

# Self-Image and Its Impact on Academic Performance of Undergraduate Medical Students in Karachi

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## ABSTRACT

**Objective:** To evaluate the extent to which students are concerned about their physical appearance and how much self-perception affects them

**Methodology:** A cross sectional observational study was conducted at the Institute of Health & Business Management and Social Sciences, Jinnah Sindh Medical University (IOH&BMSS), Karachi. A structured online questionnaire was designed and distributed through random sampling among students of medical sciences to collect the data. Data was analyzed using SPSS version 16.

**Results:** Out of the total of 160 participants in this study, 44 (27.5%) were male while 116 (72.5%) were female. Mean age was 18.24+ 1.68 years while the mean Body Mass Index (BMI) was 21.56+ 4.8. Frequency of depression due to physical appearance found in Grade A and A+ students was 0 while 27.5%, 20.8%, 40.7% was noted among students who got B, B+, B- and 30.4% and 14.3% depression due to physical appearance was noted in C, C- achieving students respectively.

**Conclusion:** Students who achieved A and A+ grade had no depression due to physical appearance while mild to moderate depression was noted among students who secured lower grades. Furthermore, no relationship was observed between overweight and academic achievements.

**Key words:** Self-image, academic achievements, students, BMI

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عنوان: کراچی میں طب کے طلباء کا اپنی شخصیت کے بارے میں ذاتی خیال سے تعلیم پر اثرات کا جائزہ

تعارف: اس تحقیق سے یہ معلوم کرنے کی کوشش کی طلباء اپنی ظاہری جسمت کے بارے میں کس حد تک فکر مند ہوتے ہیں اور انکا خود کے بارے میں ذاتی خیال انکی صلاحیتوں پر کس طرح اثر انداز ہوتا ہے۔

طریقہ کار: اس تحقیق میں استعمال ہونے والے ڈیٹا کو حاصل کرنے کیلئے جناح سندھ میڈیکل یونیورسٹی کراچی کے انسٹیٹیوٹ آف ہیلتھ اینڈ بزنس مینجمنٹ (IOHBM) اور سوشل سائنسز (BMSS) کے طلباء سے آن لائن تفصیلی سوالنامہ پُر کروایا گیا۔ اور اس مواد کو SPSS ورژن 16 پر جانچا گیا۔

نتیجہ: تحقیق میں شامل ہونے والے مجموعی طور پر 160 طلباء میں سے 44 (27.5%) مرد طلباء اور 116 (72.5%) طالبات تھیں۔ جنکی اوسط عمریں 18.24 سال (1.68) کم یا زیادہ، جبکہ BMI کی قیمت 21.56 (4.8) کم یا زیادہ پائی گئی۔ گریڈ A اور A+ والے طلباء میں اپنی شخصیت کے بارے میں ذاتی خیال کی وجہ سے ڈپریشن کی فریکوئنسی صفر تھی جبکہ گریڈ B (27.5%)، B+ (20.8%) اور B- (40.7%) والے طلباء میں ڈپریشن کی فریکوئنسی بالترتیب 0، 20.8، 40.7، 27.5 فیصد ریکارڈ کی گئیں۔ اور گریڈ C اور C- والے طلباء میں ڈپریشن کی فریکوئنسی بالترتیب 30.4% اور 14.3% ریکارڈ کی گئیں۔

حاصل مطالعہ: گریڈ A اور A+ والے طلباء میں اپنی شخصیت کے بارے میں ذاتی خیال کی وجہ سے کوئی ڈپریشن نہیں پایا گیا۔ جبکہ کم گریڈ والے طلباء میں درمیانے درجہ کا ڈپریشن پایا گیا۔ لہذا اس سے اخذ کیا جاتا ہے کہ جسمانی طور پر موٹا ہونے اور تعلیمی کارکردگی میں قطع کوئی تعلق نہیں۔

## INTRODUCTION

Self-image is a mental representation of one's own personality or is the structured declarative knowledge

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about one's self that could guide social behaviour. Self-image is the manner in which we take into account our own physical, psychological, and emotional characteristics, the dimensions of our ego and social position. Accurate self-perception is very important to know about attitudinal abilities and personal behavioural knowledge<sup>1</sup>. Teenage is a time in life when structuring one's self-image determines cognitive, affective, and physical development. Self-image stimulates affective qualities to gain behavioural safety and detachment.

Self-image regarding physical appearance becomes more noticeable during teenage years<sup>2</sup>. Hence, self-image has significant impact on students’ academic achievements and sometimes there is a need to guide their thoughts regarding their social and emotional behaviour, and also to strengthen the dimensions of ego.

University students are found to have important concerns about body image perceptions because they want to have weight and appearance according to their social preferences<sup>3</sup>. This is because the advertising industry and marketeers use body images to sell their product<sup>4</sup>. Advertisers specifically target teenagers, which raises consciousness about body image in the youth’s minds. In turn, teenagers’ self-perception of their body image affects their behaviour. It is very important to know and to structure self-perception in a positive direction because poor body image may lower self-assessment that includes self-efficacy and self-esteem, which in turn negatively impacts academic achievements among students. In particular, girls tend to be more dissatisfied with their bodies than boys<sup>5,6</sup>.

However, little is known about how undergraduate youth are affected by self-image. Therefore, this research is designed to observe how kinds of body image relate to academic achievement.

## METHODOLOGY

The study was conducted at the Institute of Health & Business Management and Social Sciences, Jinnah Sindh Medical University (IOH&BMSS), in Karachi. This cross-sectional observational study included undergraduate students of medical sciences in the age group of 18-35 years. A structured online questionnaire was designed and random probability sampling technique was used to collect data. Data was analyzed using SPSS version 16.

Mean ± Standard Deviation (SD) was calculated for continuous variables like age, etc. Frequency/Percentages were calculated for all other categorical variables. Level of significance was checked by using Chi-square test.

## RESULTS

Table 1 shows the baseline data. Out of the total of 160 participants in this study, 44 (27.5%) were male while 116 (72.5%) were female. Mean age was 18.24+ 1.68 years while the mean Body Mass Index (BMI) was 21.56+ 4.8.

Average Grade Point Average (GPA) of students was 3.0 +0.4. Average level of education attained was 12.48+0.6. The subjects watched TV/day for 3.0+ 5.2

hours and spent about 4.29+6.3. hours per day on social media or internet.

Table: 1 Descriptive Statistics

Gender N=160	Female Male	116(72.5%) 44(27.5%)
		Mean+Std. Deviation
Age (years)		18.24+1.68
Years of Education		12.48+0.6
BMI		21.56+4.8
GPA/Percentage		3.0+0.34
No. of Hours Spent Watching TV/day		3.0+5.2
Time Spent on Internet/ Social Media (Hrs)		4.29+6.3

### Body Mass Index (BMI) and Grades of Participants:

BMI and grades of all participants are shown in Table 2. A total of 69 (43%) participants had healthy weight. Thirty (19%) participants were overweight and 48 (30%) were underweight.

Most of the participants (44.4%) achieved a “B” grade whereas the least number of participants (1.2%) achieved grades “A and A+”. Other grade details are shown in Table 2.

Table 2: BMI and Grades Distribution

	BMI		Grades		
	Frequency	Percentage		Frequency	Percentage
Healthy Weight	69	43	A and A+	2	1.2
			A-	5	3.1
Overweight	30	19	B	71	44.4
			B-	27	16.9
Underweight	48	30	B+	24	15.0
			C	23	14.4
			C-	7	4.4

### Impact of Self Image or Physical Appearance:

#### Relationship between Grades Achieved and Distress Caused by Physical Appearance

Figure 1 shows that high grade achievers (A, A+) did not feel distressed on account of physical appearance whereas those who scored B and B- were found to have mild, moderate, or severe levels of distress concerning their physical appearance. Other lower grade achievers also reported distress ranging from mild to severe due to body image.

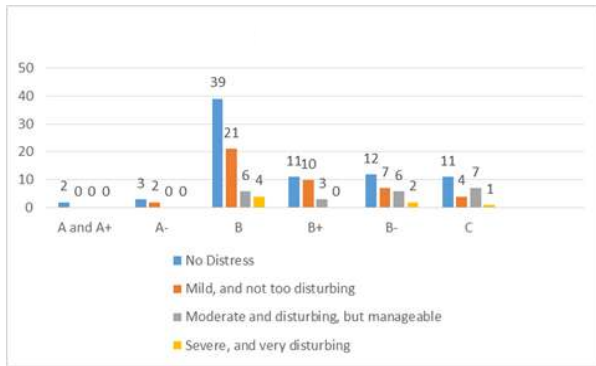


Figure 1: Grades Achieved and Distress

**Relationship between Grades Achieved and Concerns about Appearance of Any Unattractive Part of Body**

Figure 2 shows students who scored higher grades (A, A+). It shows that 50% were “not at all concerned” whereas the rest were “very concerned” about any perceived unattractive parts of their bodies.

Those who scored A-, B, B-, and C grades were found to have more concerns about their perceived unattractive body parts.

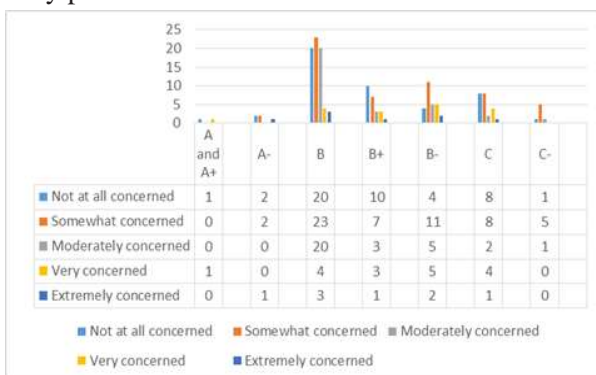


Figure 2: Grades Achieved and Concerns About Appearance

**Relationship Between Grades Achieved and Depression Due to Physical Appearance:**

Table 3 shows that students with higher grades (A, A+) did not get depressed because of their physical appearance whereas those with lower grades reported higher frequency of depression related to their appearance.

Table 3: Grades Achieved and Depression Due to Physical Appearance

Grades	Yes	No	Do you get depressed/sad/angry about your appearance?
A and A+	0%	100%	
A-	40%	60%	
B	27.5%	69.6%	
B+	20.8%	75.0%	
B-	40.7%	59.3%	
C	30.4%	65.2%	
C-	14.3%	71.4%	

**Relationship between Grades Achieved and BMI:**

Figure 3 showed students with higher grades (A, A+) were overweight whereas most of the other students were of healthy weight.

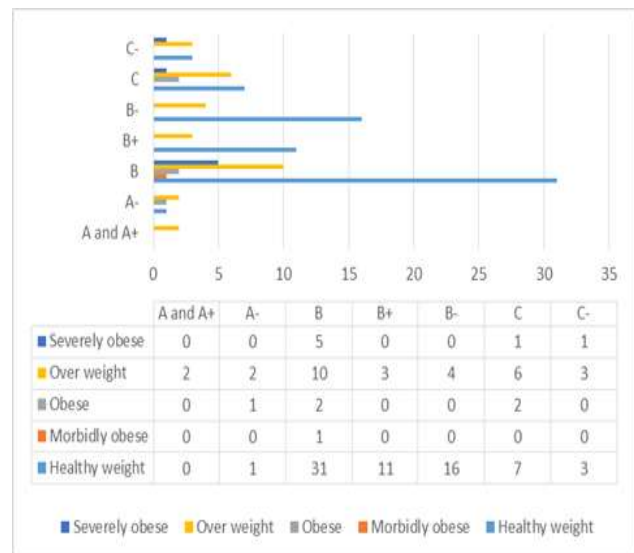


Figure 3: Grades Achieved and BMI

**Physical Appearance and Its Impact on Social Life:**

Table 4: Problems in Socializing due to Self-image

Gender	Never	Occasionally	Moderately Often	Often	Very often
Male	22	14	4	3	0
	51.2%	32.6%	9.3%	7.0%	.0%
Female	59	32	14	6	3
	51.3%	27.8%	12.2%	5.2%	2.6%

**DISCUSSION**

Academic grades are considered an important part of progress in education and future job opportunities. In western countries, a lot of research is done to see the impact of self-image on academic performance and their results show that self-image does affect the grades of young people. In youngsters, self-image is an important factor in determining cognitive and affective development. It is important for the stimulation of their spirit, affective qualities, and behavioural security.

This study was conducted in a different culture. In our South Asian society, self-image perception is important, but its impact on academic achievement is not appreciable. The limitation of the study was that it was done in a public sector educational institution where most of the student belonged to middle or lower middle class. For students from these economic backgrounds, their careers are very important and they are required to perform well in studies if they wish to progress in life. It is a matter of survival for them.

Cultural difference is also an important factor. Although some institutions are coeducational, but there is minimum interaction between boys and girls. In a conservative society, most of the females wear either hijab or loose clothes which hide their physique. Table 1 showed a majority of females from the total of 160 participants with only 44 males. Therefore, the general population of the study comprised mainly females with average age around 20 years.

In Table 2, the BMI and grades of all participants are shown. This indicated that most of the participants had healthy weight (43%), while 19% were overweight. Thirty per cent participants were underweight. Most participants had scored 'B' grade (44.4%) whereas 'A and A+' were achieved by only 1.2%.

Figure 1 shows the relationship between the grades and distress due to physical appearance. The high achievers were convinced that physical appearance was unable to impact their grades. Those participants who scored B grades (30%) reported mild disturbance due to their physical appearance.

Figure 3 also confirmed that participants with high grades felt no impact on physical appearance or they managed it very well. The study also showed that those few students who scored A grades were overweight. It can be attributed to cultural differences that students in an eastern society like Pakistan do not appear to be as conscious of their looks as their counterparts in the West, and are able to manage their self-esteem despite being overweight.

The hypothesis is partially supported by the study. Those who scored good grades were the ones who were able to manage the discomfort caused by poor perception of physical appearance. Further studies are required to see the impact of self-image on academic grades in students of private medical colleges which usually enroll students from higher income families, who may be more conscious about their perceptions of self-image.

This study also highlighted the need of physical health and availability of gymnasium and sports facilities for students. The overall health of students is important as a healthy body is required for a healthy mind, which impacts the perception of self-image. It is recommended that educational institutions should have sports facilities where students can take care of their physical health.

**Authors' contributions:** Dr Rahat Naz conceived the idea, worked on literature search, data collection, data analysis and review, introduction and discussion, reviewed the literature, results, and drew the conclusion from discussion. Dr Fatima Abid worked on literature search, results and discussion. Dr Sohaila Tariq and Miss Talat Naz reviewed the literature, worked on discussion and edited the manuscript. All authors discussed the results and contributed to the final manuscript.

## References

1. Bāban, A. Educational counseling, a methodological guide for counseling classes, Psinet Publishing house, Cluj-Napoca. 2001; 66.
2. Fung MSC, Yuen M. Body image and eating attitudes among adolescent Chinese girls in Hong Kong. *Percept Mot Skills*.2003; 96(1): 57-66.
3. Yahia N, El-Ghazale H, Achkar A, Rizk S. Dieting practices and body image perception among Lebanese university students. *Asia Pac J Clin Nutr*. 2011; 20(1): 21-28.
4. Thompson, K J, Heinberg, LJ. The media's influence on body image disturbance and eating disorders: We've reviled them, now can we rehabilitate them? *J Soc Issues*. (1999); 55(2): 339-353.
5. Page RÌ, Lee CM, Miao NF. Self-perception of body weight among high school students in Taipei, Taiwan. *Int J Adolesc Med Health*. 2005; 17(2): 123-36.
6. Chen LJ, Fox KR, Haase AM. Body shape dissatisfaction and obesity among Taiwanese adolescents. *Asia Pac J Clin Nutr*. 2008; 17(3): 457-60.