Original Research Article

Body shaming among school-going adolescents: prevalence and predictors

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ABSTRACT

Background: The transition from childhood to adulthood is marked by dramatic physical, mental, sexual, psychological and social developmental changes. These tumultuous years can have long term consequences for the individual, especially when it comes to mental health. Body shaming, weight shaming or appearance-based harassment can be described as the act of mocking or humiliating someone based on their physical appearance. It often leads to low self-esteem, low body dissatisfaction, and depressive symptoms, which is consistent with the growing body of work emphasizing the harmful role of appearance-based harassment among youth. The objectives of the study were to estimate the prevalence of body shaming among school-going adolescents and to assess the distribution and relationship of body shaming with various factors.

Methods: A cross-sectional study was conducted in 4 schools of Lucknow with 200 participants from each school. They filled anonymous self-administered questionnaires and as a part of the study their height and weight measurements were also taken. Multi-stage random sampling was done to select the sample population from classes 9th to 12th.

Results: A total of 44.9 percent (n=359) participants responded to have been body shamed at least once in the past one year. It is maximum among boys in co-ed schools and least among girls in single-gender schools.

Conclusions: The prevalence observed in the present study is higher than global reports, thus drawing attention to the need for similar studies on the subject.

Keywords: Body shaming, Weight shaming, Adolescent health

INTRODUCTION

WHO defines 'adolescents' as individuals in the 10 to 19 years age group.¹ The transition from childhood to adulthood is marked by dramatic physical, mental, sexual, psychological and social developmental changes. These tumultuous years can have long term consequences for the individual, especially when it comes to mental health. The adolescents must learn how to cope with psychological stress of growing up, deal with emotions, resolve conflicts, and handle peer pressure.¹

Adolescence is also the phase where the individual grows overtly conscious about their looks and outside appearance. Body shaming, weight shaming or Appearance-based harassment can be described as the act of mocking or humiliating someone based on their physical appearance.² With the advent of the ‘influencers’
concept in social media and rampant preaching about the way one should look, adolescents, in this impressionable yet immature age, are more and more getting sucked into the idea of the ‘ideal body’. This invariably leads to anyone who does not conform to this image, being shamed on their looks. This influence may further lead to unhealthy expectations of body shape among adolescents, in themselves and in others, which may in turn account for some teasing of healthy weight young people who do not conform to the cultural ideals. The role of exposure to idealized body images in the media in teasing, being teased, and possible psychosocial outcomes has yet to be explored in the scientific literature.3

Body shaming often leads to low self-esteem, low body dissatisfaction, and depressive symptoms, which is consistent with the growing body of work emphasizing the harmful role of appearance-based harassment among youth.4,5 Previous studies have linked shame to poor psychological health, for an example depression.1,6 Furthermore, shame is also related to poor physical health, indicative of deregulations of the immune system.7

Globally, the prevalence of body shaming was found to be in the range of 25 to 35 percent.5,8 The absence of research in this field in India is worth drawing attention to. This study, therefore fills the gap in the understanding of body shaming in the Indian context.

Objectives

The objectives of the study were to estimate the prevalence of body shaming among school-going adolescents and to assess the distribution and relationship of body shaming with various factors.

METHODS

Study area

The study was conducted in Lucknow, Uttar Pradesh.

Study period

The study was conducted from September 2018 to August 2019. Three months of the study period was utilized for review of literature, development of interview schedule and pilot testing, six months for data collection and remaining three months for data compilation, analysis and thesis writing.

Study universe

The study universe consists of “adolescents” as defined by WHO, as “the individuals in the age group of 10 to 19 years and it is a phase rather than a fixed time period in an individual’s life”. The phase of development on many fronts: from the appearance of secondary sexual characters to sexual and reproductive maturity; the development of mental processes and adult relative independence. Adolescents are not a homogeneous group and hence their needs vary with their age, sex, stage of development, life circumstances and the socio-economic conditions of their environment and accordingly are classified into 3 stages namely; early adolescence was 10 to 14 years, middle adolescence was 15 to 17 years and late adolescence was 18 to 19 years.

Study population

Adolescents enrolled in 9th to 12th standard in a school during the academic year 2018-19.

Study unit

Individual school going adolescent.

Study setting

Schools in the study district of Lucknow having classes from 9th to 12th standards.

Inclusion criteria

Pupils enrolled in classes 9th to 12th in any government or private school, pupils willing to participate in the study and giving assent were included.

Exclusion criteria

Uncooperative pupils were excluded in this study.

Sample size estimation

Keeping an exfoliation rate of 10%, prevalence (p) as 32%, margin of error 7%, and confidence interval 95%, a sample size of 200 was calculated for each participating school.9

Pre-testing of the questionnaire

The designed questionnaire was pretested on 10% of the total sample. Relevant modifications were made in the schedule to overcome the difficulties faced during pre-testing.

Ethical clearance

Owing to ethical consideration, permission was obtained from the Institutional Ethical Committee of the King George’s Medical University UP, Lucknow before commencing of the study (Ref. code: 93rd ECM II-B Thesis/P39).

A comprehensive list of all the secondary schools registered with the Department of Education, Lucknow was drawn. They were stratified into girls, boys, and co-
ed and 1 each from the single gender schools and 2 schools from co-ed were randomly selected.

Within the schools, the participants were selected from classes 9th to 12th. Further, systematic random sampling was done after probability proportionate to size sampling to select the participants from each class. Prior permission and informed consent was taken from the principal and assent forms signed by the participants. They were gathered in a room and were briefed about body shaming and its various aspects.

After assuring them about total confidentiality, they were handed out the questionnaires and their heights and weights were measured.

**RESULTS**

Out of the total 800 students who participated, 44.9% (n=359) reported facing body shaming in the last academic year (Table 1). Most of the victims reported to having faced this form of harassing behaviour only sometimes (45.2%), with about 6.7% (n=24) reported facing body shaming as ‘always’ (Table 2).

### Table 1: Distribution of adolescents according to body shaming victimization.

| Body shaming | Single-gender school | Co-ed school | Total (n=800) |
|--------------|----------------------|--------------|--------------|
|              | Boys (n=200)         | Girls (n=200) | Boys (n=246) | Girls (n=154) | No. % | No. % | No. % | No. % |
| No           | 108 54.0 143         | 71.5 111 45.1| 79 51.3      | 441 55.1      | 92 46.0 57 | 23.5 135 54.9 | 75 48.7 359 | 44.9 |

### Table 2: Distribution of adolescents who reported body shaming victimization.

| Adolescent reports of body shaming | Single-gender school | Co-ed school | Total (n=354) |
|-----------------------------------|----------------------|--------------|--------------|
|                                   | Boys (n=90)          | Girls (n=57) | Boys (n=132) | Girls (n=75) | No. % | No. % | No. % | No. % |
| Rarely                            | 17 18.9 16           | 28.0 56 42.4| 22 29.3      | 111 31.4      | 6 6.7 4 | 7.0 11 8.3 | 3 4.0 24 | 6.7 |
| Sometimes                         | 56 62.2 25           | 43.9 45 34.1| 34 45.3      | 160 45.2      | 11 12.2 12 | 21.1 20 15.2 | 16 21.4 59 | 16.7 |
| Often                             | 11 12.2 12           | 21.1 20 15.2| 16 21.4      | 59 16.7       | 6 6.7 4 | 7.0 11 8.3 | 3 4.0 24 | 6.7 |
| Always                            | 6 6.7 4              | 7.0 11 8.3  | 3 4.0 24   | 6.7 |

### Table 3: Distribution of body shaming according to gender and school type.

| Gender | Body shaming | Present (%) | Absent (%) | P value |
|--------|--------------|-------------|------------|---------|
| Boys   | Single-gender| 93 (46.5)   | 109 (53.5) | 0.050   |
|        | Co-ed        | 135 (54.8)  | 111 (45.2) |         |
| Girls  | Single-gender| 57 (28.5)   | 143 (71.5) | <0.001  |
|        | Co-ed        | 75 (48.7)   | 79 (51.3)  |         |

### Table 4: Relation between body shaming with physical and social characteristics.

| Characteristics       | Boys school (n=200) | Girls school (n=200) | Co-ed school (n=400) | P value |
|-----------------------|---------------------|----------------------|----------------------|---------|
|                      | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) | Body shamed | N (%) |
| **BMI**               |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |
| Below normal          | 53 (50.5)| 52 (49.5) | 0.573 | 72 (80.9) | 17 (19.1) | 0.003 | 74 (50.3) | 73 (49.7) | 0.008 |
| Normal                | 39 (58.2)| 28 (41.8) |        | 54 (70.1) | 23 (29.9) |        | 87 (52.7) | 78 (47.3) |        |
| Above normal          | 16 (57.1)| 12 (42.9) |        | 17 (50.0) | 17 (50.0) |        | 29 (33.0) | 59 (67.0) |        |
| **Feeling about school** |    |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |
| Like                  | 94 (54.0)| 80 (46.0) | 0.987 | 137 (71.45)| 55 (28.6) | 0.823 | 146 (53.1)| 129 (46.9)| <0.001 |
| Dislike               | 14 (53.8)| 12 (46.2) |        | 6 (75.0)  | 2 (25.0)  |        | 44 (35.2) | 81 (64.8) |        |
| **Number of close friends** |       |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |        |            |
| None                  | 8 (80.0)| 2 (20.0)   |        | 8 (80.0)  | 2 (20.0)  |        | 7 (39.0)  | 11 (61.0) |        |
| 1                     | 5 (20.0)| 20 (80.0)  | <0.001 | 22 (65.0) | 12 (35.0) | 0.395 | 47 (44.0) | 59 (56.0) | 0.012 |
| 2-3                   | 17 (44.0)| 22 (56.0) |        | 34 (65.0) | 18 (35.0) |        | 37 (45.0) | 46 (55.0) |        |
| 4-5                   | 26 (57.0)| 20 (43.0) |        | 22 (65.0) | 12 (35.0) |        | 47 (44.0) | 59 (56.0) |        |
| >5                    | 52 (65.0)| 28 (35.0) |        | 66 (74.0) | 23 (26.0) |        | 85 (58.0) | 62 (42.0) |        |
Statistically significant association was found between the type of school and body shaming among both the genders. For both the genders, body shaming reports were higher from co-ed schools (Table 3).

In the associations of body shaming with physical and social characteristics (Table 4), it is seen that in case of boys, those whose body mass index (BMI) was below normal faced more harassing behaviour than others. While for girls and respondents from co-ed schools those whose BMI was above normal faced more harassing behaviour than others.

Multiple logistic regression analysis was used to compute predictors of body shaming using various study variables (Table 5). In boys-school it was found that a height of more than 160 cm and a friend circle of more than or equal to 4 friends were protective against body shaming, while a higher than normal BMI made one more prone to face body shaming. In co-ed schools, those whose BMI was higher than normal were twice as prone to being victims of body shaming than their counterparts, and in girls school those whose weight was more than 50 kg were four times more likely to be body shamed than those who weighed less than 50 kg.

### Table 5: Multiple logistic regression analysis of predictors for body shaming.

| Variable                      | Univariate analysis | Multivariate analysis |
|-------------------------------|---------------------|-----------------------|
|                               | Unadjusted OR (95% CI) | P value           | Adjusted OR (95% CI) | P value |
| Boys school                   |                     |                      |
| Height (in cm)                |                     |                      |
| ≤160                          | Reference           |                      |
| >160                          | 0.466 (0.262-0.830) | 0.009                | 0.472 (0.262-0.850) | 0.012   |
| BMI                           |                     |                      |
| Normal/underweight            | Reference           |                      |
| Overweight/pre-obese/obese    | 1.863 (0.385-3.341) | 0.019                | 1.758 (0.391-3.125) | 0.020   |
| No. of close friends          |                     |                      |
| <4                            | Reference           |                      |
| ≥4                            | 0.420 (0.233-0.755) | 0.004                | 0.424 (0.233-0.770) | 0.005   |
| Co-ed school                  |                     |                      |
| BMI                           |                     |                      |
| Normal/underweight            | Reference           |                      |
| Overweight/pre-obese/obese    | 1.861 (1.013-3.418) | 0.045                | 2.072 (1.251-3.432) | 0.050   |
| Girls school                  |                     |                      |
| Weight (in kg)                |                     |                      |
| ≤50                           | Reference           |                      |
| >50                           | 5.061 (1.644-15.581) | 0.005               | 4.638 (2.237-9.609) | <0.001  |

**DISCUSSION**

In the present study, total prevalence of body shaming was found to be 44.9 percent which is higher than the findings by Bucchianeri et al, and Eisenberg et al, where they found the prevalence of the appearance-based harassment to be 38.2 percent and 30 percent respectively. There was not much variation observed in the total reports according to the gender, similar to findings by Lind et al. However, most of the victims reported infrequent victimization. It was also seen that a larger friend circle of close friends offered a protective factor against body shaming. Similar findings by Brewis et al, show that early engagement in seeking and maintaining peer friendships in the campus environment is protective against the depressing effects of body shaming. Having a BMI more than normal or being overweight acted as a risk factor for body shaming. It is similar to findings by Brewis et al, who reported that those students who were classified as overweight/obese had higher reports of body shaming.

**CONCLUSION**

Most of the victims reported to dislike school, which may draw attention to body shaming as a major factor in absenteeism among adolescents. Also, since a bigger friend circle is found to be protective against this kind of harassing behaviour, group activities and social skills building programs need to be incorporated in the daily school curriculum to have an overall conducive growing environment for adolescents. Finally drawing attention to body shaming as a major factor in the topic in the Indian subcontinent, it is hoped that more studies will be undertaken on body shaming or appearance-based harassment in the future.

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