

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Pooja^{1*}, Shiksha Kakkar²

ABSTRACT

Background: Body image is the perception of one's body appearance, shape, and size. Youthful grown-ups are more worried about their physical appearance. **Aim:** The study aimed to assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults. **Methodology:** There were 80 individuals recruited as a sample aged 20 to 25 in which there were 40 females and 40 males. Body Image Concern Inventory (BICI) for body image concern (2005), Rosenberg Self-esteem Scale for self-esteem (1965), The UCLA Loneliness scale for loneliness (1978), Eating disorder (1979), Beck Depression Inventory for depression (1961) was used in this study. To analyse the results t-test and Pearson product-moment correlation statistical were used. **Results:** The results show that there was a positive correlation between body image concern, loneliness, disordered eating, and depression, and a negative correlation between body image concern and self-esteem was found. It also shows that both genders were equally concerned about their body image.

Keywords: *Body Image Concern, Self-Esteem, Loneliness, Disordered eating, Depression, and Gender*

Body image includes the picture of one's own body in his/her mind, that may or may not match one's body's actual shape and size. This includes how one feels about his/her appearance; what one thinks about his/her body, such as one's height and weight, and how one feels within his/her skin. Body image dissatisfaction is defined as the perception a person has for his or her body appearance. It might include his/her physical self, thoughts, and feelings surrounding their awareness of self. The feelings and thoughts can be positive or negative and can be influenced by environment and societal factors. Body image dissatisfaction can occur at any age and affects all levels of society, demographics, and cultures. It affects men and women both and can lead to bad consequences like - Body dysmorphic disorder (BDD) which is a serious illness in which an individual becomes overly worried about their appearance, about minor or imaginary physical flaws. They constantly check their appearance in a mirror, try to hide their perceived flaws, be worried about their body image or perceived flaws for at least an hour a day, and this worry

¹Post-Graduate student, Department of psychology, D.A.V. Chandigarh, India

²Post-Graduate student, Department of psychology, D.A.V. Chandigarh, India

*Responding Author

Received: October 08, 2020; Revision Received: November 12, 2020; Accepted: November 15, 2020

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

interferes with their life in some or the other way. They also have unrealistic expectations for one's body image which increases the probability of body dissatisfaction and a higher risk for developing eating disorders, low self-esteem, depression, and loneliness.

Self-esteem is the sum of self-Confidence and Self-Respect, which is described respectively as “a sense of efficacy and a sense of personal worth”. It is a positive or a negative orientation towards themselves; it is a general evaluation of ones' worth and value. Individuals are motivated for having high self-esteem which indicates positive self-regard and not egotism. Self-esteem is considering oneself effective, trusting one's own ability to think, to learn, to choose, and to make the right decisions and to defeat challenges and bring good changes in life. It also consists of respecting, loving oneself, and being self-fulfilling in ones' own lives. Most recently, self-esteem was viewed as comprising of two different dimensions: competence and worth. Low self-esteem indicates low self-confidence and low self-worth which might cause depression, loneliness, high body image concern and might even cause eating disorders.

Loneliness is the unpleasant feeling which occurs when an individual's network of social relationships has deficiency either quantitatively or qualitatively. Loneliness is a unidimensional concept which differs primarily in its intensity of the experience. Loneliness is a situation that a person experiences when there is a lack of certain relationships. This includes when the existing relationships are smaller in number than it is considerable, as well as situations when the intimacy an individual wishes for has not been realized. Loneliness is a negative feeling which arises when one's social needs are not met by the quantity and quality of one's present social relationships. As a social being, people rely on safe, secure social surroundings to survive and thrive. Individuals with dejection can encounter high sentiments of weakness, that can negatively affect both their bodies and psyches. For some people, it might be temporary, and for others, it might be long term. It is subjective which means that every person experiences it differently and for everyone, there can be a different reason to feel lonely. It is not a sign of weakness and it does not occur only in people who are physically isolated or old. One can have many people around him/her and still feel lonely. Feeling lonely can have furthermore bad consequences, such as- a person might become depressed, have low self-esteem.

Disorder eating means having wrong eating habits, having a distorted attitude towards eating. Disordered eating can lead an individual towards eating disorders or can form the starting step towards the development of eating disorders. Anorexia nervosa, bulimia nervosa, and binge eating are kind of dietary issues. In anorexia nervosa the individual has a distorted body image that leads her or him to see himself or herself as overweight often refusing to eat, exercising compulsively, and developing unusual habits such as refusing to eat in front of others, they can even starve to death. In bulimia nervosa the individual may eat excessive amounts of food then purge their body of food by using medicines or by vomiting, the person often feels disgusted and ashamed when s/he binges and is relieved of tension after purging. In binge eating, there are recurrent episodes of out of control eating. In general, psychological disorders include a variety of behavioural problems like abnormal or disturbed eating attitudes, depression, and life-threatening extreme eating behaviours. Eating disorders affect not only the patient's mental well-being but also harm the patient's physical health and may lead to fatal outcomes. People who are not satisfied with their body image are prone to depression as there was a highly significant association found between body image dissatisfaction, eating disorder, and depression.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Depression is a mood disorder, which is characterized by disturbance in the mood for a prolonged emotional state. Depression is the most common mood disorder which covers a variety of negative moods and behavioural changes. Depression can refer to as a symptom or as a disorder. Depression includes depressed mood, loss of interest in pleasure activities, change in body weight, sleep problems, tiredness, poor concentration, difficulty making decisions, agitation, greatly slowed behaviour, and thoughts of death or suicide, other symptoms include excessive guilt, a feeling of worthlessness and hopelessness. The relationship between depression and eating disorders is interlinked and bi-directional. Depression leads to starting eating pathology and not proper diets and no proper intake of nutrition can also create chemical imbalances which plays an important role in causing certain types of depression.

LITERATURE REVIEW

Barnett.M.D. & Edzaeds.S.M, (2020), examined body image satisfaction and loneliness among young adults and older adults. A sample of 459 young adults and older adults was taken. Findings showed that young adults had higher levels of body dissatisfaction and loneliness than older adults.

Shetty.J., (2018), researched the assessment of body image and self-esteem among young adolescents in which 139 students IX and X standards were recruited as a sample. The findings indicate that girls were more likely to have body image dissatisfaction as compared to boys.

According to a research study by Manaf, N. A. (2016), the purpose of this study was to study the susceptibility to an eating disorder and the prevalence of depression with a sample of 2016 female students from a private university in Malaysia and understand the relationship between depression, body image, and susceptibility to eating disorder. And this study also aims to determine whether depression is a mediator between body image and susceptibility to eating disorders among female college students. The findings showed a positive relationship between depression and eating disorder and a negative relationship between body image and depression and, body image with an eating disorder.

According to a research study by Şanlıer, N., Türközü, D., & Toka, O., (2016), the objective of this study was to determine the relationship between body image, depression, food addiction, and body mass index, and gender difference among these variables. It was conducted on a total of 796 university students. It was shown that body image scores of females were lower compared to those of males. And there was a negative relationship between body image and depression.

Zinovyeva.E.V, Kazantseva.T.V. & Nikonova A.N., (2016), examined the self-esteem and loneliness with body dissatisfaction among Russian adolescents. A sample of 66 Russian adolescents under the age of 13-15yr was taken. Results indicate that body dissatisfaction is associated with self-esteem and loneliness. This study confirmed that body dissatisfaction leads to loneliness. Loneliness further triggers the eating disorder and all these lead to depression.

Choi. E. & Choi.I., (2016), examined the relationship between body dissatisfaction, body figure, self-esteem, and depressed mood among adolescents in the United States and Korea. The sample of 1002 from the United States and 3993 from Korea were recruited. Findings

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

showed that body dissatisfaction forecast higher depressed mood and self-esteem resolve the connection in American and Korean Adolescents. Body Dissatisfaction depressed mood though self-esteem was higher for American adolescents as compared to Korean adolescents.

Vanhalst, J., Luyckx, K., Scholte, R. H. J., Engels, R. C. M. E., & Goossens, L. (2013), did longitudinal research on low self-esteem as a risk factor for loneliness in adolescence. In which 428 Dutch adolescents and 882 Belgian adolescents were taken as a sample. Findings show that self-esteem and loneliness mutually affected each other.

Levine, M. P., (2012), Finds the link between loneliness and eating disorder. According to the article, the negative emotion was responsible for eating disorders and loneliness. Loneliness is associated with an eating disorder.

Van den Berg, P.A. et.al (2010), investigated the link between body dissatisfaction and self-esteem in adolescents, the results show that body image concern and low self-esteem were found in all age groups and backgrounds of adolescents.

According to a research study by Brausch.A.M. & Gutierrez.M. P., (2009), the objective of this study was to study the role of disordered eating and body image as a risk factor for depression and suicidal ideation in adolescence. The sample for the study was 393 high school students. Results showed that disordered eating contributes to depressive symptoms, while body image does the same. The depression contributes to suicide ideation.

Pritchard.M.E. & yalch.K.L, (2009), researched to find the relationship between loneliness, interpersonal dependency, and eating disorder among young adults. There were 176 college students recruited as a sample. Results show that loneliness intervenes in the relationship between body dissatisfaction and interpersonal dependency among adults.

Knauss. C., Paxton, S. J., & Alsaker, F. D., (2008), examined the relationship between body shame and body surveillance in adolescent boys and girls: objectified body consciousness, internalization of the media. Body ideal and perceived pressure from media. A sample of 819 boys and 791 girls of 14-16 years of swiss adolescents was taken. The finding shows that girls were highly associated with body shame and body surveillance as compared to boys.

A researched study conducted by Kim, J.-H., & Lennon, S. J. (2007), the purpose of the study was to determine whether the third level of exposure to mass media is related to self-esteem, body image, and eating disorder. It was conducted on a sample of 114 female college students. The results showed there was a positive relationship between exposure to fashion magazines and appearance dissatisfaction and an eating disorder. And the risk of eating disorder tendencies was related to low self-esteem, body dissatisfaction.

Foster. R. & Potter.M., (2007), examined the relationship between body dissatisfaction and loneliness among adolescent girls. The results indicate that body dissatisfaction triggers loneliness in girls at all grade levels. However, positive peers and family support weaken the relation between body dissatisfaction and loneliness.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Dyl, J., Kittler, J., Phillips, K. A., & Hunt, J. I. (2006), the purpose of this study was to examine the prevalence and clinical correlates of an eating disorder, body dysmorphic disorder, and other clinically significant body image concerns. It was conducted on 208 adolescent inpatients. The results show that the group having body dysmorphic disorder and weight concerns got a score higher than the group with no significant body image concern on the test of suicide and anxiety. The body dysmorphic disorder, eating disorder and weight concern groups had a higher score of depression than the low body dysmorphic disorder, weight concern groups, eating disorder.

Tiggermann, Marika, (2005), conducted a longitudinal study to find out the relationship between an adolescent girl's body dissatisfaction and self-esteem. 242 high school female students were recruited. Results showed that girls with overweight were more vulnerable to develop low self-esteem.

A research study was done by Grilo, C. M., & Masheb, R. M (2005), the purpose of the study was to determine body image dissatisfaction among patients with binge eating disorder. It was conducted on 3433 consecutive treatments in binge patient. Results show that women had higher body image dissatisfaction than men.

According to a research study done by Ackard, D. M., Croll, J. K., & Kearney-Cooke, A., (2002), the purpose of the study was to determine the association between dieting frequency and disordered eating behaviour, body satisfaction, and related factors. It was done on 345 females. The results showed that there was a positive association between dieting frequency and disordered eating symptoms and related problems like body dissatisfaction, perception of current body size, depression.

According to a research study by Cargill, B. R., Clark, M. M., Pera, V., Niaura, R. S., & Abrams, D. B., (1999), the objective of the study was to assess the relationship between binge-eating, depression, body image, and self-efficacy. The sample was 159 clinical patients. Results showed that increase perception of poor body image was related to binge eating. High levels of depression and low self-efficacy were contributing to binge eating, while body image had a strong relationship with binge eating.

According to a research study by Koenig, L. J., & Wasserman, E. L., (1995), the objective of the study was to examine body image and dieting failure in college men and women and determine links between depression and eating problems. It was conducted on 234 males and females from 17 to 22 years old. Results showed that regardless of gender, eating problems were high in those with negative body image. Depression was high with negative body image. Both men and women failed dieting was related to depression and only for women depression account for a variety of eating problems.

Objectives

For the current examination, the accompanying objectives were defined:

1. To assess the relationship between body image concern, self-esteem, loneliness, disordered eating, and depression among young adults.
2. To assess the gender difference between body image concern, self-esteem, loneliness, disordered eating, and depression respectively.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Hypothesis

Based on the previous studies, the following hypothesis was formulated and was tested:

- H1: There will be a negative relationship between body image concern and self-esteem.
H2: There will be a positive relationship between body image concern, loneliness, disordered eating, and depression.
H3: There will be a gender difference between body image concern and self-esteem, loneliness, disordered eating, and depression respectively.

METHODOLOGY

Participants

The sample consists of a total of 80 individuals in which there were 40 males and 40 females, age 20 to 25 years, who were selected through a purposive sampling technique for the study from city Chandigarh.

Demographic form

The demographic form was put in place to elaborate on the information pertinent to the study. The demographic forms consist of 4 questions that enquiring about the participant's- Name (optional), Age*, Gender*, and contact/email* (means required).

Inclusive Criteria

Here, we include two groups-:

1. Those who are 20 to 25 years of age.
2. Those who are the residence of Chandigarh.

Exclusive Criteria

1. Here, we exclude those who are below the age of 20 and above the age of 25 years of age.
2. Those who are not the residence of Chandigarh.

Procedure

The full consent of the participants was taken and their anonymity has been preserved during the study. The research data were kept confidential throughout and after the research. The rapport was established with each participant after taking their consent. The demographic form and questionnaires of the Body Image Concern Inventory (BICI), Rosenberg Self-Esteem scale, Eating Attitudes Test (EAT), The UCLA Loneliness Scale, and Beck Depression Inventory (BDI) given to the participants one at a time.

Variables

There were Independent variables, Dependent variables, and Control variables involved in this study.

Independent Variable: Body Image Concern.

Dependent Variable: Self-Esteem, Loneliness, Disordered eating, and Depression.

Control Variable: Age.

Psychological Tools/ Instruments

Body Image Concern Inventory: Body Image Concern Inventory introduced by Littleton, Axsom, Pury, in 2005. The Inventory (BICI) is a self-repost, brief measure of body dysmorphic appearance concern. Body dysmorphic appearance concern includes a lot of deep concern and preoccupation with the perceived defaults in its appearance, also includes

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

behaviours connecting to body concern. Body dysmorphic appearance concern is characterized by individuals with Body Dysmorphic Disorder (BDD). This inventory has 19-items, for every item, the subject was asked to rate how often they have the described feeling or performed the described behaviour on a Likert scale, with - 1 being “never” 2= Rarely, 3= Sometimes, 4= often, and 5 being “always.” This inventory is scored by adding all the answer options. A high score on the inventory means high body image concern. BICI is a reliable scale.

Self-Esteem: Rosenberg Self-esteem scale was invented by Rosenberg in 1965. The scale measures the self-esteem of an individual. This scale has 10 items in which five questions focus on self-observation that you are likely to strongly agree with if you have a high level of self-esteem. Therefore use the following system to score the results: reverse scoring 1,2,4,6 and 7: SA (strongly agree)=3, A(agree)=2, D(disagree)=1, SD(strongly disagree)=0 For questions 3,5,8,9 and 10: SA (strongly agree)=0, A(agree)=1, D(disagree)=2, SD(strongly disagree)=3. The internal consistency of Rosenberg’s self-esteem scale was 0.77 to 0.88.

Loneliness: The UCLA Loneliness scale is used to measure loneliness. It was developed by the University of California, Los Angeles (UCLA). Russell, D., Peplau, L.A., and Ferguson, M.L., it was first published in 1978, and then was revised in 1980 and 1996. There are 20-items on the scale. The loneliness scale measures one’s subjective feelings of loneliness as well as feelings of social isolation. Each item has 4 options which is 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = often. Items of 1,5,6,9,10,15,16,19 and 20 are reversed scoring. Coefficient alpha found between .89 to .94.

Eating Attitudes Test: (EAT) developed by Garner & Garfinkel, in 1979. This test is a self-report questionnaire that assesses a variety range of behaviours related to eating disorders. The test has 26 items, this test is contained in the three scales which is a shorter version of the original 40-item scale, and was used for this study (EAT-26). The test has three subscales: bulimia and food preoccupation, dieting, and oral control. A high score reflects disordered eating behaviour but is not the clinical diagnosis of an eating disorder. The subject needs to specify how often s/he engages in the behaviours presented in the questions, by choosing one of the responses from the following: "Always", "Usually", "Often", "Sometimes", "Rarely", or "Never." For each item, the "always" response is scored "3", the "usually" response a "2", and the "often" response a "1". While, "sometimes, rarely and never” responses are given a 0 score. The test-retest reliability ranged from .84 to .89.

Beck Depression Inventory: The Beck Depression Inventory (BDI) was invented by Beck, Ward, Mendelson, Mock, & Er – Baugh in 1961. BDI is a 21-item self-report inventory that measures the emotional, motivational, cognitive, and physical symptoms of depression. Each item contains four responses describing different degrees of the symptoms (scoring ranging from 0 to 3), and the subject is asked to select one item that describes how s/he has felt during the past one week. This inventory is the one that is most commonly used to measure and assessment of depression with normal and clinically-diagnosed adolescent and adult populations. This inventory measure has been shown adequate internal consistency, test-retest reliability, and concurrent reliability with major diagnostic systems. The internal consistency was demonstrated by about 0.9 and reliability ranged between 0.73 to 0.96.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Statistical Analysis

The data collected was analysed and quantitative analysis was done through statistical techniques which included: (1) Mean and SD (2) t-test (3) Pearson Product Moment Correlation. Here, we use the statistical package of social sciences (SPSS 21st version).

RESULTS

Table:1 Depicting descriptive indicators of participants score in Body Image Concern, Self-Esteem, Loneliness, Disordered Eating, and Depression.

	Body image concern	Self-esteem	Loneliness	Disordered eating	Depression
N	80	80	80	80	80
Mean	37.26	19.45	44.10	14.23	10.50
Std. Error of mean	1.399	.627	1.212	1.679	1.341
Median	36.00	20.00	46.00	7.00	6.00
Mode	38 ^a	20	46 ^a	2	0
Std. Deviation	12.516	5.607	10.841	15.021	11.996
Variance	156.652	31.441	117.534	225.620	143.899
Skewness	1.108	-.416	.457	1.149	1.757
Std. Error of Skewness	.269	.269	.269	.269	.269
Kurtosis	2.070	.473	.924	.200	3.040
Std. Error of Kurtosis	.532	.532	.532	.532	.532
Range	68	29	57	58	54
Minimum	10	1	23	0	0
Maximum	87	30	80	58	54

a. Multiple modes exist. The smallest value is shown

Table: 2 Shows the correlation between Body image concern, Self-esteem, Loneliness, Disordered eating, and Depression.

Variables	Body image concern	Self-esteem	Loneliness	Disordered eating	Depression
Body image concern	1				
Self-esteem	-.517**	1			
Loneliness	.366**	-.509**	1		
Disordered eating	.374**	-.321**	.363**	1	
Depression	.664**	-.710**	.530**	.313**	1

Table no 2 showing the correlation between body image concern, self-esteem, loneliness, disordered eating, and depression. The results show that there was a significant negative relationship between body image concern and self-esteem and a significant positive relationship between body image concern, loneliness, disordered eating, and depression at 0.01 level.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Table: 3 Shows the Correlation between Body image concern, Self-Esteem, Loneliness, Disordered eating, and Depression among males and females' young adults.

Variable	Body image	Self-esteem	Loneliness	Disordered eating	Depression
Body image concern	1				
Self-esteem	-.455** -.615**	1			
Loneliness	.150 .592**	-.484** -.545**	1		
Disordered eating	.327* .422**	-.411** -.204	.473** -.204	1	
Depression	.529** .776**	-.709** -.738**	.611** .457**	.550** .096	1

Note: (**Females, Male**)

Table no. 3 shows the correlation value of males and females young adults separately. There was a highly significant negative relationship between body image concern and self-esteem and a highly significant positive relationship between body image concern, disordered eating, and depression among females. Whereas males also show a negative relationship between body image concern and self-esteem and a positive relationship between, disordered eating, and depression. The correlation value of body image concern with self-esteem in females was found -.455, and the correlation value of body image concern with self-esteem in males was found -.615. The correlation value of body image concern with loneliness in females was found .150 it was not significant at 0.05 and 0.01 level., and the correlation value of body image concern with loneliness in males was found .592. The correlation value of body image concern with disordered eating in females was found .327 is significant at 0.05 level, and the correlation value of body image concern with disordered eating in males was found .422. The correlation value of body image concern with depression in females was found .529, and the correlation value of body image concern with depression in males was found .776 which shows a significant correlation at 0.01 level.

Table: 4 Showing the mean difference in body image concern, self-esteem, loneliness, disordered eating, and depression among male-female young adults.

Variables	Female (N=40)		Male (N=40)		Df	t-ratio
	Mean	SD	Mean	SD		
Body image concern	37.60	11.98	36.93	13.17	78	.240
Self-esteem	19.75	6.32	19.15	4.84	78	.476
Loneliness	43.28	11.40	44.93	10.32	78	-.678
Disordered eating	13.43	15.11	15.03	15.08	78	-.474
Depression	10.68	11.56	10.33	12.55	78	.130

Table no. 4 shows the Mean and SD Value of Female and Male separately. The mean difference of Body image concern among young females (N=40, Mean =37.60, SD = 11.98), were found (t=.811, p>0.05), which is insignificant at 0.05 level. The mean difference of Self-Esteem among young female adults (N=40, Mean = 19.75, SD = 6.32), were found (t=.635, p>0.05), which is insignificant at 0.05 level. The mean difference of Loneliness among young female adults (N= 40, Mean = 43.28, SD = 11.40), were found (t= .500, p>0.05), which is insignificant at 0.05 level. The mean difference of Disordered eating

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

among young female adults (N= 40, Mean = 13.43, SD = 15.11), were found ($t=.637$, $p>0.05$), which is insignificant at 0.05 level. And the mean difference of Depression among young females' adults (N=40, Mean = 10.68, SD = 11.56). were found ($t=.897$, $p>0.05$), which is insignificant at 0.05 level. The mean difference of Body image concern among male young adults (N=40, Mean =36.93, SD = 13.17), were found ($t=.811$, $p>0.05$), which is insignificant at 0.05 level. The mean difference of Self-Esteem among young male adults (N= 40, Mean = 19.15, SD = 4.84), were found ($t=.635$, $p>0.05$), which is insignificant at 0.05 level. The mean difference of Loneliness among young male adults (N=40, Mean = 44.93, SD = 10.32), were found ($t=.500$, $p>0.05$), which is insignificant at 0.05 level. The mean difference of Disordered eating among young adults (N=40, Mean = 15.03, SD = 15.08), were found ($t=.637$, $p>0.05$), which is insignificant at 0.05 level. The mean difference of Depression among young male adults (N=40, Mean = 10.33, SD = 12.55), were found ($t=.897$, $p>0.05$), which is insignificant at 0.05 level.

DISCUSSION

The aim of present study was to assess the relationship of Body Image Concern with Self-esteem, loneliness, disordered eating, and depression among young adults.

The above results show that there is a positive correlation between body image concern, loneliness, disordered eating, and depression among female and male young adults. There is a negative correlation between body image concern and self-esteem among female and male young adults.

H1: states that there will be a negative relationship between body image concern and self-esteem. According to table no.2 a highly significant negative correlation value of -0.517 was found between body image concern and self-esteem which means that high body image concern leads to low self-esteem. Hence, H1 is “**accepted**”.

H2: states that there will be a positive relationship between body image concern, loneliness, disordered eating, and depression among young adults According to table no.2 highly significant positive correlation was found 0.366, between body image concern and, loneliness, 0.374 between body image concern and disordered eating, 0.664 between body image concern and depression respectively. It means that high body image concerns lead to a high level of loneliness, disordered eating, and depression. Thus, H2 is “**accepted**”.

H3: states that there will be a gender difference between body image concern and self-esteem, loneliness, disordered eating, and depression respectively. According to the t-ratio, there is no gender difference found in this study, which means that both the genders equally experience body image concern, loneliness, disordered eating, depression, and low self-esteem. Thus, H3 is “**rejected**”.

The study conducted by Algars et.al, (2009) on the adult body image: age, gender, & body mass index are related to body image concern. A sample of 11,400 males and females under the age of 18 to 49 were recruited. Results show that females were more dissatisfied with their bodies than males.

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

Austin et.al, (2009), examined body satisfaction and body weight: gender difference & sociodemographic determinants. A sample of 4254 girls and boys were taken. Findings show that girls experience more body dissatisfaction than boys. Chaiton et.al, (2009), Findings indicate that depressive symptoms are related to the pressure to be thin & body dissatisfaction. While body dissatisfaction is connected with depressive symptoms among boys. Santos et.al, (2007), examined the comorbidity between depression & disordered eating is found in both the genders. Results show that depression with disordered eating was found in both genders. Cohane et.al, (2001), review literature on body image in boys' findings shows that girls were less likely to concern their bodies while boys are more dissatisfied with their bodies. It also shows that body image is associated with low self-esteem.

CONCLUSION

According to the above study, we can conclude that there is a positive correlation between body image concern, loneliness, disordered eating, and depression. There is a negative correlation between body image concern and self-esteem. This study also shows that both genders experience almost equal levels of body image concern.

Limitation

1. A sample of 80 young adults from Chandigarh was selected. The sample size might not be sufficient to represent the entire population of India.
2. There might be other variables that can influence body image concern.

REFERENCES

- Ackard, D. M., Croll, J. K., & Kearney-Cooke, A. (2002). Dieting frequency among college females: Association with disordered eating, body image, and related psychological problems. *Journal of Psychosomatic Research*, 52(3), 129–136. [https://doi.org/10.1016/s0022-3999\(01\)002690](https://doi.org/10.1016/s0022-3999(01)002690)
- Ålgars, M., Santtila, P., Varjonen, M., Witting, K., Johansson, A., Jern, P., & Sandnabba, N. K. (2009). The Adult Body: How Age, Gender, and Body Mass Index Are Related to Body Image. *Journal of Aging and Health*, 21(8), 1112–1132. <https://doi.org/10.1177/0898264309348023>
- Austin, S. B., Haines, J., & Veugelers, P. J. (2009). Body satisfaction and body weight: gender differences and sociodemographic determinants. *BMC Public Health*, 9(1). <https://doi.org/10.1186/1471-2458-9-313>
- Barnett, M. D., Moore, J. M., & Edzards, S. M. (2020). Body image satisfaction and loneliness among young adult and older adult age cohorts. *Archives of Gerontology and Geriatrics*, 89, 104088. <https://doi.org/10.1016/j.archger.2020.104088>
- Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck Depression Inventory-II [Data set]. In *PsycTESTS Dataset*. American Psychological Association (APA). <https://doi.org/10.1037/t00742-000>
- Brausch.A.M. & Gutierrez.P. M., (2009). The role of body image and disordered eating as risk factors for depression and suicidal ideation in adolescents.
- Cargill, B. R., Clark, M. M., Pera, V., Niaura, R. S., & Abrams, D. B. (1999). Binge Eating, Body Image, Depression, and Self-Efficacy in an Obese Clinical Population. *Obesity Research*, 7(4), 379–386. <https://doi.org/10.1002/j.1550-8528.1999.tb00421.x>
- Chaiton, M., Sabiston, C., O'Loughlin, J., McGrath, J. J., Maximova, K., & Lambert, M. (2009). A structural equation model relating adiposity, psychosocial indicators of

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

- body image, and depressive symptoms among adolescents. *International Journal of Obesity*, 33(5), 588–596. <https://doi.org/10.1038/ijo.2009.43>
- Choi, E., & Choi, I. (2016). The associations between body dissatisfaction, body figure, self-esteem, and depressed mood in adolescents in the United States and Korea: A moderated mediation analysis. *Journal of Adolescence*, 53, 249–259. <https://doi.org/10.1016/j.adolescence.2016.10.007>
- Cohane, G. H., & Pope, H. G. (2001). Body image in boys: A review of the literature. *International Journal of Eating Disorders*, 29(4), 373–379. <https://doi.org/10.1002/eat.1033>
- Dyl, J., Kittler, J., Phillips, K. A., & Hunt, J. I. (2006). Body Dysmorphic Disorder and Other Clinically Significant Body Image Concerns in Adolescent Psychiatric Inpatients: Prevalence and Clinical Characteristics. *Child Psychiatry and Human Development*, 36(4), 369–382. <https://doi.org/10.1007/s10578-006-0008-7>
- Forste, R., Potter, M., & Erickson, L. (2017). Sad and lonely: body dissatisfaction among adolescent girls. *International Journal of Adolescent Medicine and Health*, 31(2). <https://doi.org/10.1515/ijamh-2016-0157>
- Garner, D. M., & Garfinkel, P. E. (1979). The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. *Psychological Medicine*, 9(2), 273–279. <https://doi.org/10.1017/s0033291700030762>
- Grilo, C. M., & Masheb, R. M. (2005). Correlates of body image dissatisfaction in treatment-seeking men and women with binge eating disorder. *International Journal of Eating Disorders*, 38(2), 162–166. <https://doi.org/10.1002/eat.20162>
- Kim, J.-H., & Lennon, S. J. (2007). Mass Media and Self-Esteem, Body Image, and Eating Disorder Tendencies. *Clothing and Textiles Research Journal*, 25(1), 3–23. <https://doi.org/10.1177/0887302x06296873>
- Knauss, C., Paxton, S. J., & Alsaker, F. D. (2008). Body Dissatisfaction in Adolescent Boys and Girls: Objectified Body Consciousness, Internalization of the Media Body Ideal, and Perceived Pressure from Media. *Sex Roles*, 59(9–10), 633–643. <https://doi.org/10.1007/s11199-008-9474-7>
- Koenig, L. J., & Wasserman, E. L. (1995). Body image and dieting failure in college men and women: Examining links between depression and eating problems. *Sex Roles*, 32(3–4), 225–249. <https://doi.org/10.1007/bf01544790>
- Levine, M. P. (2012). Loneliness and Eating Disorders. *The Journal of Psychology*, 146(1–2), 243–257. <https://doi.org/10.1080/00223980.2011.606435>
- Littleton, H. L., Axsom, D., & Pury, C. L. S. (2005). Development of the body image concern inventory. *Behaviour Research and Therapy*, 43(2), 229–241. <https://doi.org/10.1016/j.brat.2003.12.006>
- Manaf, N. A. (2016). The Prevalence and Inter-Relationship of Negative Body Image Perception, Depression, and Susceptibility to Eating Disorders among Female Medical Undergraduate Students. *Journal of clinical and diagnostic research*. <https://doi.org/10.7860/jcdr/2016/16678.7341>
- Pritchard, M. E., & Yalch, K. L. (2009). Relationships among loneliness, interpersonal dependency, and disordered eating in young adults. *Personality and Individual Differences*, 46(3), 341–346. <https://doi.org/10.1016/j.paid.2008.10.027>
- Rosenberg, M. (1989). *Society and the adolescent self-image*. revised edition. Middletown, CT: Wesleyan University Press.
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure. *Journal of Personality Assessment*, 66(1), 20–40. https://doi.org/10.1207/s15327752jpa6601_2

To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults

- Şanlıer, N., Türközü, D., & Toka, O. (2016). Body Image, Food Addiction, Depression, and Body Mass Index in University Students. *Ecology of Food and Nutrition*, 55(6), 491–507. <https://doi.org/10.1080/03670244.2016.1219951>
- Santos, M., Steven Richards, C., & Kathryn Bleckley, M. (2007). Comorbidity between depression and disordered eating in adolescents. *Eating Behaviors*, 8(4), 440–449. <https://doi.org/10.1016/j.eatbeh.2007.03.005>
- Shetty. J. (2018). Assessment of Body Image and Self Esteem among Young Adolescents. *International journal of scientific research*. https://www.researchgate.net/publication/329118280_Assessment_of_Body_Image_and_Self_Esteem_among_Young_Adolescents
- Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image*, 2(2), 129–135. <https://doi.org/10.1016/j.bodyim.2005.03.006>
- van den Berg, P. A., Mond, J., Eisenberg, M., Ackard, D., & Neumark-Sztainer, D. (2010). The Link Between Body Dissatisfaction and Self-Esteem in Adolescents: Similarities Across Gender, Age, Weight Status, Race/Ethnicity, and Socioeconomic Status. *Journal of Adolescent Health*, 47(3), 290–296. <https://doi.org/10.1016/j.jadohealth.2010.02.004>
- Vanhalst, J., Luyckx, K., Scholte, R. H. J., Engels, R. C. M. E., & Goossens, L. (2013). Low Self-Esteem as a Risk Factor for Loneliness in Adolescence: Perceived - but not Actual - Social Acceptance as an Underlying Mechanism. *Journal of Abnormal Child Psychology*, 41(7), 1067–1081. <https://doi.org/10.1007/s10802-013-9751-y>
- Zinovyeva, E. V., Kazantseva, T. V., & Nikonova, A. N. (2016). Self-esteem and Loneliness in Russian Adolescents with Body Dissatisfaction. *Procedia - Social and Behavioral Sciences*, 233, 367–371. <https://doi.org/10.1016/j.sbspro.2016.10.160>

Acknowledgement

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: Pooja & Kakkar S. (2020). To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults. *International Journal of Indian Psychology*, 8(4), 393-405. DIP:18.01.048/20200804, DOI:10.25215/0804.048