

Risk Factors Affecting Body Image: A Systematic Review

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Abstract: - Body image refers to the self-evaluation and perception of one's own body. With the increasing modernization of society, people, regardless of their age and gender have grown to be less accepting of their appearance. They constantly compare themselves with unrealistic body goals that are pictured and largely accepted by stakeholders. Body image concerns exist in people of all ages and gender with varying intensity. The article systematically reviews psychological (Neuroticism, Self Esteem, and self-disgust), physiological (Physical changes, BMI, and physical exercise), and sociocultural factors (socialization, teasing, rejection, and social media) that influence the development and sustenance of body image. The review reveals that factors such as neuroticism, self-disgust, use of social media, and teasing have a negative influence on body image. On the other hand, self-esteem, and physical exercise have a positive impact on BID.

Key Words: — *Body image, Body Image Dissatisfaction, BMI, Factors affecting body image.*

I. INTRODUCTION

The term 'body image' is a perception of one's own physical appearance along with the attitudes and feelings that arise from it. This perception may be quite far from one's actual appearance. It is a multidisciplinary and complex concept that constitutes personality traits, feelings, emotions, behaviours, and judgment with respect to one's own body (Cash, 2004; Grogan, 2006; Alleva et al., 2015; Spreckelsen et al., 2018; Shoraka et al., 2019). It is a reflection of self-identity and an idea that a person has of his/her body measurements, shape, and silhouettes, each attached to an emotion. These emotions influence one's appearance satisfaction (Silva et al., 1992; Yamamotova et al., 2017).

Body image dissatisfaction is becoming increasingly ubiquitous in society and manifests itself as a cause or consequence of various dangerous disorders such as anorexia nervosa, bulimia nervosa, and body dysmorphia.

BID is considered to be significant in the pathology of eating disorders (Gaudio et al., 2014; Irvine et al., 2019; Sadibolova et al., 2019). It has the capacity to affect the overall well-being (psychological, physical, social, and spiritual) of an individual. It negatively impacts confidence, self-esteem, emotions, behaviour, evaluation, and efficiency at both social and occupational levels. It is essential to know the neurological and physiological maladjustments specific to body image disturbances in cognitive and physical health respectively to deal sustainably with these concerns (Sadibolova et al., 2019).

The concept of body image can be perceived as a very complicated one as the components which form it are closely interrelated and exist in people who attach both positive and negative connotations to them. Gaudio et al., 2014 and Yamamotova et al., 2017 have categorized these components as:

- Affective Component- emotions about one's own body leading to satisfaction or dissatisfaction with their body.
- Behavioural Component- the tasks that one tends to do in order to conceal, change or reveal their body.
- Cognitive Component- mental conception of one's own body.

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- Perceptual Component- body perception with respect to actual appearance.

Varied terminologies are used for an unhealthy body image. The terms distortion, altered perception, misperception, disturbance, and dissatisfaction are used interchangeably to describe a negative body image. These terms are used to address patients who are seeking psychiatric treatment or medical care or both or none.

A disturbance of body image when manifested in the form of perception is called distortion while a disturbance of body concept is called dissatisfaction. Distortion occurs when one fails to assess their own body correctly while dissatisfaction occurs when negative emotions are involved. These disturbances may be observed in altered behaviours such as checking the mirror frequently, dieting, measuring weight repetitively, and avoiding public gatherings (Silva et al., 1992; Lewer et al., 2017; Spreckelsen et al., 2018).

1.1 Development of Body Image

Although debatable, it is prominently believed that body image is an acquired concept (Cash, 2004) that develops during the fetal stage with movement and responses to neurological inputs. It is formed according to circumstances that are faced before and after birth accompanied by the respective functioning of mirror neurons and cross-cortical connections in the brain (Price et al., 2006). Self-recognition develops in children around the age of two years and the process of socialization starts during the early years of life (Anderson, 1984). Between twenty-four to thirty-six months, children get acquainted with their gender, gender roles and social norms associated with their respective gender. Boys are expected to become competitive, athletic, and have strong physical structure while girls are supposed to look beautiful and petite. These gender roles and social norms develop a desperate need for social approval and acceptance among children which increases during school years. An understanding of appearance in children is influenced by the toys that they are exposed to. For example, barbie dolls will develop feminine characters while G.I. Joe will let the child praise the masculine strong character. Socialization also encourages peer comparison with regard to appearance which keeps gaining importance as the age progresses. Half of the children between six to twelve years of age were found to be dissatisfied with their appearance (Smolak, 2011). Adolescents undergo a growth spurt and major physical and psychological changes occur while transitioning as adults (Wertheim and Paxton, 2011). Therefore, it is a crucial phase

for the conceptualization of body image. Parents affect the body image of adolescents by passing on socially acceptable norms regarding body appearance to their children. Studies have shown that adolescents who have good relationships with their parents are likely to be satisfied with their own appearance and bother less about sticking to social ideals (Bearman et al., 2006). Parents' influence decreases with age and peers gain more importance over time (Davidson et al., 1981). Emerging adults up to the age of twenty-seven are primarily influenced by their peer group (Orr et al., 1989).

Body image disorder is a product of an interdependent relationship between physiological, psychological, and sociocultural risk factors (Irvine et al., 2019). Therefore, the objective of this article is to review the relationship of these factors on body image dissatisfaction to identify the positive and negative influences that affect body image across people of all ages and genders.

II. METHODOLOGY

Databases such as PubMed, Scopus, Google Scholar, Cochrane database, and Web of Science were used to search research papers, systematic reviews, and meta-analyses related to Body image and their causative factors. The articles published between 2000 to 2022 were used for reviewing the data related to the relevant topic. Body Image, Body Image Dissatisfaction, Risk factors affecting body image, and body image perception, were the keywords, used to select and eliminate articles. Perspective pieces, opinions and commentaries were excluded from the study.

2.1 Gender and Age Differences

Several studies have equivocally revealed that women tend to have body image issues, dissatisfaction with BMI, and poor self-esteem (Furnham and Calnan, 1998). This tendency is believed to be the product of generalized social norms regarding the external appearances of genders (Thøgersen-Ntoumani, et al. 2007). The impracticable low body weight ideal among females is a major source of body image disturbances and has been recorded in even early childhood years (Grabe et al., 2008; DeLeel et al. 2009). However, Body image issues exist among both males and females with varying dispositions. Dissatisfaction with body image exists in all stages of life. In former years, the problem is less significant and may increase with age, especially in adolescence and adulthood (Kostanski et al., 2004).

Childhood forms the foundation of the concept of body image

and other components of personality traits. Any discrepancies developed during this stage perpetuate into adolescence and manifest into serious mental health disorders and eating disorders during adulthood (*DeLeel et al. 2009; Leeper Piquero et al. 2010*).

Adult females are more inclined to have a thin body and be conscious regarding their external physical features in comparison to adult males. The ideal thin body standards, if followed during early adulthood are likely to stay in later stages of life. BMI is among the prime factors that affect body image among women throughout adulthood (*Ferraro et al., 2008; Runfola et al., 2012*). In a study by *Reboussin et al., 2000*, it was revealed that older adults give more importance to body functions rather than body appearance. *Tiggemann, 2004* reported that body image in females during their middle adulthood is affected by other elements such as menopause, midlife crisis, and anxiety related to ageing.

III. FACTORS AFFECTING BODY IMAGE

The factors which may form the ethology of body image dissatisfaction have been divided into categories viz. psychological, physiological, and sociocultural.

3.1 Psychological Factors

3.1.1 Neuroticism

Soohinda et al, 2020 revealed that higher neuroticism had a significant correlation with body image dissatisfaction. Individuals with high neuroticism tend to have a poor perception and evaluation of their bodies. They may have a negative state of mind which affects sensitivity towards the acceptance of their body features with respect to the embodied ideals (*Swami et al., 2013; Benford and Swami, 2014*). High neuroticism when clubbed with low conscientiousness and extraversion can induce body image dissatisfaction among males and females regardless of their body weight (*Allen and Robson, 2020*). High neuroticism makes people highly conscious of their body and they are easily affected by negative opinions about their appearance making them prone to body image dissatisfaction (*Benford and Swami, 2014*).

3.1.2 Self Esteem

The manifestation of social ideals in terms of body image is highly influenced by the self-esteem of a person. High self-esteem decreases the likelihood of eating disorders and other mental health problems as it cushions the negative influences on mental health and allows a person to accept his/her natural self (*Duchesne et al., 2017*). The components of the overall

personality of an individual affect his/her body perception regardless of their actual appearance (*Swami et al., 2013*).

3.1.3 Self-Disgust

Self-Disgust refers to an aversion toward the perception of faults or imperfections in the body. It often leads to compulsive and avoidant practices (*O'Brien and Schmidt, 2018*). Self-disgust towards physiological or psychological features is correlated to the development of an unhealthy body image *Moncrieff et al., 2014*. Self-disgust can be observed by certain facial and behavioural expressions such as puckered faces and avoidance. A study has shown that individuals who show disgust toward an external impetus or circumstances have a tendency to manifest self-disgust (*Olatunji et al, 2007; Overton et al., 2008*). Other sociocultural factors and experiences may also affect the likelihood of developing self-disgust and repulsion towards physical appearance. Avoidance of disgust prompting stimulations (own body) is the primary intent of self-disgust. Avoidance perpetuates the cycle of disgust and enhances its influence which makes its eradication more difficult as it makes people resist re-evaluating, thinking, and appreciating their appearance. Due to this, any change in the existing negative thought process becomes impossible and gives rise to aggravated body image distortion. Studies have categorized characteristics as disgust sensitivity (one finds the feeling of disgust as uncomfortable) and disgust propensity (one accepts disgust). Disgust sensitivity encourages avoidant behavior and augments body image dissatisfaction (*Van Overveld et al., 2008; Engelhard et al., 2011; Moncrieff et al., 2014*). A study by *Spreckelsen et al., 2018* showed that body image dissatisfaction increased as self-disgust, disgust sensitivity, and disgust propensity increased. Negative body image was positively related to self-disgust, disgust propensity, and disgust sensitivity.

3.2 Physiological Factors

3.2.1 Physical Changes

Puberty is a period of growth spurt that impacts the development of body image. Females reach puberty at around ten years and males at twelve years. Any inconsistency in the achievement of social ideals may damage self-perception and acceptance. Most, but not all studies suggest that early puberty in females and late puberty in males may damage body image in adolescents (*Cash, 2012*). Females who view themselves as overweight before puberty have higher body image dissociation (*Ackard and Peterson, 2001*). *McCabe and Ricciardelli, 2003*, reported that the role of puberty is undermined by the interference of sociocultural factors in

determining the body image.

Aging also impacts body image as individuals (both women and men) become satisfied with a few body features, regarding them as products of advancing age. On the other hand, they are unsatisfied with other characteristics of their appearance (*Algars et al., 2009*).

Fluctuation of body image among women is seen during, before and after pregnancy. The positive body image decreases in the order of pre-pregnancy, postpartum, and pregnancy period. Body image is associated with gestational weight gain (*Mehta et al., 2011*).

3.3 Body mass index (BMI)

Body mass index significantly influences body image dissatisfaction. Low and high BMI values have been found to be correlated with higher BID (*Grogan, 2016*). Men consistently idolize mesomorphic bodies with high BMI numbers (more muscle and less fat). However, variations exist across cultures. This contradicts the desire in women to achieve low BMI values (*Arbour and Martin, 2006; Franko et al., 2015; Weinberger et al., 2016*). *Soohinda et al., 2020* did not reveal any significant association between BMI and body image dissociation. This could be explained by the fact that an individual's perception of his/ her own body may be cognitively distant from the actual height and weight although, influenced by it (*Atkinson and Wade, 2012*). Lower BMI in men has been found to contribute to higher BID than in obese men. This implies that men prioritize a well build muscular physique over thinness (*Grogan, 2016*). Men in India are more susceptible to body image concerns (*Soohinda et al., 2020*). Globally, men are more likely to try and change their natural physical appearance according to generally acceptable ideals by making use of abnormal diets, ergogenic aids and steroids (*Kanayama et al., 2009; Blanck et al., 2007*). This trend might seep into the Indian scenario due to international exposure through social media. Psychological awareness is the key to encouraging a positive body image (*Henderson, 2012*). Among women, obese older women with partner had an unhealthy body image. High BMI in men linked with progressive age, alcoholism, and sedentary lifestyle are key factors leading to BID (*Silva et al., 2011*).

3.4 Physical Exercise

A study by *Furnham et al., 2002* reported that men exercise to pursue fitness and women exercise to enhance their appearance and reduce weight. The study also suggested that physical exercise fosters self-esteem and self-esteem, in turn, allows individuals to pursue exercise to maintain substantive

health outcomes. Consequently, the promotion of exercise and physical fitness can improve body image satisfaction and increase self-esteem. *Frost and McKelvie, 2005* also found high self-esteem in individuals who exercised well. However, researchers are yet to establish a cause-and-effect relationship between exercise, body image and self-esteem to reach evident conclusions reiterating the theoretical knowledge (*Anjala, 2011*). The natural effects of physical exercise on the body and overall appearance are likely to improve one's body image (*Frost and McKelvie, 2005*).

On the other hand, when exercise comes consequentially from factors related to body image such as body weight, appeal and overall appearance, it may contribute to body image dissatisfaction and eating disorders. Exercise may not help in cases where an unattainable body goal is idealized as guided by media (*Furnham et al., 2002*). Physical exercise has the highest positive influence on physical acceptance and yet the lowest on self-esteem (*Frost and McKelvie 2005; Flay and Allred 2003; DuBois and Flay 2004; McGannon and Spence, 2002*). Self-esteem grew significantly in subjects who reported improvement in fitness (*McGannon and Spence, 2002*.)

3.5 Sociocultural Factors

3.5.1 Socialization

The influence of society and its appearance-related norms put individuals in a constant state of comparison regarding their appearance (*Franko et al., 2015*). Peer group is an important constituent of the socialization process during childhood and adolescence. Common perspectives are shared with peers on body image and comparisons are made. Comparison within peer groups is a source of rankings from highly acceptable to least acceptable body characteristics (*Burke et al., 2012*). Sociocultural factors are common determinants of body image across genders. Among boys, the male best friend and among girls, the female best friend and their mother were significant antecedents of body image (*McCabe and Ricciardeli, 2003*).

3.5.2 Teasing and Rejection

Many people face teasing and rejection about general body appearance while growing up. The external comments of others start affecting the inner perceptions (*Grilo et al., 1994*). A disturbed body image and poor perception of the body may be the outcomes of teasing and rejection experienced during childhood (*Philippi and Leme, 2018*). Teasing and rejection have been found to establish a correlation between body image dissatisfaction and BMI. It creates a desire in individuals to lose weight (*Shroff and Thompson, 2004*). A

study by *Burke et al., 2012* reported that nearly sixty percent of people during their childhood or adolescence are teased due to their weight or appearance. The prevalence of peer teasing is more than family teasing (*Philippi and Leme, 2018*).

3.5.3 Social media

Social media and body image dissatisfaction are correlated across genders. The media posts related to body features are detrimental to body image. This may influence the pathophysiology of other mental health disorders (*Revranché et al., 2021*). Women tend to define their body image ideals according to the ones shown on social media more than men (*Green et al., 2003*). Mass media is a medium that generalizes specific body characteristics among a larger population. The information received is manifested by the viewers as a goal that needs to be achieved. People are always in need of approval from others. Family and peer groups fortify this manifestation by motivating its pursuance (*Trampe et al., 2007; Want, 2009*). The acquisition of unachievable standards may form the foundation of mental health problems (*Dooley et al., 2010; Anjala, 2011*). People who are happy with their appearance give a positive response to the images on social media while those who are unsatisfied, do not respond. Real images shall be put rather than ideal images that encourage unattainable body features (*Orth and Holancova 2004; Peck and Loken, 2004; Feiereisen et al., 2009*).

IV. CONCLUSION

The above review revealed that neuroticism, self-disgust, use of social media, and teasing have a positive correlation with body image dissatisfaction. On the other hand, self-esteem, and physical exercise have a negative correlation with BID. The impact of factors such as BMI, physical changes, and socialization cannot be generalized as gender and regional differences exist. There is a scope to establish a direct causative relationship of factors such as physical exercise, self-esteem, teasing, and socialization with body image dissatisfaction.

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