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Development and Validation of Body Image Scale (BIS) For Young Adult Females

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Body Image is defined as a person's self feeling and perception about his/her own body that involves his/her physical look, facial appearance, maturity and other bodily features like height and weight. This study specifically focuses on the development and validation of body image scale which explored the body image concerns in young adult females. In the present study, Body Image Scale was developed. The items were empirically generated. Factorial validity of the scale was determined on 300 participants. Factor analysis resulted in three factors i.e. physical component: α = .909, psychological component: α = .909, Strategies to maintain one's body image: α = .830. Results indicated that the 35-item Body Image Scale yielded a significant Cronbach Alpha (α = .951). Convergent validity was estimated by correlating the scores of Body Shape Questionnaire-34 with Body Image Scale (n = 100). The correlation score was significant and added to the validity of Body Image Scale. Discriminant validity was assessed by correlating the scores of Rosenberg Self-esteem Scale with Body Image Scale (n = 100). The results showed significant inverse relationship between both measures, and ensured the discriminant validity of Body Image Scale (r = -.19). Psychometric properties of the scale revealed that Body Image Scale is a reliable measure for assessing body image concerns in indigenous context.

Key words: body image, reliability, validity, young adult females

The National Eating Disorder Association (2005) defines body image as how you observe or identify yourself when you come across in the mirror or what you imagine or experience about your own physical appearances, including your weight, height, body shape, assumptions, generalizations, and memories. It's all about the mental picture you make in your mind about your appearances. Byerly, Archibald, Graber, and Brooks-Gunn (2000) have focused on different factors associated to women's perception for body image. It was assumed that body image dissatisfaction could be affected by number of factors such as, our parents, friends, and role models who convey us consciously, or unconsciously the message of what it is like to be valued and loved by others through our body or physical appearance.

Schilder (1958) has defined body image as the three-dimensional mental representation that each person has of oneself (Schilder, 1958).This impression frequently assembles and resolves a physical, psychological and social gestalt. Another perspective was highlighted by Slade (1998) who defines body image as the picture we have in our mind of the size, outline and shape of our body and the feelings we have about these characteristics and parts that make them up (Slade,1988). Body shape comprises the subsequent components: cognitive (thoughts and beliefs about the body), perceptual (tactile, kinesthetic, visual, olfactory, and auditory), affective (feelings about one's own body), behavioral and social. The development of body image is influenced by events affecting the body (accidents, illnesses, and sexual abuse), relationships with others, self-esteem and socialization (Slade, 1988).

Today, body is considered as a medium through which women express and portray their identity. In 19th century, body was not the focus of attention for women. But today, the contour of the body is the centre of attention for every woman as they think it to be the ultimate portrayal of themselves. Today our bodies control our lives, thinking patterns as well as our relationships. Soon after the mid of twentieth century, Western as well as Eastern culture became revolutionary eras with the growth and promotion of radio, television, film, drama, telephone, electricity etc. Women began to sense freedom and spirit of fighting for their rights. By the late twentieth century, mass media became an immediate source of information. It gave modern women a medium to express themselves, show their potentials, interests, speak for their rights, freedom and confidence that lead them to use their physical appearance to express their inner thoughts and convictions, their weaknesses and insecurities, their affiliations and pride etc. (Edult, 2000)

According to Usmianii and Daniluk (1997), an individual's self concept regarding body image is influenced by the cultural standards. Numerous scales on body image i.e., Body Shape Questionnaire (Cooper, Taylor, Cooper & Fairbun, 1987); Questionnaire measuring body image and body dissatisfaction in young girls (Mciza, 2005); Figure Rating Scale (Stunkard, Soreson & Schulsinger, 1983) and Body Image and Relationship Scale (Hormes, Lytle, Gross, Troxel & Schmitz, 2008) have been developed. These measures are valid and reliable, but have their own cultural norms.

Connor (2010) has discussed in detail how body image perception varies across cultures. The way people perceive their bodies varies throughout cultures and ethnicities. In each country, the way people become aware of body image is different. In United States the concept of body image is constantly changing. For instance, U.S society exerts high pressure on girls to be very slim. Also in Brazil, both women and men are expected to take care of their body image. Middle East is different from other countries like U.S and Brazil because do not allow their women to show their bodies. In Muslim countries, according to religion Islam, women are expected to cover up their bodies in traditional and long outfits, so that men are unlikely to be tempted. Foreign society set some principles and standards of attractiveness for both men and women.

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Sometimes, these set of standards can develop body dissatisfaction and inadequacy among both genders (Fallon & Rozin, 1985).

In Asian cultures, the ideal woman's figure has become increasingly thin due to unattainable norms promoted by the media and this leads toward the development of body image dissatisfaction. The perception of female beauty and female ideal body shape is culture based; Caucasian females' show greater dissatisfaction with their body shape than other racial groups (Button, Reveley & Palmer, 1998). Killen et al., (1996) believed that females who are dissatisfied with their body image are more prone to reduce their weights. In western societies, fatness and chubbiness is associated with beauty and attractiveness whereas thinness is considered as a sign of poverty and ill health (Lee, 1993). Being thin is highly appreciated among women in western society; whereas being slim and muscular is more valued among men (Ricciardelli & McCabe, 2001).

Pakistan is a country, where many problems and issues are health related. In spite of poverty and malnutrition, many females are unexpectedly more concerned and obsessed with their looks and physical appearance and at times this too much concentration can lead to eating disorders among females (Abideen, Latif, Khan, & Farooq, 2011). Suhail and Nisa (2002) have conducted a research in Lahore, to evaluate the frequency of unhealthy eating patterns and body image dissatisfaction among females. The data was collected from postgraduate female students of Lahore. The relationship between body image dissatisfaction and depression were also assessed using Eating Attitude Test (Garner & Garfinkel, 1979); Body Shape Questionnaire (Cooper, Taylor, Cooper & Fairbun, 1987) and Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983). Results indicated that the incidence of unhealthy eating patterns is high in Asians and body image dissatisfaction is positively correlated with depression.

Culture varies from place to place and the scales that are applicable in western society are not much suitable for Pakistani population. Body Shape Questionnaire BSQ -34 developed by Cooper, Taylor, Cooper and Fairbun, (1987) has certain limitations in its items with language barriers and they are culturally loaded, hence cannot be applicable in our society. The items of this scale include difficult language pattern, words like flesh, wobble, dimply, and communal are not easy to understand even for the literate people. Another scale developed by Mciza (2005) has body shape figures in one part of the question, keeping in mind the cultural connotations. Adding body image figures in a questionnaire is not a good idea and it's not much likely to show pictures of female figures to male and male figure to female. Similarly, Figure Rating Scale by Stunkard, Soreson and Schulsinger (1983) was developed to assess body image satisfaction, have also presentations of figures in the given shape that is not favorable idea as per societal norms. Individuals are reluctant to respond on such items specially designed to identify the ideal figure of opposite sex. Body Image and Relationship Scale by Hormes, Lytle, Gross, Troxel and Schmitz (2008) was developed to measure different attitudes related to health, physical appearance, and sexual relationships among breast cancer females. Items related to appearance and sexuality does not conform to our societal norms. Issues discussed in some items are not likely to discuss in our culture. Individuals are reluctant to share their personal life matters such as sexual relationship, even if they are married. Hence, the presentations of such items are not favorable idea. Psychometric properties of existing scales are well established and they have sufficient reliability, validity, and norms but they cannot be favorably used in one indigenous population.

Method

The present study was designed with following objectives: (a) to develop an indigenous measure of body image (b) to determine its psychometric properties. This study was conducted in three phases.

Phase I: Identifying Phenomenology of Body Image Scale

Following steps were taken in order to generate the initial pool of items for Body Image Scale.

Step I*:* The present research involves the more effective definition of body image. "Body Image is a psychological construct which refers to self perception including self image and feelings that an individual perceives about his or her body (Davies & Furnham, 1988)." To generate the items, the researcher reviewed related literature on body image and conducted unstructured interviews. Items were selected from two different sources:

Literature review. The review of local and foreign literature was thoroughly done to study the phenomenology of body image. Review of literature also included already existing scales and studies on body image.

Unstructured interview with subjects. Purposive sampling was used for selecting the sample of 30 young adult females. Age range of participants was 16-25 years (M = 21.02, SD = 2.479). Unstructured Interview was conducted to identify the views and problems of participants regarding body image. Open ended questions were included in the interview. Participants were permitted to answer each question and they were encouraged to talk about their disturbances and problems they were facing in their daily lives related to body image. For initial administration of the scale, the body image concerns obtained from above sources were pooled together in the form of a list of items.

Step II. Frequency check ranging from 0 to 5, i-e from 'never' to 'always' was applied for the items obtained in the previous step to obtain the most appropriate items in the scale. These selected items were administered to 30 subjects (female students from different college and universities of Lahore). The subjects were asked to respond on the items relevant to their body image concerns that they experience in their daily life.

Step III. The content of items was reviewed very closely by the researcher and the co-researcher. Both separately reviewed each item. The items were reviewed for its clarity, redundancy, readability, and the reliability to the relevant construct.

Step IV A five point likert-type scale was used to present the 47 items. The subjects were required to respond in agreement or disagreement on a 5 point rating scale that ranged from "always (4) to never (0). Items of the scale were reported positively by the subjects.

Step V. Pilot study of the scale was done for any ambiguity and lack of clarity on 30 subjects to complete the scale. Subjects were asked to note those items that were not understandable, not clear to them; they were also instructed to fill the questionnaire properly. All the items were reported as clear and comprehendible. These items were obtained for the scales' final version.

Phase II: Establishing the Construct Validity through Factor Analysis

The factor validity of the 47- item Body Image Scale was analyzed in the second phase.

Sample

The sample consisted of 300 young adult females. The age range of the sample was from 16-25 years (M=21.02, *S D* = 2.479). According to Gorsuch, (1983), to conduct factor analysis, there should be at least 200 subjects with the sample in respect of statistical error; the size of the sample was selected according to this principle. The present study includes young adult females and data was collected from different colleges and universities of Lahore. Demographic information of subjects was attained on different variables such as age, education, height, present weight, and desired weight. The demographic information of participants is summarized in Table1.

Table 1
Demographic Characteristics of the Sample (n = 300)

Variables	Frequency	Valid %
Age (16-25)		
16-18	49	16.33
19-21	121	40.33
22-25	130	43.33
Education		
11	8	16.33
12	33	40.33
13	60	43.33
14	47	20.0
15	18	15.7
16	52	6.0
17	33	17.3
18	49	11.0
Height		
5.0- 5.3	148	49.33
5.4-5.7	129	43.0
5.8-6.2	23	7.66
Present Weight (30-110)		
30-50	76	25.33
51-70	195	65.0
71-90	25	8.33
91-110	4	1.33
Desired Weight (30-80)		
30-50	170	56.66
51-70	125	41.66
71-80	5	1.66

Procedure

The subjects from different educational institutes of Lahore were included in the sample. Body Image Scale was administered on young adult female students. They were instructed to respond to each item which best described them. They were informed that the data would only be used for research purpose. All data were collected anonymously; no names were asked in the data collecting process and the subjects were assured of their confidentiality of their responses to each item. A Principal Component Analysis followed by varimax rotation was carried out for the responses of 300 subjects to the 47 items to assess factorial validity .The psychometric properties of the scale were also determined.

Results of Factor Analysis

The construct validity of Body Image Scale was studied by means of principal component analysis using varimax rotation. The purpose of the varimax rotation was to maximize the interpretability of the factors (Khan, 2006). All the 47 items was subjected to principal component analysis whereas those were excluded have eigenvalue less than 1.0.The analyses gave information regarding internal construct validity of the scale. Bartlett's test of sphericity (Bartlett, 1954) was used to evaluate condition of distribution of the participant's responses. The reason behind was to explore the underlying factors of 47 body image items. Bartlett's test of sphericity resulted significantly ($p < .001$), indicating that the data was adequately distributed to allow an evaluation of the potential factor structure. Next, the Kaiser-Meyer-Olkin measure of sampling adequacy was calculated (Kaiser, 1974) which yielded a value of .882, indicating that the ratio of the number of participants to Body Image Scale items was sufficient to run a principal-component factor analysis.

Kaiser criterion and the total explained variance were used to determine the meaningful components or factors. Kaiser-Guttman's retention criterion of eigenvalue greater than 1 (Kaiser, 1974) produced eleven factors, this process was resulted in over extraction. Principal component analyses was performed on the basis of initial findings, using ten, nine, eight, seven, six, five, and four factor solutions with varimax rotation. The three factor solution yielded the most interpretable solution and closely corresponded to the best estimation of simple structure with the least number of cross-loadings. Moreover, the scree test for eigenvalues plot was used (Cattell, 1966). Eigenvalues were 9.687, 7.764, and 2.88 for factor 1, 2, and 3. A three factor model was examined in detail and accepted with 44% of the total item variance.

Items for the scale were selected on the criteria of having factor loadings of .45 and beyond (Raubenheimer, 2004). Six items (i.e., 8, 13, 17, 22 29, and, 47) having factor loadings less than .45 were deleted from the scale. Remaining 41 items had high factor loadings on the three factors (ranging from .460 to .772). During reliability analysis some items were also eliminated from the scale to increase the reliability of Body Image Scale. This process was conducted one by one carefully, keeping in mind the value of Cronbach Alpha. This exercise resulted to delete six items; these items were 34, 35, 39, 42, 46, and 45. Finally, it formed the 35- item Body Image Scale.

A Principal Component Analysis with varimax rotation conducted on the 35- item Body Image Scale yielded a three factor solution. The content and underlying theme of the factors were closely examined. The extracted three factors were then presented to a subject matter expert for giving them appropriate names. The first factor was named as "Physical Component." On the first factor, 17 items were loaded and included items typically conceptualized as physical component related to one's body image. Some items of the first factor also fall in second factor. Other 17 items on the second factor reflected the psychological components related to body image. It was labeled as "Psychological Component." Items that were more relevant to psychological component were added in the second factor from the first factor, i-e item 40 and 41. Item no 30 have high loading in first factor so it remains there. Total 15

items are left in the first factor. Some items loading in second factor were more conceptually related to third factor such as item no 2, 14, and 36. These items were closely examined for its strength of loading on factors and for its contents. A close examination of item content and stronger loading of these items resulted in a decision to include it in factor 3, so, it is left with 13 items. The third factor was conceptualized as "Strategies for body image." It consisted of 7 items characterized by different remedies used to maintain one's body image. The factor loadings of 35 items with their respective dimensions are presented in Table 2.

Table 2
Factor Loadings of the 35 Items of Body Image Scale on Three Factors Solution (N=300)

		Factor Loadings		
		I	II	III
S. No.	No. of Items	Physical Component	Psychological Component	Strategies for Body Image
1.	1	**.488**	.210	.409
2.	2	.159	**.503**	**.535**
3.	3	.402	**.451**	.416
4.	4	**.634**	.179	-.014
5.	5	.070	**.468**	.439
6.	6	**.516**	.265	.011
7.	7	**.474**	.267	.392
8.	9	**.578**	-.182	.227
9.	10	**.564**	.432	.085
10.	11	**.638**	.170	.119
11.	12	**.494**	.383	.116
12.	14	.001	**.489**	**.580**
13.	15	.134	**.671**	.381
14.	16	.388	**.452**	.299
15.	18	**.515**	.087	.196
16.	19	.348	**.544**	.400
17.	20	**.616**	.360	.207
18.	21	**.611**	.339	.003
19.	23	.106	.307	**.674**
20.	24	.113	.200	**.763**
21.	25	.259	**.578**	.441
22.	26	.263	**.690**	.172
23.	27	.145	.224	**.566**
24.	28	.309	**.600**	.101
25.	30	**.584**	**.503**	.101
26.	31	**.563**	.419	.345
27.	32	**.811**	.001	.193
28.	33	**.756**	-.013	.244
29.	36	.252	**.505**	**.496**
30.	37	.287	-.070	**.552**
31.	38	.051	**.748**	.205
32.	40	**.523**	**.468**	.149
33.	41	**.569**	**.451**	.188
34.	43	.082	**.747**	.291
35.	44	.317	**.461**	.227
Eigenvalues		6.949	6.321	4.476
Variance		19.854	18.061	12.788
Cumulative Percenatge		19.854	37.914	50.702

Note. The items having factor loadings of .45 and greater are given in boldface.

Final Structure of Body Image Scale

The Body Image Scale (BIS) is a 35-item indigenous measure. The scale measures body image concerns among young adult females. Respondents use a 5-point scale, on which "0" represents "never" and "4" represents "always" to indicate the extent to which each item described them. The Body Image Scale is intended for use with young adult female population. The norms for the scale are as follows: Mean=45.63; Standard Deviation=28.44

The higher the score, the more an individual is concerned about her body image. There are three subscales of Body Image Scale i.e. Physical Component: $\alpha = .909$, Psychological Component: $\alpha = .909$, Strategies to maintain one's body image: $\alpha = .830$. The alpha coefficient of .951 was obtained for the Body Image Scale.

Phase III: Psychometric Properties of BIS

Convergent validity of the Scale of Body Image. Convergent validity coefficients are the correlations between measures of the same trait are obtained with different measurement methods (Campbell & Fiske, 1959). For this reason, those correlations are at times referred to as monotrait-heteromethod (MTHM) coefficients. Since they reflect the (linear) relationships between indicators of the same trait, a finding of them being consistently high lends support for construct validity with regard to that trait.

Sample

Hundred young adult female (N = 100) participants with age ranging from 16-25 years (M = 20.5, SD = 2. 2) participated in the present study. The participants belonged to different educational institutes of Lahore.

Instrument

The Body Shape Questionnaire (Cooper, Taylor, Cooper, & Fairbun, 1987) and BIS were used to establish the convergent validity. The BSQ-34 is a self-report measure consisting of 34 items that relate to concerns about body image and body shape particularly the phenomenon of "feeling fat". The scale measuring desire to lose weight, body dissatisfaction, feeling low self-worth in connection with weight, feeling of fatness after eating, self consciousness in public, and distressing thoughts about weighing too much or being too big in certain body regions. Items are responded from never to always on a six point rating scale. The higher the score on this scale the higher the body dissatisfaction and vice versa. It was basically developed to assess body dissatisfaction in relation to eating disorders, but now it has been in use widely with normal population especially among young girls and women to assess their bodily concerns and feelings. It was expected that Body Image Scale would be positively associated with BSQ-34.

Procedure

Two subscales were administered with special instructing to go through each item carefully and to give their responses by selecting that response category which best described the eating behavior practiced by them. The participants were requested not to skip any of the items on the two scales. The questionnaires were completed anonymously, and the participation in the study was voluntary. To

investigate the relation between the two measures of body image, correlation estimates were computed.

Results

As proposed, results showed that the two scales were strongly correlated ($r = .64$, $p < .01$).

Discriminant Validity of the Scale of Body Image

Campbell & Fiske (1959) explained the discriminant validity as the degree to which a construct can be empirically differentiated, or discriminated from other constructs. Measures of constructs that theoretically should *not* be related to each other are, in fact, observed to not be related to each other (that is, you should be able to *discriminate* between dissimilar constructs).

Sample

Hundred young adult female ($N = 100$) participants with age ranging from 16-25 years ($M = 20.5$, $SD = 2.2$) participated in the present study. The participants belonged to different educational institutes of Lahore.

Instrument

The discriminant validity of the BIS was established by evaluating its relation with the Rosenberg Self Esteem Scale (Rosenberg, 1965). The Rosenberg Self Esteem Scale (RSES) is most extensively used instrument to assess self esteem. The RSES is a unidirectional instrument elaborated from a phenomenological conception of self esteem that captures subjects' global perception of their own worth by means of a 10 item scale, 5 positively worded items and 5 negatively worded items. The items are rated on a four point likert type scale, ranging from 1 (totally disagree) to 4 (totally agree). Scales range from 10 to 40, with higher scores indicating higher self-esteem.

Procedure

The participants were administered the two scales, i.e. BIS and Rosenberg Self-esteem Scale (RSES), selected for discriminant validity check. Participation was voluntary.

Results

Results indicate that there was significant negative correlation between BIS and RSES ($r = -.19$, $p < 0.05$), suggesting that low self esteem contributes to poorer body image (Abell & Richards, 1996; Gleason, Alexander, & Somers, 2000).

Reliability

Internal consistency was estimated by using Cronbach Alpha Coefficient. Alpha internal consistency reliability estimate of the 35 items Body Image Scale was considerably high i.e., .951, indicated that all the items were homogeneous and measures the same construct theoretically i.e., Body Image. The internal consistency of the three subscales was evaluated by computing Cronbach alpha for each subscale. The alphas were high for all of the three sub-scales. The results are presented in the Table 3.

Table 3

Alpha Reliability of the Subscales of Body Image Scale with Respective Number of Items in Each Sub-scale (N = 300)

S. No.	Subscales	No. of items	Reliability Coefficients
I	Physical Component	15	.90
II	Psychological Component	13	.90
III	Strategies	7	.83

Discussion

Present research indicates that body image dissatisfaction are prevalent in Pakistani population. The need to focus upon an indigenous measure was to develop a standardized instrument according to Pakistani youth in their specific cultural context.

The contemporary research study yielded a reliable measure of body image. It deals with the development and validation of Body Image Scale. Items of the scale were generated empirically and were administered to a sample of 300 participants. During the factor analysis varimax rotation was used. Varimax rotation is the simplest solution from the infinity of rotations which predicts the precision and clear interpretation of each factor (Kaiser, 1974). The three factors that emerged through factor analysis were named as physical component, psychological component, and strategies used to maintain one's body image, these were almost entirely the new concepts which had not been discussed in previous scales. Alpha Internal Consistency of 35-item Body Image Scale was considerably high i.e .951.

Validation studies were also the part of a current research. To establish the convergent validity, it was found that it correlated significantly with well-known test of body image i.e. BSQ-34. A positive correlation with BSQ-34 does not minimize the importance of developing an indigenous measure. Discriminant validity was ensured by obtaining the negative correlation between BIS and Rosenberg self-esteem scale. The inverse relationship among the said variables is well established in the research (Mintz, O'Halloran, Mulholland, & Schneider, 1997).

There already exist several measures of body image in the west. Previous researches included many scales i.e., Body Shape Questionnaire (Cooper, Taylor, Cooper & Fairbun, 1987); Questionnaire measuring body image and body dissatisfaction in young girls (Mciza, 2005); Figure Rating Scale (Stunkard, Soreson & Schulsinger, 1983) and Body Image and Relationship Scale (Hormes, Lytle, Gross, Troxel & Schmitz, 2008) that quantitatively assess the body image concerns, whereas, every scale has its own validity, reliability, and cultural norms. However, body image has not been discussed in our culture and there was no indigenous tool available for its evaluation. It is a first scale to measure the level of body image dissatisfaction among young adult females within a Pakistani context. In Pakistan, many females like to be slim, smart as they get motivated from many different other factors (media, family and peers), and they are indulged in different activities in reshaping their bodies using many techniques (Abideen, Latif, Khan & Farooq, 2011). Body Image Scale is considered to deal with the limitations present in previous scales of body image. The conceptual foundations for the items used in the scale were generated empirically and also supported by detailed review of literature. Body image dissatisfaction is a significant public health

concern that leads to the development of unhealthy eating patterns (DSM-IV, 1994). Studies revealed that many females are surprisingly more anxious and possessed with their looks and physical appearance. At times this too much concentration can leads to eating disorders and body image dissatisfaction among females (Abideen, Latif, Khan & Farooq, 2011). Findings by Cohane and Pope (2001) showed that females are more concerned about their body image as compared to boys.

Conclusion

The reason for constructing a scale for body image was the need to appropriately assess the body image concerns and to define how individuals perceives or thinks about their physical appearance. Previous studies indicated many scales that quantitatively assess the body image concerns, whereas, every scale has their own validity, reliability, and cultural norms. However, body image has not been discussed in our culture and there was no indigenous tool available for its evaluation. It is a first scale to measure the level of body image dissatisfaction among young adult females within a Pakistani context. Body Image Scale is considered to deal with the limits present in previous scales of body image. The conceptual foundations for the items used in the scale were generated empirically and also supported by detailed review of literature. 35-item Body Image Scale highlighted the three of the additional components of body image, namely; physical component, psychological component and strategies to use to maintain one's body image which had not been discussed in previous scales.

As the psychometric strength of the scale is well established, it can be used with future researches for health psychologists, dietitians, and nutritionists to identify body image concerns among young adult females. This scale is considerable in understanding the feelings (positive and negative) and attitudes of females towards their body image. The data related to present research is lacking in Pakistani context, it is hoped that the current study will open the new horizons for upcoming researchers.

Limitations and Suggestions

The main limitation of the study was sample size. The sample size of the current research work was not very large. The sample was drawn only from educated and young adult females (age range 16-25). Middle age and old age women were not included in the sample. Even males were not the part of the sample. Thus findings cannot be generalized to the whole population. Studies showed that like females, males are also concerned with their physical appearances and body image (Davis & Cowles, 1991). This study could also be done as a comparative study among males and females regarding body image concerns. It could also help to evaluate the attitude of males' towards body image and measure the body image concerns in males of Pakistan. The scale only focuses the young adult females; therefore it is limited to measure the body image concerns in young adult females only. The scale requires future validation against larger population.

Implications of the Study

There was no indigenous tool available for the evaluation of body image dissatisfaction among young adults females. This is the first kind of work with reference to measure the level of body image dissatisfaction among young adult females within a Pakistani context. An indigenously developed scale will represent the cultural dimensions related to body image in more appropriate way. The scale will enable the researcher to identify the positive and negative feelings and attitudes of females towards their body image. The scale will provide a valuable insight to the health practitioners about body image concerns of females in our society. Utilizing this scale health practitioner can help females to cope with their negative feelings associated with their body and to develop positive attitude by adopting healthy life styles.

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