India between the age group of 20 to 25 years old and the conclusion of the study is as follows:

- The study showed that there is no significant difference among body image of the respondents across age. Females scored higher than males.
- The study showed that there is significant difference among body image of the respondents across gender. Females scored higher than males.
- The conclusion is that in each dimension the score of females were higher than the scores of male samples and significant difference was found across age group of 20 to 25 years in body image and eating disorder between males and females.

Limitations and Suggestions

Any kind of survey or research project can be never perfect, there shall always remain some areas and aspects which are touched or some aspects of the research question that remain untouched or unanswered, or certain conditions that are not in our control and the findings were not as per the expectations of the research work. There is always scope of improvement to any kind of study and the research design. This particular study is no different and there were definitely the limitations. Following are some areas which would have definitely enhanced the project and would have provided better results.

Sample size: For any study large sample size rendered better results and hence it is advisable here as well. Larger sample size ensures a normal distribution of data and becomes more reliable. Although sample size 60 is reasonable but it would have been better to have more samples for the study. This is one of the biggest limitations to the study.

Correct and True responses: Any research cannot guarantee 100% true data from its samples. There is no way to identify correct responses. Even though all of the samples were informed about the objectives and purpose of the project, it cannot be denied that some

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responses may not be true facts hence the results could have been impacted. All the doubts of the samples were cleared and told the importance of the study and how it would be helpful in deriving material for futuristic studies. But still there is no guarantee that responses were not rushed, random and incorrect.

Current state of mind of Sample: When the samples were filling the forms at that time their current state of mind (happy, sad relaxed, tensed etc.) cannot be assessed, hence the credibility of their responses might be affected and interfere the study results

Geographical Region: The geographical region selected for this study was Delhi, so data was collected through purposive sampling method from the population. Geographical region was limited to some parts of Delhi only which is the biggest drawback of the study. If larger geographical area was selected, the results of the study would have been definitely different and better from present results and conclusions.

Data Collection: I got permission denied from mental health assilems that is why random and purposive sampling were used to collect data. A lot of time got wasted coordinating mental health hospitals and psychiatric clinics for meetings and waiting for responses. It took 3 to 4 months to collect data from samples. Organising meetings in informal settings was really challenging.

So based on the above limitations, the following can be suggested for future studies to research:

- Target a bigger sample size.
- Research Design and methodologies should be well thought.
- The objectives and hypothesis statements should complement each other.
- Proper steps should be taken to ensure genuine responses
- Psychiatric hospitals should be involved in such kinds of outcomes have inherent benefits for the hospital as well as for system.
- Keep conducting research to get better insight and more and more knowledge.
- Larger geographical area could be used.

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Conflict of Interest

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