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The Standardization of the Persian

Body Image and Satisfaction Scale (PBISS)

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Abstract

The current research is intended to investigate the reliability and validity of the Persian Body Image and Satisfaction Scale (PBISS), which is designed to replicate the traditional Body Image and Satisfaction Scale in an Iranian context. Following translation into the Persian language, the PBISS was administered to 288 students at Shahid Beheshti University in Tehran, Iran. The sample was comprised of a random sample of 187 women and 101 men, ranging in age from 18 to 32. A confirmatory factor analysis provided support for a 25-item, five-factor measurement model (face, trunk, height and lower body, upper torso, and sex organs). The analyses indicated that the Persian scale possessed reasonable reliability and was equivalent to the traditional BISS. The results make it clear that the PBISS can be utilized for assessing body image and satisfaction in an Iranian population, allowing its research results to be profitably compared to those secured with Western, English speaking populations.

Keywords: cultural studies, Iran, physical attractiveness, psychometrics

Introduction

The American Psychological Association dictionary defines body image as:

The mental picture one forms of one's body as a whole, including both its physical and functional characteristics . . . and one's sttitudes toward these characteristics (VandenBos, 2007, p. 128).

As Cash (2003) observed: "body image encompases one's body related selfperceptions and self–attitudes, including thoughts, beliefs, feelings, and behaviors" (p. 1-2). Body image includes one's attitude toward one's general appearance, one's satisfaction with individual body parts, and a knowlege of how others evaluate one's appearance (Abell & Richards, 1996; Cash & Pruzinsky, 2002).

Despite the maxim that "beauty is only skin deep," people have always been aware that how they *think* they stack up in the "beauty marketplace" and how they *actually* stack up influences their life chances. (Individuals' subjective perceptions are often even more powerful than the reality of appearance.) Literally hundreds of studies have documented that self-esteem (concerning one's appearance), body image, and actual physical attractiveness have a profound impact on how one is treated in life. Cash (2003) observed that there has been an explosion of research on these topics. A search of PsycINFO's and PubMed's data bases for articles pertaining to body image or body (dis)satisfaction, yielded 726 and 1250 citations, respectively, from the 1970s, 1428 and 1785 citations from the 1980s, and 2477 and 2766 citations from the 1990s.

In these studies, it has been found that positive body images and "objective" physical appeal have a huge impact on people's self-esteem, their health, their lives (Abell et al., 1996), and their self-efficacy (Hargreaves & Tiggemann, 2004; Tiggemann, 2004; Rakideh, 2011). Confident and attractive people are assumed (by observers) to be more sensitive, kind, interesting, strong, poised, modest, sociable, outgoing, and exciting. They are assumed to be more sexually warm and responsive. Good looking infants and children attract more attention from parents and teachers (Langlois et al., 2000), are more popular, are treated more generously by authority figures and teachers, get better grades for the same quality work, secure more job offers when merit is equal, receive higher salaries, attract more love and sex interest, fare better in court, and the like (see Cash, 1981; Cash & Pruzinsky, 2002; and Hatfield & Sprecher, 1986, for a review of this research).

These social benefits cause many American men and women to be deeply concerned as to whether or not their appearance matches the cultural ideal, to strive to match it, and to feel dissatisfaction and shame when they believe that they have failed to live up to cultural standards (Cafri, Yamamiya, Brannick, & Thompson, 2005; Fredrickson & Roberts, 1997). Studies of college students and adults find that a substantial minority of men and women are dissatisfied with their overall appearance (Frederick, Bohrnstedt, Hatfield, & Berscheid, 2014; Frederick, Forbes, Jarcho, & Grigorian, 2007; Frederick, Peplau, & Lever, 2006).

If people are disappointed with their appearance, they may experience social anxiety (Cash, Theriault, & Annis, 2004a), depression (Stise, Hayward, Cameron, Killen, & Taylor, 2000), possess a desire for cosmetic surgery (Frederick, Lever, & Peplau, 2007), become susceptible to anorexia and bulimia (Gordon et al, 2012), develop a compulsive need for excessive exercise (White & Halliwell, 2010), become dissatisfied in sexual realm (Peplau et al, 2009), experience a poor quality of life (Cash et al, 2004b), and a host of other cognitive, emotional, and behavioral problems (Cash, Jakatdar, & Williams, 2004). No wonder people try to acquire a more appealing physical appearance so that other people will approve of their appearance.

Popular media images idealize a narrow range of body types, and humans naturally aspire to attain an appearance that will increase their social prestige. In every culture across the world, people strive to enhance their appearance in the hopes of gaining greater social status (Etcoff, 2000).

Given this plethora of evidence, it is surprising that there have been so few nationally representative studies of adults examining the prevalence of body dissatisfaction in the American population. There have been, however, several notable attempts to recruit demographically representative samples or large and broad samples (e.g., Asgeirsdottir, Ingolfsdottir, & Sigfusdottir, 2012; Cash & Henry, 1995; Cash, Winstead, & Janda, 1986; Frederick et al., 2006; Swami et al., 2010; for a review, see Frederick, Jafary, Daniels, & Gruys, 2011). Even worse, given our interests, is the fact in Iran and the Middle East, there have been almost no research on body image (and certainly no large scale studies of the importance of this construct) in Iranian life. In this study we hope to rectify this problem.

The Body Image Satisfaction Scale

In 1972, the first major national study on body image was conducted under the auspices of *Psychology Today*. Berscheid and Hatfield, 1972 and Berscheid, Hatfield, and Bohrnstedt (1972) created the *Body Image Satisfaction Scale*, which consisted of two parts. The first item measured people's overall satisfaction with their bodies:

Overall Body Satisfaction. Participants rated their satisfaction with their "overall body appearance" on a six-point Likert scale ranging from 1 = *extremely satisfied* to 6 = *extremely dissatisfied*.

Then followed a list of 24 aspects of their bodies:

Body Parts Satisfaction Scale. Participants were asked to express their satisfaction with each of these 24 aspects using a six-point Likert scale, again ranging from ranging from $1 = extremely \ satisfied$ to $6 = extremely \ dissatisfied$.

The BPSS scale asked about satisfaction with one's hair, eyes, ears, nose, mouth, teeth, voice, chin, and complexion. Next came shoulders, arms, hands, feet, size of abdomen, buttocks (seat), hips (upper thighs), legs and ankles. Then came height. Next came weight, and general muscle tone and development. Finally, respondents were asked about chest/breast, size of sex organs, and appearance of sex organs. The entire survey can be viewed here: (http:..www.elainehatfield.com .research articles, #33.).

Readers were asked to complete the survey and mail it back to the authors: 62,000 people responded.

Given that they had 62,000 respondents, Berscheid and Hatfield (1972) and Berscheid, Hatfield, and Bohrnstedt (1973) were able to stratify their sample as to sex and age to appropriate the national U. S. distributions as of 1972. The final sample consisted an equal number of men and women; within each sex, 45% were 24 years old or younger; 25% were between 25 and 44; and the rest were 45 or older. The authors presented the results of this study (which was designed to explore the links between a number of demographic variables, personality, body image and behavior) in a second *Psychology Today* article a year later: "The happy American body: A survey report," (Berscheid, Hatfield, & Bohrnstedt, 1973).

Information on the reliability and validity of these two scales is available in

Bohrnstedt, Hatfield, and Berscheid (2014). The authors also detailed the factor structure underlying the Body Image Satisfaction Scale, and provided a complete report of the findings. The extensive factor analyses revealed that the Body Image Scale was not unidimensional. Somewhat different factors emerged for men and women. They observed:

An exploratory factor analysis conducted on 2,013 adults revealed factors for men (Face, Sex Organ, Height, Lower Body, Mid Torso, Upper Torso, Height) and women (Face, Sex Organ, Height, Lower Torso, Mid Torso, Extremities, Breast). The factors were weakly to moderately intercorrelated, suggesting the scale can be analyzed by items, by subscales, or by total score. People who reported more dissatisfaction with their body also tended to report lower self-esteem and less comfort interacting with members of the other sex. The analyses provide a useful comparison point for researchers looking to examine gender differences in dissatisfaction with specific aspects of the body, as well as the factor structures linking these items (p. 223).

Since the *Psychology Today* publication, the BPSS (and subsets of the items)

have been widely used throughout the English speaking world. This measure has been widely cited (584 times as of March 15, 2014 according to googlescholar; Berscheid, Hatfield, & Bohrnstedt, 1973). This scale, and subsets of items from this scale, have also been used by physicians treating cancer patients and those suffering from eating disorders, social psychologists interested in the consequences of body image and body satisfaction among others. Scholars conducting research on media (Cameron & Ferraro, 2004; Pinhas, Toner, Ali, Garfinkel, & Stuckless, 1999), body image (Petrie, Tripp, & Harey, 2002), sexual orientation (Bergeron & Senn, 1998), gender identity (Kimlicka, Cross, & Tamal, 1983), sexual dysfunction (Adersen & Legrand, 1991), and disordered eating (Brown, Cash, & Lewis, 2006; Mintz & Betz, 1988; Siever, 1994; Tripp & Petrie, 2001). Additionally, researchers have modified the items to assess concerns with both muscularity and leanness, resulting in a three factor measure assessing concerns with upper body, legs, and face (McFarland & Petrie, 2012). Although some measures assess overall satisfaction with the body, the approach employed by this scale was to assess dissatisfaction with multiple aspects of the body. This approach to assessing multiple aspects of the body has been continued through measures such as the Body Esteem Scale (Franzoi & Shields, 1984) and has proved useful for identifying particular areas of body dissatisfaction.

Unfortunately, although the BPSS has been used throughout the English speaking world and translated into several languages, scholars have not yet translated the scale for use in the Middle Eastern and Asia. The current study is designed to remedy that omission. In fact, the senior authors have already begun to utilize the PBISS scale described herein, in Iranian sport psychology reviews, and in studying the relationships of Body Image to Iranians psychological and physical health (see Malekshahi, et al., 2008a and b).

The Development of the PBISS

Participants

Participants were a random sample of 288 undergraduates (187 women (64.9%) and 101 men (35.1%), all of whom were enrolled in Shahid Beheshti University, in Tehran, Iran. (All the participants were enrolled in the university's physical education program.) Initially, the Persian Body Image and Satisfaction Scale was distributed to 301 students. A full 288 students completed the entire questionnaire, and they constituted our sample. This number was deemed appropriate for our research.

The required sample size was determined by assessing the S. D. and setting 2.0 as the D value. Thus, the sample size of 288 persons was regarded as appropriate for this research.

$$N = \frac{6^2 \times z^2}{d^2}$$

Subjects ranged in age from 18 to 32 years of age (M = 21.47 years). They ranged in height from 140 cm. (4 feet, 6 inches) to 203 cm. (6 feet, 6 inches) (M = 168.90 cm. or 5 feet, 5 inches). They ranged in weight from 40 kg (88 pounds) to 115 kg (253 pounds) (M = 64.20 kg., 141 pounds).

Measures

Our first step was to translate the Body Image and Satisfaction Scale into Persian. Since the BPSS scales are so simple (comprised of questions like: "How satisfied are you with the way your _____ looks?" with possible answers ranging from 1 = Extremely satisfied to 6 = Extremely dissatisfied), translation was quite straightforward. For additional information on the procedures for developing the PBSS translation see Malekashahi, et al., (2008) and Malekashahi and Mohammadi (2008). The questionnaire (in English translation and Persian appears in Figure 1.

Insert Figures 1a and 1 b here

Figure 1a: The PBISS in English Translation

Num	Question	Comple	Satisf	Someti	Someti	Unsatis	Comple
ber		tely	ied	mes	mes	fied	tely
		Satisfie		Satisfie	Unsatis		unsatis
		d		d	fied		fied
1	Height						
2	Weight						
3	Hair						
4	Eyes						
5	Ears						
6	Nose						
7	Mouth						
8	Teeth						
9	Voice						
10	Chin						
11	Face						
12	Attractive						
	ness of						
	face						
13	Shoulders						
14	Chest						
	(men).						
	Chest						
	(women)						
15	Arms						
16	Hands						
17	Size of						
	stomach						
18	Rear-end						
	or bottom						
19	Size of						
	sexual						
	body						
	parts						
20	Appearan						
	ce of						
	sexual						
	body						
	parts						
21	Thiahs						

22	Arch and top of foot			
23	Legs			
24	Growth or general strength of muscles			
25	How satisfied are you with your overall body image?			

How satisfied are you with your body image?

Figure 1b: The Persian Body Image Scale (PBISS)

	~ ~	001		•			т
كاملا	ناراضد	ڭاھى	گاهی	راضى	كاملا	سئوال	×3
ناراضد	ى	ناراضد	راضی		راضی		مار
ى		ى					٥
						قد	1
						وزن	2
						مو	3
						چشمها	4
						گوشھا	5
						بينى	6
						دهان	7
						دندانها	8
						صيدا	9
						چانه	10
						سيما	11
						جذابیت کلی صورت	12
						شانهها	13
						قفسه سینه (مردان)، سینه (زنان)	14
						1	1.5
						باروها	15
						دستها	16
						انداز ه شکم	17
						باسن (نشیمنگاه)	18
						اندازه اندامهای جنسی	19
						ظاهر اندامهای جنسی	20
						رانها	21
						ساق پا و قوزکھا	22
						پاها	23
						رشد یا سفتی کلی عضلات	24
						چقدر از ظاهر کلی بدنتان رضایت	25
						داريد؟	

چقدر از اندام هایتان رضایت دارید؟

Procedure

Participants completed the PBISS and turned them into the senior scientists, who scored them, and ran a confirmatory factor analysis, following the procedures outlined in Hooman (2000). In accord with earlier researchers, we attempted to craft a single overall measure of Body Image, a set of Factors for the 24 body parts, and acceptable single items for all the 24 body parts.

The Results of Frederick et al.'s (2004) Exploratory Factor Analyses

The authors of the original Body Image Satisfaction Scale observed that the BISS was "clearly multidimensional and the items appear to be linked in ways that make conceptual sense." Nonetheless, Frederick, et al. (2014), attempted to construct a single, reliable measure of people's satisfaction with their bodies (in general). In an exploratory factor analysis they found they could. (In this preliminary analysis, they considered men and women separately. For the general measure, the internal consistency reliability estimates were .86 for women and .89 for men.

In building a factor structure, Friedrich et al. (2014), reported that **for women** the α coefficients for each of the factors included: face (.74), extremities (.66), lower torso (.76), mid torso (.74), and sex organs (.82) two items: height and breast satisfaction remained as independent items in the scale. **For men,** the α coefficients for each of the factors included: face (.79), upper torso (.80), lower body (.74), mid torso (.75), and sex organs (.84). One item: height remained as an independent item in the scale.

The Results of the Malekshahi, et al. Confirmatory Factor Analysis.

In accord with the original authors, we too attempted to construct a general measure of body image that was reliable and valid, demonstrate the existence of six separate factors, and 24 useful individual factors.

In a preliminary analysis, Malekshahi et al. (2009) found that the global measure of the PBISS was reliable. Cronbach's α , our measure of internal consistency was high (r = .88) and close to that secured in the original study.

The Factor Structure of the 24 Body Parts

Our confirmatory analysis was designed to see if the factor structure of the 24 body parts was similar to that secured in the original study. Our scoring method included scores on the PBISS, which contained 25 questions (the global item and the 24 body parts), answered on a 6-point Likert scale, with alternatives ranging from 0 = completely agree to 5 = completely disagree, in such a manner that the options (completely agree, agree, sometimes agree, sometimes disagree, disagree, and completely disagree) were provided with their respective scores of 0 to 5. In the original list, *face* included the items of 3-12; *extremities* included items of 13, 15, 16, 23; *mid-torso* included items 17, 18, 21, 22; and finally *height and growth and muscle* included such items as 1, 2, and 24. The items 19 and 20 were linked to sex organs and item 14 was assigned to the chest/breast factor. Finally, the last item—the general satisfaction of body image—was taken directly from Berscheid and colleagues (1973).

Results

Descriptive statistical methods were used to calculate frequency, drawing, central tendencies, and distributions. In order to determine validity, the confirmatory factor

analysis was conducted. Cronbach's α was used to determine the internal consistency of the items comprising each of the factors.

Internal Consistency

In order to determine the internal consistency of the PBISS, Cronbach's α was calculated. The total value of α was obtained as .938 with 25 items (i.e., the general item plus the 24 item PBISS). According Nanli (1978), for the research objective, a validity coefficient of .17 to .80 is sufficient; for attitude scales, a α coefficient of .49 or less is considered low, .79 as of medium sufficience, and .80 to .98 is judged a high value. According to this standard, our alpha of .94 would clearly be deemed acceptable. Table 1 indicates the values obtained in the correlation of the individual items with the total scale, the coefficient obtained after item deletion, and the α coefficient obtained with separated factors.

Insert Table 1 here

Table 1

The Results of the Calculation of Cronbach	The Results of the	Calculo	ation of	Cronbach	α
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Factor names	Gained α coefficient for each factor	Items number	Correlation of each item with total scale	α coefficient with limited item
Factor 1	.834	7	.578	.912
Face		11	.629	.911
		10	.543	.912
		4	.440	.914
		5	.459	.914
		9	.493	.913
		8	.435	.914
		6	.345	.916
		3	.377	.915
		12	.587	.911
Factor 2	.811	17	.494	.914
Trunk		2	.531	.912

		18	.616	.910		
		25	.705	.909		
		24	.579	.911		
Factor 3	.765	22	.606	.911		
Height and		23	.621	.910		
Lower Body		21	.633	.910		
		1	.292	.917		
Factor 4	.788	13	.544	.912		
Upper Torso		15	.635	.910		
		16	.632	.910		
Factor 5	.755	14	.523	.912		
Sex Organs		19	.631	.911		
		20	.615	.911		
α coefficient of	.915					
total scale						
Participants'	288					
number						

The first factor analysis statistic we report is the Kaiser–Meyer Olkin measure (kmo=.889). Ghiasvand (2008) considered .90 as an excellent value, 9.8 as a very good value, 8.7 as good value, .60 as a medium value, .50 as a weak value—while values less than .50 were deemed unacceptable. Therefore, our result of .89 indicate that the sample size is sufficient. Also, Bartlett's statistics confirms that the data are appropriate for factor analysis. The secured value of BT = 364.621 for SIG = .000 indicates that the null hypothesis has been rejected and the correlation of data is not null. Thus, it could be concluded that the data enjoys an acceptable proportionality to test factor analysis.

Insert Table 2 here

Table 2

kmo and Bartlett

kmo	.889
BT	3646.621
df	300
sig	.000

In order to find the number of Factors by which body image is saturated, having done the Factor analysis by using a varimax kind of orthogonal rotation in which the variances of factor loading is maximized, the number of factors are derived with respect to the following criteria:

1- Eigen values of the factors must be acceptable.

2- A given factor must at least contain three Factor loading variables, Santos and Clegg (1999) believed that each structure which doesn't possess the least required condition for the factor loading on at least three variables, should be deleted from the analyses (Hooman, 2001).

3- The correlations must be .30 or higher for definition of the factors.

In order to determine the number of factors, a Scree plot can be used. Plot 1 describes that the scale is maximally saturated with six factors. Also, the plot shows that the first factor enjoys more shares than other factors in total variances.

Insert Figure 2 about here

Figure 2: A Scree Plot



In order to select the number of factors, the Eigen value was specified so that the minimum Eigen value for selecting the factor was more than 1. Therefore, with respect to the varimax rotation, six factors were secured but since of the factors need to contain at least three items within themselves, and also with respect to the fact that some items in the factors were not consistent with other factors, the factor analysis was repeated in terms of a lower number of the factor. The results of factor analysis for five factors indicated that this number of factor describes 56.836 percent of variance for the research community and the matters in the obtained factors are consistent with other matters in terms of content. In Table 3, the contribution of each factor has been determined together with their respective variables being reported. As it can be seen in the table, the defined cumulative variance is 59.836 percent and the first factor is given more share in variances than other factors, while the fifth factor is given a lower share than other factors.

Insert Table 3 here

Table 3

ltem item		Factor	Factor	Factor	Factor	Factor
number		1	2	3	4	5
in scale						
7	mouth	.709				
11	Complex	.679				.462
10	Chin	.679				
4	Eyes	.665				
5	Ears	.642			.426	
9	Voice	.636				
8	Teeth	.526				
6	Nose	.440				.395
3	Hair	.381			.321	
17	Abdomen		.837			
2	Weight		.752			
18	Buttocks		.588	.413		
25	Overall appear.		.567	.347		
	body					
24	Gen. mus. tone		.460		.422	.339
22	Leg/Ankles			.794		
23	Feet			.790		
21	Hips (upper		.507	.606		
	thighs)					
1	Height			.518		
13	Shoulders				.718	
14	Breast/Chest				.691	.405
15	Arms		.398		.678	
16	Hands	.300	.307	.339	.542	
19	Sz. sex org			.300		.733
20	Appear. sex.			.406		.699
	org					
12	Overall/ face	.562				.566
Percent of	described	16.294	12.048	11.653	1.599	9.242
variance	1					
Accumulat	ed percent of	16.294	28.342	39.995	5.593	59.836
described variance						

Results of Factor Analysis in terms of Variables and Derived Factors

Having studied the factor loading of each item and having matched other items from the individual items, the items 7, 11, 10, 4, 5, 9, 3, 12 were placed in Factor 1, items 17, 2, 18, 25 and 24 were placed in Factor 2, items 22, 23, 21 and 1 were put in Factor 3, items 13, 15, and 16 were put in Factor 4 and items 14, 19, and 20 were put in Factor 5. To name the factors, three professionals were asked to help and finally, the first factor was named as face, the second factor as mid torso, the third factor and height and lower extremities, factor four as upper extremities and factor five as sex organs. Table 4 presents the names of the factors, items of each factor, and the number of items for each factor.

Insert Table 4 here

Table 4.

Factors Description

Factors	Face	Trunk	height and	Upper	Sex Organs
name			Lower	Torso,	
			Body,		
Items of	7, 11, 10, 4,	17, 2, 18,	22, 23. 21. 1	13. 15. 16	14, 19. 20
each Factor	5, 9, 8, 6, 3,	25, 24			
	12				
ltem	10	5	4	3	3
number in					
each					
Eactor					
Factor					

Normality

One of the requirements of the standard tests is that the test must be practiced in the same condition and the obtained raw scores should be converted into other criteria, principle or scale, so that they can be compared. To do so, the scores are converted into

standard scores. Also, the individuals' raw scores for each factor are calculated. Then,

with mean and SD, the Z score can be calculated. Table 5 presents two calculated scores

in terms of the obtained Scores.

Insert Table 5 here

Table 5

Scores According to Factors

Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
Row	Ζ								
Score	value								
24	7.2	1	-3.02	2	-3.44	1	-3.88	1	-
									4A28
25	55.2	3	-2.64	4	-2.92	3	-3.17	2	-3.89
26	38.2	4	-2.46	5	-2.66	4	-2.81	4	-3.10
27	21.2	5	-2.27	6	-2.40	5	-2.46	5	-2.70
28	04.2	6	-2.08	7	-2.14	6	-2.10	6	-2.31
29	87.1	7	-1.89	8	-1.89	7	-1.75	7	-1.92
30	7.1	8	-1.70	9	-1.63	8	-1.39	8	-1.52
31	53.1	9	-1.51	10	-1.37	9	-1.04	9	-1.13
32	36.1	10	-1.32	11	-1.11	10	68	10	74
33	19.1	11	-1.13	12	85	11	32	11	34
34	02.1	12	94	13	59	12	.3	12	.05
35	85.0	13	75	14	34	13	.39	13	.44
36	68.0	14	57	15	08	14	.74	14	.84
37	51.0	15	38	16	.18	15	1.10	15	1.23
38	34.0	16	19	17	.44				
39	17.0	17	.00	18	.70				
40	01.0	18	.19	19	.96				
41	16.0	19	.38	20	1.21				
42	33.0	20	.57						
43	5.0	21	.76						
44	67.0	22	.95						
45	84.0	23	1.14						
46	01.1	24	1.33						
47	18.1	25	1.51						
48	35.1								
49	52.1								
50	69.1								

Discussion

In a talk to the American Psychological Association, Hazel Markus once lamented the fact that most psychological studies conceived of by Americans, theories tested with American (and white) college students as subjects, and published in American psychology journals. "Even the rats were white," she joked. In this study, we attempted to expand the social psychological perspective and research on body image to a decidedly non-Western population: Iran. The first step was for Iranian psychometricians to translate the BISS into Persian. That done, we administered the PBISS to Iranian men and women, and see to what extent our scale was comparable to those crafted by Western theorists and administered to Western college students.

Generally, the results we secured from our confirmatory factor analysis of the PBISS were in line with those of earlier researchers. The five factors obtained with Iranian participants achieved acceptable reliability. The α value obtained for the individual factors, and also for all of the factors, showed that the scale is internally consistent. This indicates that this research tool could profitably be used for body image research in the Iranian community. Several small differences were observed between the standardized version for the Iranian community and the standardized version developed by Frederick et al. (2014) for use with American students, however. These differences may originate from cultural differences and also from the specific fact that men and women in Iran wear different clothing and display different parts of their bodies—making them differentially sensitive to public scrutiny and perhaps censure.

In both the Persian and the American versions of the scale, Factor I was labeled as face factor. (It included such items as hair, eyes, ears, nose, mouth, teeth, voice, face,

and general attractiveness of facial expression). Factor II was labeled as trunk (and involved such items as weight, stomach, buttocks, growth, muscle tone, and contentment with general appearance of body. In the Iranian community, such items such as weight and central gravity were especially heavily weighted). Contentment with general appearance of body was important too. Factor III was labeled height and lower limbs. (It was comprised of such items as height, legs, ankles, and thighs.) Factor IV was labeled upper body. It included such items as shoulder, arms, and hands. In the Iranian community, Factor V was the sex organs factor. (It included such items as chest/breasts, and satisfaction with the general appearance and size of sex organs.)

You can see that many factors were virtually identical in the American and Iranian communities. In a few cases there were slight differences. We observed that perhaps these minimal differences are cultural or due to differences in modesty and dress.

As has been done in the West, it is hoped that in the future the PBISS can assist in the timely diagnosis of some body image problems and the amelioration of those problems. Therefore, it is recommended that body image and satisfaction be studied among Iranian children and adolescents. The differences observed between men and women in terms of body image factors of the standardized version developed by Frederick et al. (2014), together with importance of Hijab and the differences between Iranian men and women in terms of their clothing and gender, could be reconsidered as a basis for necessity of recommendation for doing future research.

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