

Body Image Perception, Self Esteem and Eating Behaviour among Adolescents

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ABSTRACT

Introduction: Body image concerns are increasing day by day in adolescents. Body image perception, self-esteem and eating behaviour among adolescents is related with each other. Body Image perception is divided into Affective and behavioural body image perception.

Objective: To assess body image perception, self-esteem and eating behaviour among adolescents.

Methodology: Total 65 children in the age group of 13-16 years were selected by Simple Random Sampling from a selected school.

Results: Out of 65 adolescents the least satisfaction was seen in body build, only 31 (47.69%) of adolescents were satisfied with body build, followed by satisfaction with over all look in photographs (56.92%). Out of 65 adolescents 43 (66.15%), 42 (64.61%) were satisfied with their weight and height respectively. As per behavioural perception of body Image 8 (12.30 %), 37 (56.92), 17 (26.15), 03 (04.61) were highly satisfied, satisfied, uncertain and dissatisfied with their body image respectively. All adolescents had high self-esteem. As per eating behaviour, 07 (10.77%) adolescents had normal eating behaviour and 58 (89.23%) had disordered eating behaviour. In contributing factors, family members tease the adolescents for their weight, height and appearance, adolescents prefer to look like their favourite celebrities and some adolescents were being teased by their peer group for their weight, height and appearance.

Conclusion: Body image dissatisfaction is present in adolescents, eating pattern is also disordered.

Keywords: [Adolescents, Body Image Perception, Self-esteem, eating behaviour]

INTRODUCTION

Adolescence is a period of life during which important body changes take place that are determined by pubertal development, the various physical and psychological changes that occur at this time can influence their perceptions of and satisfaction with body image. These both are the key elements in the development of self-esteem and social adjustment among adolescents (Gatti E et al 2014).¹

Body image concerns have become gradually universal in the last few decades (Leavy and Poorani 2012).² Body image is the dynamic perception of one's body –how it looks, feels and move. It is shaped by perception, emotions, and physical sensations and is not static but can change in relation to mood, physical experience and environment. Body image is influenced strongly by self-esteem and self-evaluation more so than by external evaluation by others (Stang J and story M 2005).³ A person is said to be suffering from poor body image when he/she focus on the negative or imaginary negative aspects related to own body or its competence to the

total exclusion of positive aspects (Deshmukh VR and Kulkarni A 2017).⁴

There are two components of body image. The perceptual component refers to the mental representation of our own body and its characteristics. The attitudinal component refers to the feelings one has about his body and physical appearance (Knafo H 2016).⁵

Research indicated that between 50-88% of adolescent girls feel negatively about their body shape or size while 49% teenage girls say they know someone with an eating disorder.⁶⁻⁷ Furthermore, only 33% of girls say they are the right weight for their bodies, while 58% wants to lose weight. In comparison to males, females are much more likely to think their current size is too large (66% versus 21%) at least in part because they are exposed to thin models on television, magazines and movies.⁸⁻⁹

Another study reported that more than half (60.1 %) of the students were dissatisfied with their body image. Overweight and obese students had higher body image dissatisfaction (79.6%) compared to students with normal weight (51.7%) or underweight students (57.6%). Among students with normal BMI only 48.3% were satisfied with their current body image. Female students had higher body image dissatisfaction (66.1%) compared to male students (52%) (Latiff Azmira et al 2018).¹⁰

As per as age is concerned studies have documented high prevalence of body image dissatisfaction in all age groups of the population, especially among female adolescents. (Lampard AM et al 2014).¹¹

Body image perception is influenced by social and cultural factors. Since childhood television, bill boards, movies, music videos, video games, computer games, toys, the internet and magazines play an important role for convey of ideal attractiveness, beauty, shape, size, strength and weight. (Stang J and story M 2005).³

The typical adolescent lives in a media rich environment. Although they watch less television than their younger peers, their media consumption or screen time often is

greater, because adolescents use a variety of media with great frequency (Brown JD and Witherspoon EM 2002).¹² According to a research adolescents watch an average of 28 hours of television per week and spend 900 hours a year in school and 1023 hours a year watching television, 11.8 hours per day of media use of all kinds. Moreover, children view 20,000 commercials per year (Facts and figures about our TV habits).¹³ and 75% of adolescents spend at least 6 hours a week watching music videos (Television viewing study).¹⁴ Teen magazines, either in print or online, are extremely popular with adolescent boys and girls (Carr D).¹⁵

Familial concerns and pressures also contribute to increased body dissatisfaction and body image concerns. Socialization encourages males to strive to become stronger and more developed, while females are to make their bodies more beautiful. Parents tend to become less positive and more critical regarding their children's appearance, eating and physical activity as they move into and through adolescence. Adolescents receive the most criticism regarding their physical appearance and the most efforts to change their appearance (Striegel –More RH 1994)¹⁶. All these contributing factors have similar outcomes. (Stang J and story M 2005).³

Another important factor that effect self-perception and body satisfaction during pubertal development is body mass index (Grogan S and Richards H 2002).¹⁷ BMI seems to be positively correlated with body image perception in female adolescents (Braco LM and Eid sdottin).¹⁸

Studies have focused on the relationship between body image and self-esteem during adolescence. Most of these studies suggest that girls are more vulnerable than boys to physical changes, this vulnerability tends to turn into a greater level of body and weight dissatisfaction, which reflect low self-esteem (Brunet J et al 2010).¹⁹ This dissatisfaction was more in females as compare to males (Ciuluvica CA et al).²⁰ Another important factor is age as far as body dissatisfaction and self-esteem is

concerned. Adolescents who are in early stage are more satisfied with their physical appearance and their weight, as they achieve more scores in self-esteem as compare to those who are in middle of their adolescence (Boodman SG 2004).²¹

The lower or more negative one's body image, the lower his or her self-esteem. (Jung Lee 2006).²² In addition, the more optimistically one feels about his or her own appearance, the more optimistically he or she will feel about him or herself overall. It is the perception of appearance that leads to their body image and subsequently self-esteem. There is incongruence between one's perception of his/her body and his or her ideal figure. (Boyes, Fletcher & Latner 2007).²³ The greater the incongruence the more likely a person is to have lower self-esteem (Bessenoff 2006).²⁴ The overwhelming dissatisfaction with body shape and weight that is experienced by adolescents is not solely a cognitive perception or observation but often is linked with one of the two extremes in weight related disorders that is obesity and disordered eating (Dunkley TL et al 2001).²⁵ The prevalence of eating disorders has increased over the last 50 years (Lucas AR).²⁶ A large number to girls, including those with normal weight have reported dieting and body dissatisfaction. (Emmons L 1992).²⁷

Studies show that approximately 30% of boys and over 55% girls report using unhealthy weight control methods such as vomiting, laxatives, diet pills, cigarette smoking and diuretics in effort to lose weight (Tammim H et al 2004).²⁸ Another study reported that the overall prevalence of students trying to lose weight was 30% with 71% of them being underweight or normal weight. Use of medication and inducement of vomiting constituted 12% and 11% (Muisse AM et al 2003).²⁹ Anorexia nervosa involves 0.5% to 1% of girls and women in late adolescence and early adulthood and bulimia nervosa affects 1% to 3% of adolescents (Emans SJ 2000).³⁰ Eating disorders often occur in conjunction with

other problems, such as anxiety disorders, depression and substance abuse. Women who have eating disorders experience serious morbidity and high mortality particularly as a result of anorexia nervosa (Hill and Pallin V 1998).³¹ On average girls believe that weight control is strongly associated with self-worth and view dieting as a means of improving self-worth (Taylor CB et al 1998).³² Teasing related to weight and shape is implicated as contributing factor for disordered eating behaviour (Alwan H et al 2011).³³ This study aims to better understand whether body image perception and satisfaction influence self-esteem among adolescents and its impact on eating behaviour.

The various contributing factors which effect the body image perception and satisfaction include media, family, peer group, socio-economic status, weight, age, and gender. An Asian study involving 13-14 year olds found that 78.1% were dissatisfied with their current body size, even though 50% of the students had normal BMI and those with high body image discrepancy scores were reported to be more likely to have higher BMI. Another study conducted with the use of figure rating scale among 14-16 year olds, 95% of female students tended to choose the silhouette representing 10% underweight as their ideal or desired body image. The overweight students showed significantly greater body image dissatisfaction.

Some similar studies have been carried out to study body image dissatisfaction. However, since cultural and environmental influence play significant roles in the development of body image dissatisfaction, local studies are needed to ascertain the prevalence of body image dissatisfaction among Indian adolescents. This study intends to determine the prevalence of body image dissatisfaction among adolescents and to identify the determinants that influence body image dissatisfaction in this population. Findings from this study may be useful in designing future interventions which may be incorporated into the school

syllabus to make adolescents aware of healthy body image so they are less easily influenced by the fad that the thin body is a best body size.

Problem Statement: Body Image Perception, Self Esteem and Eating Behaviour among adolescents.

Aim: To assess Body Image Perception, Self Esteem and Eating Behaviour among adolescents:

Objectives

1. To assess body image perception, self-esteem and eating behaviour among adolescents.
2. To find out the factors contributing to body image perception among adolescents.

MATERIALS & METHODS

Research approach

Quantitative research approach was used to conduct the study.

Research setting

The study was conducted in a selected school.

Target population

Target population for study was adolescents studying in selected school of city Ludhiana Punjab.

Sample

Adolescents in the age group of 13-18 years

Sample size

Sample size was 65

Sampling technique

Simple random sampling was used to select adolescents from the selected school.

Inclusion criteria & Exclusion criteria

Inclusion criteria

- Adolescents in the age group of 13-18 years.
- Adolescents and their parents who will give consent to participate in the study.

Exclusion criteria

- Adolescents who were absent in school on the day of data collection.

Description of research tool: The tool was divided into following parts:

Part 1 Socio-demographic profile of the adolescents:

Part 2 Body image perception questionnaire and Likert scale

A. Affective perception of body image

B. Behavioural perception of body image:

Part 3 Rosenberg self-esteem scale

Part 4 Eating behaviour scale

Part 5 Structured contributing factors assessment scale

Permission for the study

A written permission was taken from Principal of the selected school.

Ethical considerations

Ethical clearance was obtained from institutional ethical committee and formal permission was taken from school authorities.

STATISTICAL ANALYSIS

Descriptive statistics was used to find the frequency and percentage.

RESULT

Table 1: depicts the distribution of adolescents as per their socio-demographic variables. It shows that 66.2% of adolescents were in the age of 15-16 years, 61.5 % were females, 44.6% were younger child, 55.4 were studying in 9th standard, 40.0 % had very good academic performance in last academic session, 40.0 % had attendance between 81-90%, 52.3 % were Sikh, 29.2 % of mothers of adolescents were educated up to matriculation, 29.2 fathers of adolescents were educated up to Secondary level, 87.69 % of the adolescents were residing in Urban area, 78.5 % belonged to Nuclear family, 86.2 % of parents of adolescents were living together, BMI of 86.2 % of adolescents was normal.

Table 1: Frequency and percentage distribution of adolescents as per their socio-demographic characteristics: N=65

Variable	Frequency	Percentage
Age		
13-14	22	33.8
15-16	43	66.2
Gender		
Male	25	38.5
Female	40	61.5
Birth order		
Younger	25	44.6
Middle	11	16.9
Elder	29	38.5
Class/standard		
9 th	36	55.4
10 th	29	44.5
Academic performance (based on overall average marks obtained in the last academic year)		
Excellent (>80%)	25	38.5
Very Good (71-80%)	26	40.0
Good (61-70%)	12	18.5
Fair (51-60%)	01	01.5
Poor (<50%)	01	01.5
Attendance of last year		
>90%	25	38.5
81-90%	26	40.0
71-80%	12	18.5
61-70%	01	01.5
51-60	01	01.5
Religion		
Hindu	28	43.1
Muslim	01	1.5
Sikh	34	52.3
Christian	01	1.5
Others	01	1.5
Education of mother		
Illiterate	05	07.7
Elementary	11	16.9
Matriculation	19	29.2
Secondary	17	26.2
Graduate & above	13	20
Education of Father		
Illiterate	06	9.2
Elementary	10	15.4
Matriculation	17	26.2
Secondary	19	29.2
Graduate & above	13	20
Habitat		
Urban	57	87.69
Rural	08	12.31
Type of family		
Nuclear	51	78.5
Joint	12	18.5
Extended	02	03.1
Marital Relationship of parents		
Living together	56	86.2
Separated/Divorced	03	04.6
Widow/widower	06	09.2
BMI of adolescents		
Normal	43	66.2
Overweight	08	12.3
Obese	02	03.1
Underweight	12	18.5

Table 2: Distribution of adolescents as per the affective perception of body image N=65

Satisfaction with:	f (%)
Weight	43 (66.15)
Height	42 (64.61)
Complexion	54 (83.07)
Hair	56 (86.15)
Ears	64 (98.46)
Eye-brows	60 (92.30)
Eyelashes	61 (93.84)
Eyes	57 (87.69)
Nose	55 (84.61)

Cheek/cheek bones	62 (95.38)
Lips	59 (90.70)
Teeth	54 (83.07)
Neck	61 (93.84)
Chin	48 (73.84)
Shoulder	62 (95.38)
Breast/chest	53 (81.53)
Arms	60 (92.30)
Abdomen	60 (92.30)
Waist	55 (84.61)
Legs	61 (93.84)
Buttocks	58 (89.23)
Thighs	56 (86.15)
Feet	59 (90.76)
Muscle tone	56 (86.15)
Body scent	60 (92.30)
Body build	31 (47.69)
Over all body look	35 (53.84)
Look in photographs	37 (56.92)
Moustache*	11 (44.00)
Beard *	12 (48.00)

*n=25 (applicable to males only)

Table 2 depicts the satisfaction of adolescents with particular body part or features affective perception. It illustrates that out of 65 adolescents the least satisfaction was seen in body build, only 31 (47.69%) of adolescents were satisfied with body build, followed by satisfaction with over all look in photographs (56.92%). Out of 65 adolescents 43 (66.15%), 42 (64.61%) were satisfied with their weight and height respectively.

Table 3: Distribution of adolescents as per the behavioural perception of body image. N=65

Behavioural perception	Scores	f (%)
Highly satisfied	56-68	08 (12.30)
Satisfied	42-55	37 (56.92)
Uncertain	28-41	17 (26.15)
Dissatisfied	14-27	03 (04.61)
Highly dissatisfied	0-13	00 (00.00)

Table 3 depicts the behavioural perception of body image among adolescents, it shows that out of 65 adolescents 08 (12.30 %), 37 (56.92), 17 (26.15), 03 (04.61) were highly

satisfied, satisfied, uncertain and dissatisfied with their body image respectively.

Table 4: Distribution of adolescents as per their self-esteem. N=65

Self-esteem	Score	Pre-test f(%)
Low self-esteem	0-15	00
High self-esteem	<15	65 (100)

Table 4 depicts the self-esteem of adolescents, all adolescents had high self-esteem.

Table 5: Distribution of adolescents as per their eating behaviour N=65

Eating behaviour	Score	f (%)
Normal	>35	07 (10.77)
Disordered	0-35	58 (89.23)

Table 5 depicts the distribution of adolescents as per eating behaviour, 07 (10.77%) adolescents had normal eating behaviour and 58 (89.23%) had disordered eating behaviour.

Table 6: Distribution of adolescents as per factors contributing to Body Image Perception N=65

Sr no.	Item	Always f(%)	Sometimes f(%)
	Family environment		
1.	Family teased for weight	13(20)	13(20)
2.	Family teased for height	06(9.2)	18(27.7)
3.	Family criticized body features	09(13.8)	10(15.4)
4.	Family criticized body appearance	10(15.4)	07(10.8)
5.	Parents compared with other children in terms of appearance	09(13.8)	23(35.4)
6.	Parents told that girls look more beautiful if they have a feminine body Or Parents told that boys look more handsome if they have a masculine body	09(13.8)	17(26.2)
7.	Parents talked about my weight	05(7.7)	22(33.8)

Table 6 To Be Continued...			
8.	Parents talked about my height	10(15.4)	22(33.8)
9.	Parents talked about my appearance	08(12.3)	17(26.2)
10.	Relative(s) teased me because of my physical appearance	08(12.3)	08(12.3)
	<i>Social Media/celebrities</i>		
11.	Preferred to look like my favourite celebrity/ celebrities	21(32.3)	22(33.8)
12.	Followed certain beauty advertisements (products) to improve by body appearance	10(15.4)	20(30.8)
13.	Followed models on beauty advertisements.	09(13.8)	26(40)
14.	Actively engaged in social media for enhancing or improving body image	10(15.4)	19(29.2)
	<i>Peer group</i>		
15.	Peers excluded me from the group because of my appearance.	7(10.8)	10(15.4)
16.	Peers excluded me from the group because of my weight.	04(6.2)	9(13.8)
17.	Peers excluded me from the group because of my height.	5(7.7)	8(12.3)
18.	Peers teased me because of my appearance.	2(3.1)	11(16.9)
19.	Peers teased me because of my weight.	03(4.6)	10(15.4)
20.	Peers teased me because of my height.	04(6.2)	06(9.2)

Table 6 depicts the distribution of adolescents as per factors contributing to Body Image Perception, it shows that family members tease the adolescents for their weight, height and appearance, adolescents prefer to look like their favourite celebrities and some adolescents were being teased by their peer group for their weight, height and appearance.

DISCUSSION

This study reported that out of 65 adolescents the least satisfaction was seen in body build, only 31 (47.69%) of adolescents were satisfied with body build, followed by satisfaction with over all look in photographs (56.92%). Out of 65 adolescents 43 (66.15%), 42 (64.61%) were satisfied with their weight and height respectively. A study conducted by Azmira A et al. (2017) on 776 school students in Malaysia concluded that 60.1% students had body image dissatisfaction, females had 2.07 times higher rates of body image dissatisfaction ($p < 0.001$) compared to male counterparts. Over weight/obese students had 4.06 times greater body image dissatisfaction ($p < 0.001$) as compared to students with normal Body Mass Index (BMI).⁷

Present study reported that all the 65 adolescents had high level of self-esteem and disordered eating was found in 58 (89.23%) adolescents. The major contributing factors to body image perception are: adolescents being teased by family members, peer group and influence of social media and various celebrities.

CONCLUSION

Study concluded that few adolescents are dissatisfied with their body image and disordered eating pattern is also seen in them.

Declaration by Authors

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