

Attitude of Parents, Peers and Teachers towards Obese Teenagers

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ABSTRACT The present study was undertaken exclusively in Ludhiana city to assess the attitudes of parents, peers and teachers of obese and non obese teenagers towards obesity. The sample consisted of 160 adolescents (between 13 to 19 years of age), their parents (mothers: 80 and fathers: 80), randomly selected classmates (n: 80) and teachers (n: 40). Half of the sample (n: 80) consisted of randomly selected normal-weight teenagers, equally distributed over the two sexes (girls: 40 and boys: 40). The other half of the sample consisted of obese teenagers (n: 80), distributed equally over the two sexes (girls: 40 and boys: 40). Attitudes were evaluated by administering a scale prepared by Rudd Institute, Yale University (2004). The parents of obese boys were found to be more positive towards obesity than both parents of normal-weight teenage boys. Both parents of normal-weight girls were more and equally positive towards obesity than their counterparts of obese girls. Peers were the only group showing more of negative than positive attitudes towards obesity. Teachers were far more positive than peers and well matched the parents' groups in their positivity towards obesity. The overwhelming positive attitude towards obesity indicates acceptance of obesity in the present socio-cultural context.

INTRODUCTION

Obesity is defined as a condition of excess body fat and is associated with a large number of debilitating and life threatening disorders. The term "Obese" and "Overweight" are used often, interchangeably. Technically "Obesity" is the upper end of the "Overweight". Obesity is clinically diagnosed as greater than 90th percentile (age and sex specific) for weight for height. Obesity occurs when a positive balance develops between energy intake and expenditure (Passmore and Eastwood 1990). The WHO (1998) describes obesity as a complex condition, one with serious social and psychological dimensions that affect virtually all age and socio-economic groups and threatens both developed and developing countries.

Obesity has emerged as an epidemic in developed and developing countries during the last quarter of the 20th century affecting the high and middle income people at an alarming rate (Popkin and Doak 1998). In developed countries, levels of obesity are higher in low socio-economic groups but in developing countries this relationship is reversed. According to World

Health Organization (WHO), more than 1.2 billion people worldwide are classified as overweight and 250 million are classified as obese.

Obesity has reached epidemic proportion in the United States with more than 20 per cent of adults defined as clinically obese and an additional 30 per cent defined as overweight. This prevalence has nearly tripled from 5.0 to 15.5 per cent for adolescent in past two decades (Broussard et al. 1995). Obesity levels range from below 5 per cent in China and Japan to more than 75 per cent in urban Somalia. A recent study assessed the prevalence of obesity among school children (7-9 years old), in India that revealed 6.22 per cent of the children were obese and 8.24 per cent were overweight. The prevalence of obesity has risen dramatically in developed countries over the past two to three decades (Benjamin 2001).

A number of factors have been linked to obesity, including genetics, dietary pattern, parent-child relationship, television viewing, level of physical activity, transition from rural to urban life style etc. It is thought that genes are responsible for between 25-40 per cent of all cases of obesity, while the rest is largely determined by environmental factors. The genetic susceptibility to obesity may, in fact, be higher in some ethnic groups such as Pima Indians, but changes in environmental factors are crucial in promoting obesity.

Obesity has social, psychological and emotional consequences besides negative physical

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and economic consequences. There is evidence of stigmatization of obese people in multiple domains (Puhl and Brownell 2001). The most immediate consequences of being over-weight/obese during childhood and adolescent are psychosocial.

Given the strong bias towards obese people, a plausible explanation is that obese individuals are treated as if they are deficient because of weight stigma, which gets enacted in prejudice and discrimination. Attitude towards obesity is a concern to most people in society today, especially those who are unhappy with their body appearance. Society's demands for slenderness have caused many stereotypes towards obesity to appear (Farrington 1997). Educators can hold negative anti-fat attitude that may affect perception of performance among obese students (Neumark-Sztainer et al. 1999). Self-fulfilling prophecies may then occur in which obese individuals behave in ways consistent with stereotype. In this context, the present study is an attempt to explore the attitudes of parents, peers and teachers towards teenagers' obesity.

METHODOLOGY

Sample: The subjects for the present study were drawn from class VIII to XII of randomly selected ten Public Schools of Ludhiana city so as to control socio-economic (middle/upper middle) status. The sample consisted of 160 teenagers (between 13 to 19 years of age), their parents (mothers: 80 and fathers: 80), randomly selected peers (n: 80) and teachers (n: 40). Half of the teenagers' sample (n: 80) consisted of randomly selected normal weight teenagers, equally distributed over the two sexes (girls: 40 and boys: 40). The other half of the sample consisted of obese teenagers (n=80), distributed equally over the two sexes (girls: 40 and boys: 40). The sample was evenly distributed by age and sex. The normal-weight teenagers had their Body Mass Index (BMI) ranging between 18.5-22.9, whereas, obese teenagers had their BMI range from 27.5 to ≥ 40 . Both types of teenagers had siblings and both parents alive and they lived with their family of origin.

Procedure: Socio-economic status scale by Bhargadwaj (1971) was used to ascertain the socio-economic status of the respondents. Attitude of parents, teachers and peers towards obesity was assessed by using a six point (strong-

ly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree and strongly agree) rating scale (designed by the Rudd Institute at Yale University 2004), consisting of 20 items. It has both positive and negative worded items. Each subject was measured for his/her weight and height following standard methods as given by Jelliffe (1966) for calculation of Body Mass Index (BMI).

RESULTS AND DISCUSSION

Most of the boys' fathers were post-graduates (obese: 47.5%; normal-weight: 35%) followed by graduates and senior secondary. Fathers of obese girls were mostly graduate (37.5%) or post-graduate (37.5%) and that of normal girls were senior secondary pass (32.5%) followed by graduates (25%) and post-graduates (25%); no father was reported to be under matriculation. More of the mothers were matriculates, senior secondary or graduate. Only two mothers in the sample were under matriculation.

(a) Attitudes of Parents of Obese and Normal Weight Boys

It is observed from Tables 1 and 2 that fairly large number of parents of obese and normal weight boys expressed that 'obese people are as happy as non-obese'. Majority of the parents, especially mothers of normal-weight boys (90%) felt that 'the most obese people are more self-conscious', but many of the fathers of obese boys (67%) did not share these feelings. Majority of the parents (82.50% Mothers and 75% Fathers) of normal-weight boys and obese boys' parents (Mothers: 70% and Fathers: 75%) agreed that 'most obese people are not dissatisfied with themselves'. Majority of parents of both normal-weight and obese boys also agreed that obese people are 'just as self confident as other people'. Large numbers of mothers of normal-weight boys (80%) and obese boys (70%) disagreed that 'obese people are less aggressive than non-obese people'. Similar kind of attitude was expressed by 75% of fathers of obese boys and 50% fathers of normal-weight teenagers. Relatively large number of parents of obese teenager boys and fathers of normal-weight teenager boys agreed that 'obese are usually ashamed of their weight'. However, majority of mothers of normal-weight teenager boys disagreed with this.

Table 1: Attitudes towards obesity of parents, peers and teachers of obese and normal-weight teenage boys and girls expressed as their percentage distribution of positive (+ve) attitudes as per attitude items

S. No.	Attitude items	Family associates								Extra family associates	
		Mothers				Fathers				Peers	Teachers
		+ve attitudes among percent of				+ve attitudes among percent of				Per-cent-age of +ve atti-tudes	Per-cent-age of +ve atti-tudes
		MOB	MOG	MNB	MNG	FOB	FOG	FNB	FNG		
1.	Obese people are happy as non obese	97.50	97.50	95.00	90.00	97.50	95.00	100.0	92.50	68.75	65.00
2.	Most obese people feel they are not as good as other people	47.50	50.00	2.50	42.50	55.00	55.00	7.50	10.00	38.75	67.50
3.	Most obese people are more self-conscious as other	60.00	7.50	90.00	15.00	32.50	32.50	72.50	17.50	30.00	77.50
4.	Obese workers can not be as successful as other workers	50.00	62.50	17.50	65.00	57.50	67.50	17.50	82.50	42.50	37.50
5.	Most non obese people would not want to any one who is obese	32.50	32.50	5.00	70.00	42.50	45.00	45.00	72.50	45.00	80.00
6.	Severely obese people are untidy	65.00	67.50	95.00	85.00	60.00	65.00	90.00	75.00	55.00	45.00
7.	Obese people are usually social able	60.00	82.50	27.50	90.00	70.00	90.00	55.00	87.50	81.25	97.50
8.	Most obese are not dissatisfied with themselves	70.00	72.50	82.50	80.00	75.00	70.00	90.00	77.50	72.50	75.00
9.	Obese people are just as self confident as other people	72.50	82.50	82.50	87.50	85.00	82.50	57.50	85.00	72.50	97.50
10.	Most people feel uncomfortable when they associate with obese people	70.00	87.50	25.00	80.00	75.00	72.50	25.00	40.00	47.50	90.00
11.	Obese people are less aggressive than non-obese people	30.00	45.00	20.00	80.00	27.50	47.50	50.00	60.00	71.25	37.50
12.	Most obese people have different personalities than non obese people	37.50	30.00	15.00	30.00	47.50	30.00	12.50	15.00	26.25	30.00
13.	Very few obese are ashamed of their weight	22.50	15.00	50.00	65.00	25.00	35.00	12.50	30.00	26.25	35.00
14.	Most obese people resent normal weight people	47.50	17.50	72.50	40.00	40.00	25.00	62.50	27.50	22.50	20.00
15.	Obese people are more emotional than non obese people	50.00	72.50	95.00	85.00	62.50	82.50	97.50	85.00	77.50	87.50
16.	Obese people should not expect to lead normal life	72.50	82.50	15.00	82.50	82.50	92.50	97.50	77.50	40.00	75.00
17.	Obese people are just as healthy as non-obese people	40.00	52.50	15.00	85.00	52.50	75.00	25.00	60.00	63.75	52.50
18.	Obese people are just as sexually attractive as non-obese	35.00	70.00	15.00	90.00	50.00	77.50	20.00	87.50	62.50	67.50
19.	Obese people tend to have family problems	75.00	40.00	70.00	20.00	57.50	32.50	72.50	52.50	45.00	52.50
20.	One of the worst thing that could happen to a person would be for him to become obese	67.50	37.50	80.00	7.50	72.50	50.00	17.50	52.50	38.75	10.00

MOB: mothers of obese boys; MNB: mothers of normal-weight boys; FOB: fathers of obese boys; FNB: fathers of normal-weight boys; MOG: mothers of obese girls; MNG: mothers of normal-weight girls; FOG: fathers of obese girls; FNG: fathers of normal-weight girls; P: normal-weight peers of obese teenagers; T: teachers of obese teenagers

Majority of the parents of normal-weight boys had positive attitude towards obese boys that as they felt that 'most obese people feel they are as good as other people' (Mothers: 97.50% and Fathers: 92.50%) and that 'obese workers can be as successful as other workers' (Mothers:

82.50% and Fathers: 82.50%). However, most of the parents of normal-weight boys did not consider that 'severely obese people are untidy' (Mothers: 95% and Father: 90%) and the same was expressed by most of the parents of obese boys.

Table 2: Attitudes towards obesity of parents, peers and teachers of obese and normal-weight teenage boys & girls expressed as their percentage distribution of negative (-ve) attitudes as per attitude items

S. No.	Attitude items	Family associates								Extra family associates	
		Mothers				Fathers				Peers	Teachers
		-ve attitudes among percent of				-ve attitudes among percent of				Per-cent-age of -ve attitudes	Per-cent-age of -ve attitudes
		MOB	MOG	MNB	MNG	FOB	FOG	FNB	FNG		
1.	Obese people are happy as non obese	2.50	2.50	5.00	10.00	2.50	5.00	0.00	7.50	31.25	35.00
2.	Most obese people feel they are not as good as other people	52.50	50.00	97.50	57.50	45.00	45.00	92.50	90.00	61.25	32.50
3.	Most obese people are more self-conscious as other	40.00	92.50	10.00	85.00	67.50	67.50	27.50	82.50	70.00	22.50
4.	Obese workers can not be as successful as other workers	50.00	37.50	82.50	35.00	42.50	32.50	82.50	17.50	57.50	62.50
5.	Most non obese people would not want to any one who is obese	67.50	67.50	95.00	30.00	57.50	55.00	55.00	27.50	55.00	20.00
6.	Severely obese people are untidy	35.00	32.50	5.00	15.00	40.00	35.00	10.00	25.00	45.00	55.00
7.	Obese people are usually social able	40.00	17.50	72.50	10.00	30.00	10.00	45.00	12.50	18.75	2.50
8.	Most obese are not dissatisfied with themselves	30.00	27.50	17.50	20.00	25.00	30.00	10.00	22.50	27.50	25.00
9.	Obese people are just as self confident as other people	27.50	17.50	17.50	12.50	15.00	17.50	42.50	15.00	27.50	2.50
10.	Most people feel uncomfortable when they associate with obese people	30.00	12.50	75.00	20.00	25.00	27.50	75.00	60.00	52.50	10.00
11.	Obese people are less aggressive than nonobese people	70.00	55.00	80.00	20.00	72.50	52.50	50.00	40.00	28.75	62.50
12.	Most obese people have different personalities than non obese people	62.50	70.00	85.00	70.00	52.50	70.00	87.50	85.00	73.75	70.00
13.	Very few obese are ashamed of their weight	77.50	85.00	50.00	35.00	75.00	65.00	87.50	70.00	73.75	65.00
14.	Most obese people resent normal weight people	52.50	82.50	27.50	60.00	60.00	75.00	37.50	72.50	77.50	80.00
15.	Obese people are more emotional than non obese people	50.00	27.50	5.00	15.00	37.50	17.50	2.50	15.00	22.50	12.50
16.	Obese people should not expect to lead normal life	27.50	17.50	85.00	17.50	17.50	7.50	2.50	22.50	60.00	25.00
17.	Obese people are just as healthy as nonobese people	60.00	47.50	85.00	15.00	47.50	25.00	75.00	40.00	36.25	47.50
18.	Obese people are just as sexually attractive as nonobese	65.00	30.00	85.00	10.00	50.00	22.50	80.00	12.50	37.50	32.50
19.	Obese people tend to have family problems	25.00	60.00	30.00	80.00	42.50	67.50	27.50	47.50	55.00	47.50
20.	One of the worst thing that could happen to a person would be for him to become obese	32.50	62.50	20.00	92.50	27.50	50.00	82.50	47.50	61.25	90.00

MOB: mothers of obese boys; MNB: mothers of normal-weight boys; FOB: fathers of obese boys; FNB: fathers of normal-weight boys; MOG: mothers of obese girls; MNG: mothers of normal-weight girls; FOG: fathers of obese girls; FNG: fathers of normal-weight girls; P: normal-weight peers of obese teenagers; T: teachers of obese teenagers

More mothers (Mothers of normal-weight boys: 95% and Mothers of obese boys: 67.50%) than fathers (Fathers normal-weight boys: 55% and Fathers of obese boys: 57.50%) expressed that 'most non-obese people would not want to marry with any one who is obese'.

Large number of both parents of obese and fathers of normal-weight teenager boys (except for mothers of normal-weight boys) felt that 'obese people are sociable'. Most of the parents of obese teenager boys felt that 'most people feel uncomfortable when they associate with ob-

ese people', whereas most of the parents of normal-weight teenager boys felt just the opposite. Majority of the parents, especially those of normal-weight boys (Mothers: 85% and Fathers: 87.50%) agreed that 'most obese people have different personalities than non-obese people'. Most of normal weight boys' parents held that 'most obese people resent normal weight people'.

Fairly large number of parents of both normal-weight and obese boys (except for fathers of obese boys) stated that 'obese people are just as healthy and sexually attractive as non-obese people'. Both the parents of obese boys and fathers of normal-weight boys mostly felt that 'obese people should not expect to lead normal life', however, most of the mothers of normal weight boys felt the other way. Most of all parents considered obesity the 'worst thing to happen' but most of the fathers of normal-weight boys did not endorse to this view.

(b) Attitudes of Parents of Obese and Normal-Weight Girls

Attitudes of parents of obese and normal weight girls towards obesity are shown in Tables 1 and 2. It is clear from the tables that most of the mothers of girls (Mothers of obese girls: 92.50% and Mothers of normal weight girls: 85%) agreed that 'most obese people are more self-conscious than others'. Very few mothers of obese girls (12.50%) felt that 'most people feel uncomfortable when they associate with obese people'. It means that majority of them (87.50%) held positive attitude towards obesity by disagreeing with the statement that 'most of the people feel uncomfortable when they associate with obese people'. Similarly, large proportion of obese girls' mothers agreed that 'most of the obese are ashamed of their weight' (85%); 'most obese people do not resent normal weight people' (82.50%); 'most obese people have similar personality as compared to non-obese people' (70%) and 'most non-obese people would want to associate with any one who is obese' (67.50%). These results are also supported by Irving (2000). More than half of the mothers of obese girls did not consider obesity as 'one of the worst things to happen to a person' (62.50 %) and that 'obese people tend to have family problem' (60%).

Most of the mothers of normal-weight girls did not agree that 'obese people are just as se-

xually attractive as non-obese' (90%) and 'as healthy (85%) as non-obese' and 'are more emotional than non-obese' (85%). Majority of other parents were also endorsing to these feelings.

Large number of mothers (80%) and fathers (60%) of normal-weight girls felt that 'obese people are less aggressive than non-obese'. Most of the fathers (80%) of normal weight girls expressed that 'most people feel uncomfortable when they associate with obese people'. Majority of other parents (60%) also had this view. Most of the parents of obese as well as normal-weight teenagers were of the view that 'obese people are as happy as non-obese', 'they are usually sociable', and are just 'as self confident as other people'. More than half of all the parents and large segment of fathers of normal-weight girls disagreed that 'obese workers cannot be as successful as other workers'. More than half of parents of obese girls and majority of mothers of normal-weight girls (80%) disagreed that 'obese people tend to have family problems'.

A large proportion of mothers of normal-weight girls (92.50%) and more than half of the mothers of obese girls held that 'obesity is worst thing to happen'. Most of all the parents agreed that 'severely obese people are untidy'.

Tables 1 and 2 also show the attitudes of peers and teachers towards obesity. Eighty peers and 40 teachers have voted out obesity as undesirable. Nevertheless, more than 80% peers and almost all the teachers found 'obese to be sociable and are more emotional'. Around 40% peers disagreed that 'to be obese is worst'. Almost all the teachers and more than 70% peers found 'obese to be confident and self-conscious'. Both the groups did not find 'obese to be ashamed of their weight' and considered them to be 'equally sexually attractive'.

(c) Proportion of Positive vs. Negative Attitudes Among Parents, Peers and Teachers

Table 3 presents Distribution of Percent of total scale items (20) expressing positive /negative attitudes towards obesity as per proportion (%) categories of family (parents) and extra family associates (peers and teachers). Sixty percent of the total twenty items of attitude assessment scale showed up positive attitude responses towards obesity among more than 60% of mothers and 70% fathers of obese boys whereas 40% and 30% of the items recorded re-

Table 3: Distribution of percentage of total scale items (20) expressing positive /negative attitudes towards obesity of parents, peers and teachers

Parents, peers and teachers	Positive attitudes	Negative attitudes
	(%age of equal to and more than 50% positive responses for each included item..... Table 1)	(%age of more than 50% negative responses for each included item.. Table 2)
<i>Parents of Teenage Boys</i>		
MOB	12 (60%)	8 (40%)
MNB	10 (50%)	10 (50%)
FOB	14 (70%)	6 (30%)
FNB	11 (55%)	9 (45%)
<i>Parents of Teenage Girls</i>		
MOG	12 (60%)	8 (40%)
MNG	14 (70%)	6 (30%)
FOG	13 (65%)	7 (35%)
FNG	14 (70%)	6 (30%)
<i>Extra Family Associates</i>		
Peers	9 (45%)	11 (55%)
Teachers	13 (65%)	7 (35%)

MOB: mothers of obese boys; MNB: mothers of normal-weight boys; FOB: fathers of obese boys; FNB: fathers of normal-weight boys; MOG: mothers of obese girls; MNG: mothers of normal-weight girls; FOG: fathers of obese girls; FNG: fathers of normal-weight girls.

sponses of negative attitude, respectively. Similarly 60% and 65% items were responded for the positive attitude towards obesity by mothers and fathers of obese teenage girls, respectively. Relatively, lesser percentage of items, that is, 50% for mothers and 55% for fathers of normal-weight teenage boys had responded their positive attitude towards obesity. However, the corresponding percentage of items showing positive attitude towards obesity in case of both mothers and fathers of normal-weight teenage girls was relatively greater (70% for both parents) than their counterparts of obese teenagers. On the other hand, 50% and 45% of items responded for the negative attitudes of mothers and fathers, respectively, of normal-weight boys and normal-weight girls emerged as the most conspicuous group among all the groups of parents in showing 45% and 40% of items marking negative attitudes towards obesity. Among the extra family associates, only 45% items showed up the positive attitude among peers as against the 55% items showing negative attitudes, thus making this group to top all others in showing negative attitudes towards obesity. Teachers, on the other hand, were quite positive towards obesity as in

their case 65% items were responded for the positive attitude towards obesity.

Attitudes toward obesity are culturally and socially shaped. Across racial and ethnic populations perspectives differ, therefore, obese people have more or less latitude and stigma depending on the socio-cultural context. In the United States, there is a strong cultural anti-fat bias. Manifestations of overweight/obesity are considered a moral failure but among individuals in different populations there is less or more bias attached to obesity (Crocker et al. 1993; Devlin et al. 2000; Helb and Turchin 2005; Teachman et al. 2003).

The positive attitudes towards obese teenagers commonly held by all parents, peers and teachers of the present study include that 'they are as happy as non-obese'; 'obese are not untidy'; 'most obese are not dissatisfied with themselves' and 'obese can expect to lead a normal life' etc. Earlier reports of associating obesity with untidiness could not be confirmed by the present findings. Similarly, parents did not find 'obese to be ashamed of their weight' and considered them to be 'equally sexually attractive'. Similar results have been reported by Neumark-Sztainer et al. (1999). There was overwhelming disagreement with the statement that 'obese workers cannot be as successful as other workers'. Maroney and Golub (1992) reported negative attitudes commonly held about obese adolescents such as 'obese are over indulgent', 'lazy and are less successful than their average-weight counterparts' could not be confirmed by the present study. More mothers than fathers in the present study expressed that 'most non-obese people would not want to marry with any one who is obese'. The groups of the present study did not find 'obese to be ashamed of their weight' and considered them to be 'equally sexually attractive'. These results are in conformity with the findings of Neumark-Sztainer et al. (1999).

In the present study a positive pattern of attitudes towards obesity has been observed across all the four groups of parents with whom the obese teenagers interact daily. The parents of obese boys were found to be more positive towards obesity than both parents of normal-weight teenage boys. The reverse of this was found among teenage girls' parents, where, both parents of normal-weight girls were more and equally positive towards obesity than their co-

untherparts of obese girls. Peers were the only group showing more of negative than positive attitudes towards obesity. Teachers were far more positive than peers and well matched the parents' groups in their positivity towards obesity. The overwhelming positive attitude towards obesity was expressed by all closely interacting human components of obese teenagers' environment thereby indicating acceptance of obesity in the present socio-cultural context. Acceptance of obesity might have a positive role to play in the psychological well-being of the obese individuals but at the same time it may induce inaction by the parents and the individuals to take essential measures to combat the overweight/obese condition. Therefore, parents need to be involved in obesity prevention programmes at the school level by involving pediatricians and other health care professionals to facilitate parental awareness of health related risks of obesity.

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