

## OBJECTIFIED BODY CONSCIOUSNESS, PERCEIVED BODY IMAGE AS PREDICTORS OF DISORDERED EATING PATTERNS IN MEDICAL STUDENTS

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### ABSTRACT

**Objectives:** This empirical study purports to examine the relationship between objectified body consciousness, perceived body image, and disordered eating patterns in medical students.

**Design:** Correlational/ cross-sectional research design.

**Place and Duration of Study:** Lahore, from October, 2016 to February, 2017.

**Participants & Method:** A sample of (N=300) male and female students from different medical colleges and universities of Lahore. The objectified Body Consciousness scale was used to assess body consciousness; Eating Attitude Test for measuring disordered eating patterns, The Body Shape Questionnaire was utilized in order to measure the perceived body image, in addition to an indigenously designed demographic information form.

**Result and Conclusion:** Results indicated that objectified body consciousness and perceived body image are significantly and positively correlated with disordered eating patterns in medical students. While, there were no gender differences, reported for the studied variables.

It is concluded that objectified body consciousness and perceived body image are likely to play a significant role in the development of disordered eating patterns in medical students.

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**Keywords:** Objectified Body Consciousness; Perceived Body Image; Disordered Eating Patterns, Medical students

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## INTRODUCTION

In Pakistani society, physical semblance and appearance matter a lot due to increased hype of imagery-based social media. People judge others primarily based on their looks (Khan, Khalid, Khan & Jabeen, 2011). Perceived body image is a central yet multidimensional construct which is empirically identified as a leading determinant in outlining one's identity and professional worth (Frederick, Peplau & Lever, 2006). This sensational pull of physical appeals gives rise to increased concerns and consciousness in young people to yearn for the ideal body. Therefore, in the current empirical study, the researchers have probed the relationship between objectified body consciousness, perceived body image and disordered eating patterns in medical students as this has been widely explored among other students' groups. However, the medical students' perspective is least presented so far in this domain. Our study intends to explore the perceived body image beliefs of emerging health professionals.

The term objectified body consciousness was originated by McKinley and Hyde (1996). The term elaborated on the situations wherein a person feels objectified because of the experiences of body surveillance, and body shame which significantly influence appearance control beliefs. There are, in fact, entwined series of events that gradually turn out to become the reason for self-objectification among males and females. There is indeed a three-step process of self-objectification, including the initial process that begins with one *inclining to internalise* the appearance ideals. Next step is *focus* in which the individual starts focusing only on specific, certain appearance traits and not on the whole body (Eggermont & Vandenbosch, 2014). Both body surveillance and regular monitoring of one's body ultimately lead one to keep stringent watch on their eating patterns so that they can achieve their body ideals. This tends to affect cognition and influence behaviour (Noll & Fredrickson, 1998; Moradi & Huang, 2008).

It has become increasingly evident that there is direct association between self-objectification and the tendency to internalize the thin body ideals. In addition to this, there lie negative affect such as body shame that make a person indulge in disordered eating. This pattern of behaviour in return helps individuals to overcome the psychological distress. Some experiential studies have also established that symptomatology of both body dissatisfaction and disordered eating is evident more among those individuals who acknowledge they are overweight and believe in controlling it (Myers & Crowther, 2007). A prospective epidemiologic study was executed on women with diagnosable

eating disorders that revealed that self-objectification contributes as a significant mediating factor in relationship between determination for thinness and thin ideal internalization. In this model-framework the body shame acted as distinctive positive mediator in relationship between self-objectification and striving for slenderness (Calogero, Davis & Thompson, 2005).

Clinical case review has revealed that most of the psychological problems pertaining self-image and eating disorders are reported along with low mood during adolescence period (Kessler, Berglund, Demler, Jin, & Walters, 2005). Disordered eating behaviors are behavioral indicators of eating disorders disseminated in the form of prolonged strict control over food-intake, over or excessive eating episodes, purgative behaviors for example use of laxatives or diuretics, over-exercising, and self-induced vomiting. Yanover and Thompson (2008) suggested that the body image discontent has many consequences like disturbed eating behaviors and has adverse impact on educational performance especially in the areas of problem solving abilities and cognitive tasks (McCab & Riccardelli, 2005). Sociocultural model of bulimia herein helps in imparting insight on determinants of disordered eating by specifying that eating disorders are the result of increasing psychosocial pressures on adolescents and young women who are coerced to gain ultra-thin body (McCab & Riccardelli, 2005).

Theoretical framework for the study under conjecture is taken from Fairburn's (2008) eating disorder model. Fairburn undertook a series of empirical studies to substantiate the clinical perfectionism module. This was illustrated by his evidential work that an individual's rigorous self-evaluation and critical judgment leads to attainment of their personally stipulated standards of performance and this can only be managed through cognitive-behavioral means and ways (Fairburn, 2008).

The impetus and emphatic rationale to execute this research has been multidimensional and diverse; the main frame is being subsumed here. In Pakistan, perceived body image researches have been mostly done to examine its association with media exposure. In current research however, the focus is levelled on medical students' perceived body image in relationship to disordered eating as this is assumed that they have better insight and knowledge pertaining health domains and probably carry better health beliefs in comparison to the layman. This sort of exposition is likely to help us in estimating when to intervene and whom to target.

The current study also delves to capture both boys and girls thus encompassing the evidence from both genders as numerous studies in health sciences have always explored body image and body ideals phenomenon among girls and women thus exhibiting the biased gender specificity trends. This insightful exposition is likely to help in devising effective public health interventions and in devising prevention programs.

The current empirical investigation targeted following hypotheses

- 1) Body consciousness, perceived body image and disordered eating patterns in medical students are likely to be significantly associated.
- 2) Body consciousness and perceived body image are likely to predict disordered eating patterns in medical students.
- 3) There are likely to be significant gender differences in means scores of body consciousness, disordered eating patterns and perceived body image in medical students.

## **METHOD**

This research was laid out through correlational cross sectional research design. A sample of N=300, (150 male) and (150 female), enrolled in medical studies in medical colleges or universities, within age range 18-22 years ( $M=20.16$ ;  $SD=1.66$ ). Non-probability purposive sampling strategy was adopted to recruit the participants, as their selection relied on certain pre-stipulated criterion such as their enrolment as regular medical student in public sector medical college/ university, living in Lahore city only and their registration in either of academic years of medical degree program. Internees and house-officers were excluded.

### ***Measures***

Following measures were administered as research tools:

#### **Demographic Form**

This was designed in order to fulfil the requisites of demographic information of the participants' including name, age, gender, class, parental education, family system and income levels etc.

### **The objectified Body Consciousness Scale:**

The revised objectified body consciousness scale was used in the current research (Mckinley & Hyde, 1996). This rating scale principally measured objectified body consciousness in young people. It has three subscales. The first subscale titled as surveillance taps the self-monitoring that person executes on its own self. Second, body shame assesses how much self-shame and doubt one experiences due to their appearance and body build. Third subscale measures appearance control beliefs, which are contorted and distorted beliefs pertaining one's appearance. The respondents are expected to score all statements against a 5-point scale ranging from 1 to 5 wherein 1 indicates strongly disagree while 5 indicates strongly agree.

### **Eating Attitude Test-26**

This test is usually employed to measure disordered eating patterns (Garner, Garner & Rosen, 1993). Its first scale is dieting-subscale (12 items); second one is bulimia-subscale (6 items); third one is food preoccupation scale (7 items); while fourth one is oral control (7 items). Psychometric properties are well-establish for this scale. The subscales showed high inter-correlation, thus their yielded composite score provides sound score of disordered eating.

### **The Body Shape Questionnaire:**

This instrument is designed to measure concerns about body shape, perceived body image and preoccupations typical of people suffering from bulimia nervosa and anorexia nervosa. Each item is scored 1 to 6 with never=1 and always=6 and overall score is the total score, computed across the 34 items that lies in accumulated score range of 34 to 204 (Cooper, Taylor & Fairburn, 1987).

### ***Procedure***

After seeking formal permissions from authors of the standardized tools and concerned authorities (college and university administration), the data was collected. The researcher explained the nature and purpose of the study before taking the written consent from those who were willing to participate. They were assured about the confidentiality of their responses. The measures were completed in the presence of the researcher so that all queries and ambiguities

could be entertained. The assessment measures comprised of demographic form, Body Shape Questionnaire, Eating Attitude Test-26, and Objectified Body Consciousness scale. All of these scales were completed by the participants after detailed instructions given by the researchers. The participants were also informed the volunteer nature of their participation. The average time taken by each respondent to fill in the questionnaires was 10-15 minutes. The data was analyzed through SPSS version 23.00.

## RESULTS

**Table 1**  
*Demographical features of the study sample (n=300)*

Demographics		<i>f</i>	%
<b>Gender</b>	Male	120	40
	Female	180	60
<b>Parents' Education</b>	Undergraduate	64	21.3
	Graduate	122	74.0
	Postgraduate	14	4.7
<b>Enrolment status</b>	1 <sup>st</sup> year	80	26.7
	2 <sup>nd</sup> year	110	36.7
	3 <sup>rd</sup> year	80	26.7
	4 <sup>th</sup> year	30	10.0
<b>Family system</b>	Nuclear	220	73.3
	Joint	80	26.7
<b>Regional affiliation</b>	Rural	80	26.7
	Urban	220	73.3

*f=frequency; %=percentage*

**Table 2**  
*Descriptive Statistics and Reliabilities of Study Variables (N=300)*

Study Variables	<i>M</i>	<i>SD</i>	<i>Mini-Max</i>	<i>A</i>
<b>Objectified body consciousness</b>	87.83	11.44	70-111	.67
<b>Perceived body image</b>	92.70	41.85	37-151	.76
<b>Disordered eating patterns</b>	72.33	21.67	36-107	.89

Note. M=Mean; SD=Standard Deviation; Mini=Minimum value; Max=Maximum value;  $\alpha$  = Cronbach's alpha

**Table 3**  
*Relationship among age, gender, objectified body consciousness, perceived body image and disordered eating patterns determined through Pearson Product Moment Correlation (N=300)*

Variable	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
<b>1.Gender</b>	-	-.27	.83	.23	-.03	.37
<b>2.Family system</b>	-	-	.07	.07	-.01	-.04
<b>3.Age</b>	-	-	-	-.01	.03	-.01
<b>4.OBC</b>	-	-	-	-	.45*	.05**
<b>5. PBI</b>	-	-	-	-	-	.71***
<b>6.DEF</b>	-	-	-	-	-	-

Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

OBC=Objectified Body Consciousness; PBI=Perceived Body Image  
 DEF=Distorted eating patterns

**Table 4**

*Predictors of disordered eating patterns determined through multiple regression analysis (N=300)*

Variables	<i>t</i>	<i>p</i>	$\beta$	<i>F</i>	<i>df</i>	<i>p</i>	<i>Adj.R</i>
<b>Constant</b>							
<b>DEP</b>				19.99	296	.001	.59***
<b>OBC</b>	-12.26	.065	-24.45				
<b>PBI</b>	-8.03	.043	27.12				

Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ;

Interval; Predictors =OBC & PBI ; Outcome=DEP

OBC=Objectified Body Consciousness; PBI=Perceived Body Image;  
DEP=Distorted eating patterns

**Table 5**

*Gender differences on objectified body consciousness, perceived body image and disordered eating patterns in medical students through Independent Sample t-test (N=300)*

Variables	Male(n=150)		Females (n=150)					<i>Cohen's d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>		
OBC	84.66	11.58	89.94	11.16	-1.24	.22		.23
PBI	87.16	41.64	96.38	42.78	-.58	.56		.06
DEP	69.58	21.77	74.16	22.03	-.56	.57		.28

Note. \* $p < .05$ ;

*M*= Mean; *SD*= Standard Deviation; *CI*=Confidence Interval; *LL*= Lower Limit;  
*UL*= Upper Limit. OBC=Objectified Body Consciousness; PBI=Perceived Body  
Image DEP=Distorted eating patterns



## DISCUSSION

The current study was centred amongst public-sector medical colleges and universities of Lahore, the sample comprised of educated middle class medical students that can be demarcated from conservative sections of the society. The role of media exposed ideal body images cannot be negated as this incurs massive influence on the young minds. This has been established by some empirical work that whatever we consume from digital media as ideal body images, we tend to absorb influences and develop consciousness towards idealised looks (Borland & Akram, 2007). The main pivoted goal of the current study was to examine association among objectified body consciousness, perceived body image and disordered eating patterns in medical students of Lahore.

It was hypothesised that perceived body image and objectified body consciousness are likely to be significant predictor of disordered eating patterns in young medical students. The findings have been quite comprehensive which reveal significant positive relationship among objectified body consciousness, perceived body image and disordered eating in medical students. This result affirms a theoretical model derived from Objectification Theory by Noll and Fredrickson (1998) that explained significant positive relationship among self-objectification, body shame, and disordered eating. This enlightening result is also corroborated by several similar research studies in which similar conclusions were drawn from studies conducted in China, Russia, Germany. One such aligned investigation was conducted by Sands, Tricker, Sherman, Armatas and Maschette (1997) who premeditated disordered eating patterns, body image, self-esteem, and physical activity in a large youth sample. Their revelations demonstrated that steadiness of actual assessment of body image for boys was somehow closer to objective evaluation but there were marked discrepancies for girls 'self-image and body evaluations'. Female respondents of this research preferred to be ideally slimmer in physique over time and evaluated them as overweight in spite of marked weight loss. Another finding reveals that females are likely to recognize a lean body as ideal (Mintz & Bentz, 1986). In developing countries like Pakistan, digital media has envisaged the concept of global culture. All societal institutions are crumbling and transforming under the guise of liberalism and evolution thus falling victims to visuo-graphics stigma (Hall & Nemirovsky, 2012) that is illustrated by media personnel as self-evaluation by ruminating on media exposed body ideals from different societies. This tends to

compromise the independent, realistic and rational evaluation ability of an individual and make them succumb to societal pressures and demands.

Fitzsimmons-Craft et.al. (2012) have also revealed in their study that young girls' eating behaviour is determined by individual and environmental factors. Psychological factors for instance, contribute significantly and most significantly body consciousness in youth lead to disordered patterns of eating. Thus objectified body consciousness is a distinctive predictor of body dissatisfaction and may predict clinically significant psychological states including anorexia, bulimia and binge-purge cycles. In concurrence with multiple other western studies, this study has affirmed that peoples' perceived body image is likely to determine disordered patterns of eating (Basow, Foran, & Bookwala, 2007).

Another pivotal hypothesis of the current investigation was to examine the gender differences on dimensions of objectified body consciousness, perceived body image and disordered eating in medical students. This is generally presumed that females are more vulnerable to societal pressures of body ideals and objectified images; thus chances of disordered eating are somehow more related for females than males. Such trends were also supported by some preliminary researches that revealed that females have greater vulnerability for objectified body consciousness and internalization of thin body ideals (Botta, 1999). With regards to the difference in body image dissatisfaction in males and females, for current research study, the results produced attention-grabbing outcomes as this has been revealed that there are no marked gender differences across men and women in terms of objectified body consciousness, perceived body image and disordered eating in medical student's sample. In most of the populations, male scores tend to be lower than females as there appear to be several logical reasons for that. Rationally speaking, this is evident that in most of such investigations, there is no single scale with standardized gender specific psychometric aspects that can be entitled as unified scale for measuring body image dissatisfaction. In fact this is such a parameter that requires in depth exploration in order to get corroboration of its allied dimensions. The disparity could not be assessed also due to the fact that in Muslim societies, women wear covered clothes and there is least emphasis on exposing body for getting approval and body image satisfaction. The inability to capture differences across male to female could also be due to hesitant approach of females to report such self-labelling phenomenon even if they were obsessed with them. Social desirability might have restrained it. Thus further qualitative research may help in yielding more convincing results.

### ***Conclusion***

In a nutshell the investigation has revealed that objectified body consciousness, perceived body image are significant positive predictors of disordered eating patterns in medical students; with no marked gender differences on either of the above stated study constructs. The findings clearly highlight that there is dire need to launch psycho-education drives by health care professionals in schools and colleges on how to equip healthy repertoire in order to prepare themselves as role models. These findings may act as starting point of future prospective researches on objectified body consciousness, perceived body image and disordered eating in medical students. This is anticipated that such findings can facilitate the avenues of future investigation and may help in broadening the vision on such intricate psychosocial dimensions that have been markedly neglected in the past.

### ***Limitations and recommendations***

In spite of worthwhile innovative contribution of the current empirical study, this study is subject to some humble limitations such as its reliance on self-report measures; least consideration of social desirability hiccup. There was no mean of validating the respondents' responses; crosschecking of the obtained responses by using multimethod approach could prove beneficial. This suggested that future researches may also add their BMI and weight to see if their weight is lower than what would be expected of their age.

Secondly, cross-sectional correlational data was relied on in the current research and that might have compromised the establishment of causality. If further researches could suffice out with resources, they may include longitudinal data. The sample size was constraint within one city and that might have limited its generalizability. Nationwide investigations on such topics may bear promising results, generalizable to larger population. Nevertheless, it is suggested in alignment to all these speculated limitations that this study may desirably be replicated with other populations of different regions. Future study should include students from other fields for comparison.

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