Body Appreciation Scale: Evaluation of the Factor Structure and Psychometric Properties among Male and Female Turkish University Students

Abstract: The Body Appreciation Scale (BAS) was developed by Avalos, Tylka & Wood-Barcalow (2005) to determine body appreciation. The present study examined the factor structure of the BAS among Turkish women and men university students. For this purpose, confirmatory factor analysis (competing model analysis) was conducted to evaluate the factor structure the BAS. Results from the confirmatory factor analysis on 741 university student (431 women; 310 men) suggested that a two-factor model with four items deleted represents an adequate description of the data, and best of the factor model proposed. In terms of convergent validity of the scale a negative and significant correlation was found between body appreciation and social appearance anxiety for women and men samples. The Turkish version of the BAS demonstrated adequate internal consistency and composite reliability. Finally, findings from t-test analysis showed that the BAS scores did not differ according to gender.

Keywords: Body, body appreciation, university students, competing model analysis

Introduction

Body image is defined as how an individual perceives his/her body (Davis, 1997). When this concept is examined, a cognitive approach incorporating an individual’s perception of both the body and the experiences involving the body, as well as an emotional approach involving appearance, such as whether or not the individual appreciates and is satisfied with his/her body, might be mentioned (Bektaş, 2004). In other words, body image is a multi-dimensional and complex concept incorporating perception, views and feelings of an individual on his/her body (Avalos, Tylka & Wood-Barcalow, 2005; Kroon Van Diest & Tylka, 2010; Lobera & Rios, 2011; Tiggemann & McCourt, 2013). The concept of body appreciation, which has been begun to be studied in recent years, is a remarkable dimension of body image (Lannantuono & Tylka, 2012).

Body appreciation is defined as the individual’s having positive views of his/her body despite his/her current body measures/weight and the deficiencies he/she perceives, being aware and taking note of the needs of his/her body, rejecting the unrealistic ideals presented by the media and protecting and taking care of his/her body with a healthy lifestyle (Avalos, et al.,...
Body Appreciation Scale

2005; Halliwell, 2013; Kroon Van Diest & Tylka, 2010; Lannantuono & Tylka, 2012; Ramseyer-Winter & Satinsky, 2014; Satinsky et al., 2012; Swami & Jaafar, 2012; Tiggemann & McCourt, 2013). In other words, body appreciation involves, beyond appreciating his/her body, a cognitive process aimed at developing and maintaining a positive view about his/her body (Avalos, et al., 2005; Halliwell, 2013; Swami & Jaafar, 2012).

The attitude towards one’s physical self is observed to have become associated with to what extent an individual fits the ideal beauty and appeal criteria of society in recent years, where being overweight and fatness are observed to cause body dissatisfaction and feelings of being fat in many people who are not even fat. Consequently, it is notable that body appreciation is associated with being thin rather than having a fit body (Bektaş, 2004; Halliwell, 2013; Mele, Cazzato & Urgesi, 2013; Ramseyer-Winter, V. & Satinsky, S, 2014; Swami, Kannan & Furnham, 2012; Taylor, Szpakowska & Swami, 2013). Moreover, an outstanding aspect of body image is that it is closely associated with the individual’s wellbeing and mental health (Mele, et. al, 2013). One of the developmental tasks an individual should cope with especially in the adolescence period is accepting his/her body as it is (Kalafat & Kincal, 2008). Nevertheless, the bodies of men and women presented in the media and reflecting the ideals of society make it difficult especially for young people to complete this task successfully.

The primary reason for this is that presentation of excessively thin models as a beauty criterion in the media results in adolescents appreciating their bodies less (Mele, et. al, 2013). As a matter of fact, the study conducted by Tiggemann and McCourt (2013), which was comprised of a sample of women aged from 18 to 75 years, revealed that body appreciation level increased as age level increased. Although the negative body perception that is widely seen among the young is thought to be a problem only of Western societies, it is remarkable that this problem is nowadays encountered all over the world (Swami, Mada & Tovée, 2012). When examining the studies addressing this concept, it is remarkable that the focus is mainly on body image and its consequences (Avalos, et al., 2005; Ramseyer-Winter & Satinsky, 2014; Swami, Stieger, Haubner, & Voracek,2008; Swami & Jaafar, 2012; Tiggemann & McCourt, 2013). For instance, the study conducted by Page (1991) revealed that normal-weight girls who perceive themselves as fat have more feelings of loneliness and hopelessness compared to others. In addition, a positive and significant association was determined between the body image perceived and suicide behavior in girls who are in the adolescence period (Jacobson & Steven, 1997). Moreover, the study conducted by Rinderknecht and Smith (2002) concluded that poor body image and dissatisfaction were associated with depressive symptoms observed in children and adolescents.

It is remarkable that, while there are studies on body image and its consequences, there are few studies on positive body image/body appreciation and its predictors and consequences. The Body Appreciation Scale (BAS) was developed by Avalos, et al., Tylka and Wood-Barcalow (2005), who drew attention to this topic and pioneered studies conducted on this issue. In the adaptation studies, BAS was observed to have a single-factor structure in Western societies (Avalos,et al, 2005; Lobera & Rios, 2011; Swami, Özgen, Gökçen & Petrides, 2015) whereas it exhibited a two-factor structure in Malaysia (Swami and Chamorro-Premuzic, 2008), Portuguese-speaking Brazil (Swami, Campana, Fereirra, Barrett, Harris, & Tavares, 2011) South Korea (Swami, Hwang, & Jung, 2012) Indonesia (Swami & Jaafar, 2012), Zimbabwe (Swami, et al., 2012) and Hong Kong (Ng, Barron & Swami, 2015). Some of these studies were reduced by BAS to two dimensions, the dominant factor labeled General Body Appreciation (eight items-1,2,3,4,5,6,7,10,11) and the secondary factor labeled Body Image Investment (three items-8,9,12) (Swami, Campana, et al., 2011; Swami & Jaafar, 2012). Swami & Chamorro-Premuzic (2008) proposed a two-dimensional model with two items deleted (7 and 11). Moreover, in the study of Ng, et al. (2015) BAS reduced two factors and deleted four items (1, 7, 11, 12).

The study conducted by Avalos, Tylka and Wood-Barcalow (2005) revealed that body appreciation in female university students was an important predictor of the important concepts to psychological wellbeing such as self-respect, optimism, life satisfaction and proactive coping.
On the other hand, the existence of criticizing messages such as “you’ll get fat”, “you shouldn’t eat dessert” was determined to have a negative and significant association with body appreciation (Kroon Van Diest & Tylka, 2010). Besides this, a positive and significant correlation was found between body appreciation and sexual life in women in the study conducted by Satinsky et al., (2012). It was also determined that body appreciation played a protective role against the negative effects of the media (Halliwell, 2013).

When examining the studies conducted on this topic in Turkey, it was observed that they concentrate on body image/body perception. Self-worth (Oktan & Şahin, 2010), self-perception and body-mass index (Örsel, Canbolat, Akdemir & Özbay, 2004), impulsivity in obesity patients (Sarisoy, Atmaca, Ecemiş, Gümüş, & Pazvantoğlu, 2013), psychological distress (Uğurlu & Akın, 2008), and subjective well-being (Oktan, 2012) are some of the variables addressed with the body image/body perception in the studies. Moreover, BAS was adapted into Turkish by Swami, Özgen, Gökçen and Petrides (2015), and the sample of this study consisted of 501 female university students. In the factor analysis conducted in the same study, BAS was concluded to be one-dimensional as in Western societies. Thus, BAS was demonstrated to be associated with the concepts of life satisfaction, self-worth and body mass index (Swami et al., 2015).

Although validity and reliability studies of BAS have been conducted on female university students in Turkey, no study has been conducted as to whether it measured the body appreciation of men. In the study, we aimed to reassess the validity and reliability of the BAS of the Turkish sample consisting of female and male university students. Moreover, the factor structure of the scale will be examined by comparing four different models of BAS.

Method

Participants and procedure
Participants included 741 students from the Education Faculty of Uşak University (431 women; 310 men). The departments of students are given in Table 1. This study group was aged between 17-28 years ($M_{\text{women}} = 19.88$, $SD_{\text{women}} = 1.59$; $M_{\text{men}} = 20.09$, $SD_{\text{men}} = 1.61$).

Table 1. The Departments of Sample Group

| Departments                  | N  | %   |
|------------------------------|----|-----|
| Science Teaching in Primary Education | 126| 17  |
| Mathematics Teaching Primary Education | 127| 17.1|
| Turkish Teaching in Primary Education | 128| 17.2|
| Social Studies Teaching in Primary Education | 119| 16  |
| Guidance and Psychological Counseling | 108| 14.5|

First, permission was received from Tracy Tylka to adapt the Body Appreciation Scale into Turkish. The original scale was translated into Turkish by two psychological counselors with a good command of English. Then, the translated items and the original version were presented to three academic members from the field of Guidance and Psychological Counseling, and they were requested to determine the items that were and were not appropriate. Later, the necessary corrections were made in line with the suggestions from the academic members, and the resulting version was presented to an expert in the field of Turkish to be examined for its
appropriateness to the Turkish language. Necessary adjustments were made according to the feedback received, and validity and reliability studies of BAS were commenced.

Study data were collected in the academic year 2014-2015. Purpose of the study was explained to the participants, and it was stated that their giving candid and sincere answers was important for the results of the study and the answers would be kept confidential. Application of the measurement tools within the scope of the study took about 15-20 minutes.

**Measures**

**Demographics**

The first section of the questionnaire contains questions about demographic characteristics of the participants such as gender, age, grade level and department of education.

**Body Appreciation Scale (BAS)**

The scale, which aims to measure to what extent an individual appreciates his/her own body, accepts it as it is and takes care of it despite the ideal body measures presented by the media, was developed by Avalos, Tylka & Wood-Barcalow (2005). Body appreciation increases as the score received from the scale scored according to the 5-point rating scale rises. Item 12 of the test questions the influence of media on body appreciation, and the item is structured separately for women and men. The item regarding influence of the unrealistically slim woman’s images presented in the media is answered by women and the item regarding the influence of the unrealistic muscled man images presented in the media is answered by men. In summary, a tool which reflected body appreciation (as one aspect of a positive body image) was developed and evaluated using four independent samples of women attending college. Study 1 (N = 181) gave support to the unidimensionality and construct validity of the Body Appreciation Scale (BAS) since it was related as expected to body esteem, body surveillance, body shame, and psychological well-being.

Study 2 (N = 327) cross-validated its unidimensionality. The 13 BAS items served as indicators for the body appreciation latent variable. Results demonstrated that the model provided an acceptable fit to the data, as fit statistics ranged from adequate (CFI = .94, RMSEA = .09) to excellent (SRMR = .05).

Study 3 (N = 424) also confirmed the construct validity of the BAS in the following areas: (a) relating as expected to appearance evaluation, body preoccupation, body dissatisfaction, and eating disorder symptomatology, and (b) not relating to impression management. Studies 1 and 3 further showed that the BAS was able to predict unique variance in an individual’s psychological well-being above and beyond extant measures of body image. Lastly, study 4 (N = 177) was able to demonstrate that the scores of the BAS remained stable over a three-week period. All of the studies confirmed the internal consistent reliability of its scores. With the support of these studies, Cronbach’s alpha internal consistency was calculated to be .94 and the test-retest reliability coefficient was calculated to be .90.

In the adaptation studies, BAS was observed to have a single-factor structure in Western societies (Avalos, et al., 2005; Lobera & Rios, 2011; Swami, et. al., 2015), whereas it exhibited a two-factor structure in non-Western societies (Swami and Chamorro-Premuzic, 2008; Swami, Campana, Fereirra, Barrett, Harris and Tavares; Swami and Jaafar, 2012; Swami, et. al., 2012; Ng, et al., 2015). The first adaptation study for Turkish people was conducted by Swami et al., 2015 with a sample of 501 female university students. In the factor analysis conducted in the same study, the BAS was concluded to be one-dimensional, as in Western societies.

**Social Appearance Anxiety Scale (SAAS)**

SAAS was developed by Hart et al., (2008) to measure the social appearance anxiety of individuals and was adapted into Turkish by Doğan (2010) The adaptation study sample was composed of 340 university students (143 female, 197 male). The short version of the Fear of Negative Evaluation Scale (FNES) was used to evaluate criterion validity. Exploratory and
confirmatory factor analysis was conducted to reveal the factor structure of SAAS. Factor analysis results revealed the one-dimensional structure of the scale as in its original version. For SAAS, the Cronbach alpha internal consistency coefficient was found to be .93, the test-retest reliability coefficient was found to be .85 and the reliability coefficient calculated by split-half test method was found to be .88. Item-total correlation coefficients of the Turkish version of the scale were concluded to be between .32 and .82. The correlation between SAAS and FNES was demonstrated to be .60.

Findings

Confirmatory factor analysis
AMOS (Analysis of Moment Structures; Arbuckle, 2009), which is a common confirmatory factor analysis program, was used to determine whether the BAS items confirmed its hypothesized structure in the one factor model (Avalos, et al., 2005); the two factor model 1 (Swami, Campana et al., 2011; Swami & Jaafar, 2012 and Swami, et. al., 2012); the two factor model 2 (Swami & Chamorro-Premuzic, 2008) and the two-factor model 3 (Ng, et al., 2015).

### Table 2. Goodness of Fit Indices of Confirmatory Factor Analysis (CFA) Models

| Models               | Gender | $\chi^2$ | $sd$ | $\chi^2/sd$ | GFI  | CFI  | RMSEA | ECVI     | BIC       |
|----------------------|--------|----------|------|-------------|------|------|-------|----------|-----------|
| One factor model     | Women  | 398.465  | 65   | 6.13        | .86  | .87  | .11   | 1.048    | 556.184   |
|                      | Men    | 310.612  | 65   | 4.78        | .86  | .88  | .11   | 1.174    | 459.763   |
| *Two-factor model 1  | Women  | 293.931  | 64   | 4.59        | .90  | .91  | .09   | .809     | 457.716   |
|                      | Men    | 251.714  | 64   | 3.93        | .88  | .91  | .09   | .989     | 406.602   |
| **Two-factor model 2 | Women  | 216.917  | 43   | 5.04        | .91  | .92  | .10   | .611     | 356.438   |
|                      | Men    | 165.064  | 43   | 3.84        | .90  | .93  | .09   | .683     | 297.005   |
| ***Two-factor model 3| Women  | 164.428  | 26   | 6.32        | .92  | .93  | .11   | .471     | 279.684   |
|                      | Men    | 118.274  | 26   | 4.55        | .91  | .93  | .11   | .506     | 227.269   |

Note: Based on the one factor model of Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005); *Based on Swami, Campana, Fereirra, Barrett, Harris, & Tavares, (2011); Swami & Jaafar, (2012); Swami, Mada, et al., 2012); **Based on Swami & Chamorro-Premuzic (2008); ***Based on Ng, Barron & Swami (2015)

The ECVI and BIC have become quite popular in structural equation modeling (SEM) and latent variable modeling applications, particularly for the purpose of examining competing models (Raykov & Marcoulides, 2006). Thus, ECVI evaluates how well a model fitted to the calibration sample would perform in comparable validation samples (Schermelleh-Engel, Moosbrugger & Müller, 2003). While comparing different models, the smaller values of ECVI and BIC represent a better fit (Byrne, 2001). As seen in Table 2, two factor model 3 (Ng, et al., 2015) had lower values than the other three. Based on this, it is suggested that the two-factor model 3 (Ng, et al., 2015) represents an adequate description of the data and is the best of the factor models proposed.

The suitability of the CFA results of this study were first evaluated using the ratio of the chi-square value to the degrees of freedom. As shown in Table 2, the ratio of the chi-square to the degrees of freedom was determined to be 6.32 (164.428 / 26, p=.00) for the female
population and 4.55 (118.274 / 26, p = 00) for the male population indicating an acceptable fit. (Beauducel & Wittmann, 2009; Bentler, 1990; Çokluk, Şekercioğlu & Büyüköztürk, 2010; Meydan & Şesen, 2011; Şimşek, 2007). An evaluation of the goodness of fit indices indicated that for women they varied among the GFI=.92, CFI=.93 and RMSEA=.11 values and for men the GFI=.91, CFI=.93 and RMSEA=.11 values for two-factor model 3 (Ng, et al., 2015).

The correlation between the two factors was found to be r=. 47 for the female sample and r=. 33 for the male population. These correlations showed that there is a moderate and significant relationship between the two factors of BAS for women and men samples (See Table 3).

**Table 3. Interfactor Correlations of BAS for Women and Men Samples**

|       | B1       | B2  |
|-------|----------|-----|
| Women |          |     |
| B1<sup>a</sup> |          | .47*|
| B2<sup>b</sup> |          |     |
| Men   |          |     |
| B1    |          | .33*|
| B2    |          |     |

<sup>a</sup>P<0.01
<sup>b</sup>1. Factor (General Body Appreciation)
<sup>b</sup>2. Factor (Body Image Investment)

According to the two-factor model 3 (Ng, et al., 2015), the standardized factor loadings of the BAS items were between λ= 0.52 and λ= 0.86 for the women sample and λ= 0.54 and λ= 0.90 for the men sample. In the model proposed all of the items were significant (p< .001) (See Table 4).

**Table 4. Body Appreciation Scale (BAS) Items and Factor Loadings Obtained From The Confirmatory Factor Analysis**

| Items                                                   | Women Sample | Men Sample |
|---------------------------------------------------------|--------------|------------|
| 2. I feel good about my body                            | .787         | .752       |
| 3. On the whole, I am satisfied with my body            | .858         | .808       |
| 4. Despite its flaws, I accept my body for what it is   | .766         | .779       |
| 5. I feel that my body has at least some good qualities  | .624         | .579       |
| 6. I take a positive attitude toward my body            | .820         | .863       |
| 8. My self-worth is independent of my body shape or weight | .517         | .543       |
| 9. I do not focus a lot of energy being concerned with my body shape or weight | .860 | .897 |
| 10. My feelings toward my body are positive, for the most part | .730 | .803 |
| 13. Despite its imperfections, I still like my body     | .591         | .716       |

Note: Based on two factor model 3 (Ng, Barron & Swami, 2015)

**Convergent validity**

The BAS (two-factor model 3) showed a negative and significant correlation (p < .001) with Social Appearance Anxiety. Among women, General Body Appreciation and Body Image Investment were significantly and negatively correlated with SAAS (General Body Appreciation r = -.41; Body Image Investment r = -.22). Among men, General Body Appreciation and Body Image Investment were significantly and negatively correlated with SAAS (General Body Appreciation r = -.37; Body Image Investment r = -.26).
**Internal consistency reliability**

The reliability of the Body Appreciation Scale was evaluated with Cronbach’s alpha internal consistency (α) and composite reliability (CRC) for the BAS two factor model. Internal consistency coefficients were very good for the General Body Appreciation factor but fell below the acceptable cut-off for the Body Image Investment factor for the two groups (See Table 5).

**Table 5. Factor Loadings, Internal Consistency of BAS**

| Factor   | Gender | Item-total correlations | Cronbach’s alpha | CRC  |
|----------|--------|-------------------------|------------------|------|
| B1*      | Women  | .58-.80                 | .89              | .90  |
| B2**     | Women  | .45-.45                 | .62              | .66  |
| Total    | Women  | .37-.74                 | .87              | .91  |
| B1       | Men    | .56-.76                 | .90              | .91  |
| B2       | Men    | .49-.49                 | .65              | .70  |
| Total    | Men    | .31-.75                 | .85              | .92  |

Note: Based on two factor model 3 (Ng, Barron & Swami, 2015).
* 1. Factor (General Body Appreciation)
**2. Factor (Body Image Investment)

**Gender difference**

An independent t-test showed that the difference between the BAS scores for women and men was not statistically significant for two factors. (General Body Appreciation t (1.005) = 0.315, p > 0.05, Body Image Investment t (1.298) = 0.195, p > 0.05).

**Discussion and Conclusion**

This study aimed to examine the factorial validity of a Turkish version of the BAS (Avalos, et al., 2005) among a sample consisting of Turkish male and female university students. The studies into BAS have revealed a single factor structure in Western society (Avalos, et al., 2005; Swami et al., 2008, Lobera & Rios, 2011; Swami, Özgen, Gökçen & Petrides, 2015) whereas BAS has shown a two-factor structure in non-Western samples (Swami and Chamorro-Premuzic, 2008; Swami et al., 2011 and Swami, et al., 2012). In this context, confirmatory factor analyses (competing model analysis) were performed to determine the factor structure of the scale. The results showed that two-factor model 3 as suggested by Ng, et al., 2015 (four items deleted) for the Hong Kong sample was the most appropriate for the sample of this study. Also, results showed that fitness values were at an acceptable level for both female and male samples in this two-factor model. These results of the study differ from previous research conducted by Swami, Özgen, Gökçen & Petrides, 2015. In that study, BAS was concluded to be one-dimensional as in Western societies.

The concept of body appreciation is not the same in every culture in terms of the conceptual and factorial (Ng, et al., 2015; Swami & Chamorro-Premuzic, 2008). Hong-Kong has a mixed cultural structure with post-industrial living conditions and traditional family structures seen together (Ng, et al., 2015). There is a similar cultural structure to be seen in Turkey. Despite the impact of globalization, modernization and social media and Turkey starting to import the social habits of Western societies the traditional family structure still maintains. In these mixed cultural settings women may feel a conflict between Western concepts of individual control over the body and traditional Eastern shame of the body (Swami & Chamorro-Premuzic, 2008). Therefore it is recommended to re-examine the factor structure of BAS with different samples in the same country.

Values of the correlation between the scores received from BAS and SAAS were calculated to test the convergent validity of the scale for women and men. Significant correlation values were obtained for body appreciation and social appearance anxiety for
women and men in the two-factor model 3. Also, linear regression was conducted to examine whether BAS predicts social appearance anxiety. The result of each regression model was significant for both male and female samples. Social appearance anxiety may be interpreted as a result of the negative body image of an individual related to his/her body and appearance (Doğan, 2010). Having a negative body appearance was demonstrated to have a negative effect on the wellbeing and mental health of an individual (Mele, et. al, 2013). Consequently, the negative correlation of body appreciation, which is an important sub-dimension of body image, with social appearance anxiety that negatively affects the psychological state of the individual, is an expected result. In general, these results concerning validity show that the scale is valid.

In this research, other studies conducted on the validity of BAS concluded that Cronbach’s alpha and composite reliability coefficients are at an acceptable level. Other studies conducted on the validity of BAS concluded that Cronbach’s alpha and composite reliability coefficients are at a good level for the General Body Appreciation factor but fell below the acceptable cut-off for the Body Image Investment factor. These results were similar to the Hong Kong (Ng, et al., 2015) and Malaysian (Swami & Chamorro-Premuzic, 2008) samples. It is recommended that this second factor be reexamined.

Another result of the study is that there is no difference between the body appreciation of women and men among university students. The study conducted by Tylka (2013) demonstrated that men received higher scores in the items measuring the attitude towards the body, whereas scores of both groups were similar with respect to the behaviors towards the body. On the other hand, there are study findings in the literature showing that body appreciation of men is higher compared to women (Lobera & Rios, 2011; Swami et al., 2008; Swami & Jaafar, 2012). In Turkey, the common concern of female and male education faculty students is to be appointed as teachers (Doğan & Coban, 2009; Şahin, 2011). This situation may have caused students to focus less on issues related to the body. Therefore, in future studies the body appreciation of the different faculties’ women and men students can be compared. Hence, there is need for new study findings which support or oppose this finding of the study.

As with every study, this study incorporates several limitations as well. The data were obtained from sample of only those who live in Uşak city, Turkey. To address this, future researchers could use a diverse sample obtained from different cities and international populations for evaluating the BAS factor structure and validity. Moreover, secondary school, high school students and adults might be tested in the studies to be conducted in the future. The literature demonstrates that body appreciation is correlated with self-worth, optimism, and proactive coping variables (Avalos, et al., 2005). It is also thought that conducting studies in Turkey addressing body appreciation with these and different variables will enrich the literature on this topic.

References
Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The body appreciation scale: development and psychometric evaluation. Body Image, 2, 285–297. doi: 10.1016/j.bodyim.2005.06.002
Beauducel, A., & Wittman, W.W. (2009). Simulation study of fit indexes in CFA based on data with slightly distorted simple structure. Structural Equation Modeling, 12, 41-75. doi: 10.1207/s15328007sem1201_3
Bektaş, D.Y. (2004). Ergenlerde beden imgesi üzerine bir çalışma. Türk Psikolojik Danışma ve Rehberlik Dergisi. [A study about body image in adolescence] Turkish Psychological Counseling and Guidance Journal, 22, 67-75.
Bentler, P.M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107, 238-246.
Bergeron, D.B. (2007). The relationship between body image dissatisfaction and psychological health: An exploration of body image in young adult men. Unpublished doctorate dissertation. School of The Ohio State University. USA
Büyükoztürk, Ş. (2014). Sosyal bilimler için veri analizi el kitabı. Ankara: Pegem A Yayıncılık.

Çokluk, Ö; Şekercioğlu, G. & Büyükoztürk, Ş. (2010). Sosyal bilimler için çok değişkenli istatistik SPSS ve Lisrel uygulamaları. (2.Baskı). Ankara: Pegem Akademi

Byrne, B. (2001). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Mahwah, NJ: Lawrence Erlbaum.

Davis, C. (1997). Normal and neurotic perfectionism in eating disorders: an interactive model. International Journal of Eating Disorders, 22, 421-426.

Doğan, T. & Çoban, A.E. (2009). Eğitim fakültesi öğrencilerinin öğretmenlik mesleğine yeterli tutumları ile kaygı düzeyleri arasındaki ilişkinin incelenmesi. [The investigation of the relations between students’ attitude toward teaching profession and anxiety level in faculty education] Education and Science, 34, 157-168.

Doğan, T. (2010). Sosyal Görünüş Kaygışi Ölçeği’nin Türkçe Uyarlaması: Geçerlilik ve Güvenirlik Çalışması, Hacettepe Üniversitesi Eğitim Fakültesi Dergisi. [Adaptation of the Social Appearance Anxiety Scale(SAAS) to Turkish: A Validity and Reliability Study]. Hacettepe University Journal of Education, 39, 151–159.

Halliwell, E. (2013). The impact of thin idealized media images on body satisfaction: does body appreciation protect women from negative effects. Body Image, 10, 509-514.

Jacobson, B.H. & Steven, A. (1997). Body image dissatisfaction and moderate diet manipulation: factors related to suicide behavior. Physical Educator, 54, 143-150.

Kıncal, R.Y. (2008). Üniversite öğrencilerinin beden memnuniyeti düzeyleri ile sosyal beceri düzeyleri arasındaki ilişkinin incelemesi. Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi. [The analysis of the interaction between the body gratification of university students and their level of skill]. Dokuz Eylül University Journal of Buca Faculty of Education, 23, 41-47.

Kroon Van Diest, A. M., & Tylka, T. L. (2010). The Caregiver Eating Messages Scale: development and psychometric investigation. Body Image, 7, 317–326. doi:10.1016/j.bodyim.2010.06.002

Lannantuono, A.C. & Tylka, T. L. (2012). Interpersonal and intrapersonal links to body appreciation in college women: an exploratory model. Body Image, 9, 227-235. doi:10.1016/j.bodyim.2012.01.004

Lobera, I. J., & Rios, P. B. (2011). Spanish version of the Body Appreciation Scale (BAS) for adolescents. The Spanish journal of psychology, 14 (01), 411-420. doi:10.5209/rev_SJOP.2011.v14.n1.37

Mele, S., Cazzato, V. & Urgesi, C. (2013). The importance of perceptual experience in esthetic appreciation of the body. PloS ONE, 8 (12), e81378.

Meydan, C.M. & Şesen, H. (2011). Yapısal eşitlik modellemesi Aşos uygunalari. [Structural equation modeling and AMOS applications]. Ankara: Detay Pub.

Ng, S.K., Barron, D. & Swami, V. (2015). Factor structure and psychometric properties of Body Appreciation Scale among adults in Hong Kong. Body Image, 13, 1-8.

Oktan, V. & Şahin, M. (2010). Kız ergenlerde beden imaji ve benlik saygısı arasındaki ilişkinin incelenmesi. Uluslararası İnsan Bilimleri Dergisi. [Examination of the relationship between the body image and self-esteem of female adolescents] International Journal of Human Sciences, 7, 543-556.

Oktan, V. (2012). Beden imaji ve reddedilme duyarlılığının özel iyi oluşu yördama güçü. Eğitim Bilimleri ve Üygulama. [The predictive power of body image and rejection sensitivity on subjective well-being] Journal of Educational Sciences & Practices, 11, 119-134.

Örsel, S., Canbolat, B.I., Akdemir, A. & Özbay, H. (2004). Diyet yapan ve yapmayan ergenlerin kendilik algısı, beden imaji ve beden kitle indeksi açısından karşılaştırılması. Türk Psikiyatri Dergisi. [Comparison of body-image self-perception and BMI of dieting adolescents with those of non-dieters] Turkish Journal of Psychiatry, 15, 5-15.
Body Appreciation Scale

Page, R. M. (1991). Indicators of psychosocial distress among adolescent females who perceive themselves as fat. *Child Study Journal, 21,* 203-211.

Ramseyer-Winter, V. & Satinsky, S. (2014). Body appreciation, sexual relationship status, and prorective sexual behavior in women. *Body Image, 11,* 36-42. doi:10.1016/j.bodyim.2013.08.004

Raykow, T. & Marcoulides, G.A. (2006). *A first course in structural equation modeling.* New Jersey: Lawrence Erlbaum Associates.

Rinderknecht, K. & Smith, C. (2002). Body image perceptions among Urban-Native American youth. *Obesity Research,* 10, 315-327.

Sarısoy, G., Atmaca, A., Ecemiş, G., Gümrüş, K. & Pazvantoğlu, O. (2013). Obezite hastalarında dürtüsellik ve dürtüselliliğin beden algısı ve benlik saygısı ile ilişkisi. *Anadolu Psikiyatri Dergisi.* [Impulsivity in patients with obesity and correlations with body perception and self-esteem]. *Anatolian Journal of Psychiatry, 14,* 53-61.

Satinsky, S., Reece, M., Dennis, B., Sanders, S. & Bardzell, S. (2012). An assessment of body appreciation and its relationship to sexual function in women. *Body Image, 9,* 137-144. doi:10.1016/j.bodyim.2011.09.007

Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the fit of structural equation models: test of significance and descriptive goodness of fit measures. *Methods of Psychological Research Online,* 8, 23-74.

Swami, V., Campana, A. N. N. B., Ferreira, L., Barrett, S., Harris, A. S., & Tavares, M. C. G.C. F. (2011). The Acceptance of Cosmetic Surgery Scale: Initial examination of its factor structure and correlates among Brazilian adults. *Body Image, 8,* 179–185. doi:10.1016/j.bodyim.2011.01.001

Swami, V., Chamorro-Premuzic, T. (2008). Factor structure of the Body Appreciation Scale among Malaysian women. *Body Image, 5,* 409-413. doi:10.1016/j.bodyim.2008.04.005

Swami, V., Wray, C. S., & Jung, J. (2012). Factor structure and correlates of the acceptance of cosmetic surgery scale among South Korean university students. *Aesthetic Surgery Journal, 32*(2), 220-229. doi: 10.1177/1090820X11431577

Swami, V. & Jaafar, J.L. (2012). Factor structure of body appreciation scale among Indonesian women and men: Further evidence of a two-factor solution non-western population. *Body Image, 9* (4) 539-542. doi:10.1016/j.bodyim.2012.06.002

Swami, V., Kannan, K. & Furnham, A. (2012). Positive body image: Inter-ethnic and rural-urban differences among an indigenous sample from Malaysian Borneo, *International Journal of Social Psychiatry, 58* (6), 568-576.

Swami, V., Mada, R. & Tovee, M. J. (2012). Weight discrepancy and body appreciation of zimbabwean women in Zimbabwe and Britain. *Body Image, 9,* 559-562. doi:10.1016/j.bodyim.2012.05.006

Swami, V., Özgen, L., Gökçen, E. & Petrides, K.V. (2015). Body image among female university students in Turkey: concurrent translation and validation of three body image measures. *International Journal of Culture and Mental Health, 8* (2), 176-191. Doi: 10.1080/17542863.2014.917117

Swami, V., Stieger, S., Haubner, T. & Voracek, M. (2008). German translation and psychometric evaluation of the Body Appreciation Scale. *Body Image, 5,* 122-127. doi:10.1016/j.bodyim.2007.10.002

Şahin, İ. (2011). Öğretmen adaylarının öğretmen istihdamı ve mesleki geleceklerine ilişkin görüşleri. [Prospective teachers’ ideas about teacher recruitment and their professional future] *Educational Sciences: Theory & Practice, 11,* 1179-1184.

Taylor, D., Szpakowska, I. & Swami, V. (2013). Weight discrepancy and body appreciation among women in Poland and Britain, *Body Image, 10,* 628-631. doi:10.1016/j.bodyim.2013.07.008
Tiggemann, M. & McCourt, A. (2013). Body appreciation in adult women: relationships with age and body satisfaction. *Body Image, 10*, 624-627. doi:10.1016/j.bodyim.2013.07.003

Tylka, T.L. (2013). Evidence for body appreciation scale’s measurement equivalence/invariance between U.S. college women and men. *Body Image, 10*, 415-418. doi:10.1016/j.bodyim.2013.02.006

Uğurlu, N. & Akin, H. (2008). Muğla sağlık yüksekokulu öğrencilerinin beden algısı ve psikolojik sıkıntı belirtileri ile ilişkisi. *Atatürk Üniversitesi Hemsirelik Yüksekokulu Dergisi, 11*(4), 38-47. [Relation of body-ego perception with symptoms distress of Muğla University. *Atatürk University Journal of School Nursing, 11*(4), 38-47.]

**Uzun Öz**

**Giriş**

Beden imaşı, bireyin bedenine ilişkin algı, düşünce ve duyguları içeren çok boyutlu ve karmaşık bir kavramdır (Avalos, Tylka ve Wood-Barcalow, 2005; Davis, 1997; Kroon Van Diest ve Tylka, 2010; Lobera ve Rios, 2011; Tiggemann ve McCourt, 2013). Oluşan beden imaşı ise kısaça kişinin bedeninden memnun olmasıdır. Bu biyolojik, görünümleyicilerin onların kişilik ve değerlendirmelerinin asıl belirleyicisi olmasına inanılan ve yemek yeme kıl olma gibi konulara fazla odaklanmazlar (Bergeron, 2007; Doğan, 2010). Bunun aksine olumsuz beden imaşı kişinin genel olarak kendi vücuduya da herhangi bir organıyla ilgili olumsuz düşünce ve duygularını, diğer insanlara göre kendisini çok daha az çekici bulmasını ve bedenyle ilgili kendini rahatsız hissetmesini ve bundan dolayı utanç duymasını ifade eder (Doğan, 2010). Diğer bir kavram olan beden memnuniyeti ise özellikle son yıllarda incelenmeye başlanan bir kavramdır (Lannantuono ve Tylka, 2012).

Beden memnuniyeti bireyin varolan beden ölçülerine ve algıladığı kusurlara rağmen, bedenine ilişkin olumlu bir bakış açısına sahip olması, medyanın sunduğu gerçekçi olmayan idealleri reddederek sağlıklı bir yaşam tarzıyla bedenini koruması ve ona özen göstermesi olarak tanımlanır (Avalos, ve diğ., 2005; Halliwell, 2013; Kroon Van Diest ve Tylka, 2010; Lannantuono ve Tylka, 2012; Ramseyer-Winter ve Satinsky, 2014; Satinsky ve diğ., 2012; Swami ve Jaafar, 2012; Tiggemann ve McCourt, 2013). Bedenimiz memnuniyeti konusunda yapılmış olan çalışmaların çoğunda Batılı toplumlarda yaşayan gençlerin sorunu olduğu düşünülse de günümüzde bunun tüm dünyada görülmesi dikkat çekicidir (Swami, Mada ve Tovée, 2012). Beden imaşı konusunda yapılmış olan çalışmalarda genellikle çoğunlukla olumsuz beden algısı ve bunun olumsuz sonuçlarına odaklanıldığı görülmüştür (Avalos ve diğ., 2005; Ramseyer-Winter ve Satinsky, 2014; Swami, Stieger, Haubner ve Voracek, 2008; Swami ve Jaafar, 2012; Tiggemann ve McCourt, 2013). Bu konuda dikkati çeken Avalos, Tylka ve Wood-Barcalow (2005) Beden Memnuniyeti Ölçeği’ni (Body Appreciation Scale-BAS) geliştirmişlerdir. Uyaranla çalışmalarında BAS’in tek faktörlü yapıya sahip olduğu ortaya konmuştur (Avalos ve diğ., 2005; Lobera ve Rios, 2011; Swami, Özgen, Gökçen ve Petrides, 2015). Buna karşın Malezya (Swami ve Chamorro-Premuzic, 2008), Brezilya (Swami, Campana, Fereirra, Barrett, Harris, ve Tavares, 2011), Güney Kore (Swami, Hwang, ve Jung, 2012), Endonezya (Swami ve Jaafar, 2012), Zimbabve (Swami, Mada ve Tovee, 2012) ve Hong-Kong (Ng, Barron ve Swami, 2015) gibi Doğu toplumlarında yaşayan gençlerin konusunu olduğu düşünülmüş değildir. Bununla birlikte Ng, Barron ve Swami (2015) ise dört maddeyi (1, 7, 11, 12) çıkararak yanı ile boyutlu bir model ortaya koymışlardır.

BAS’ın geçerlik güvenirlik çalışması Swami ve diğ. (2015) tarafından yapılan olumsuz olasılığı rağmen ölçülen ölçeğin erkeklere beden memnuniyetini ölçüt ölçümedigine dair herhangi bir çalışmanın yapılmadığını göstermiştir. Bu çalışmanın amacı kadın ve erkek üniversite öğrencilerinin olusturduğu örneklem üzerinde BAS’ın geçerlik ve güvenirlik düzeyini yeniden 

---

**Bakım & Tasdelen-Karçkay**

---

420
araştırmaktır. Buna ilaveten aynı örneklem üzerinde dört farklı model karşılaştırılacak ölçegin faktör yapısı incelendiştir.

**Yöntem**

Araştırmanın örneklemi Uşak Üniversitesi Eğitim Fakültesinde eğitim-öğretim gören 741 (431 kadın; 310 erkek) öğrenci oluşturmuştur. Çalışma grubunun yaşları 17-28 arasındadır. BAS'ın uyarlama, geçerlik ve güvenirlik çalışması için öncelikle Tracy Tylka'dan izin almıştır. Orijinal ölçek İngilizce hâkim iki psikolojik danışman tarafından Türkçe çevrilmiştir. Elde edilen bu çeviri form ve orijinal ölçek maddeleri Rehberlik ve Psikolojik Danışmanlık alanında çalışan bir öğretim üyesine verilmiştir. Öneriler doğrultusunda yeniden düzenlenenen çeviri form Türkçe alanındaki bir öğretim üyesi tarafından yeniden incelenmiştir. Bu çalışma için örnekleme Kişisel Bilgi Formu, Beden Memnuniyeti Ölçeği (Body Appreciation Scale-BAS), Sosyal Görünüş Kaygısı Ölçeği (Social Appearance Anxiety Scale-SAAS) uygulanmıştır.

**Bulgular**

741 kadın ve erkek Türk üniversite öğrencisiyle yapılan bu çalışmada BAS’in faktör yapısı incelendiştir. Ölçeğe ilişkin dört farklı model karşılaştırılması amacıyla yapılan Doğrulayıcı Faktör Analizi (Model Karşılaştırma Analizi) sonucunda ölçeğin Hong-Kong Örneklemi için önerilen (Ng ve diğ., 2015) dört maddesi çıkarılmış iki faktörlü modelinin örneklemi temsil eden en uygun model olduğu ortaya konmuştur. Önerilen modelin ki-kare serbestlik derecesi oranlarının kadınlar için 6.32 (164.428 / 26, p=.00) ; erkekler için 4.55 (118.274 / 26, p = 00) kabul edilebilir düzeyde olduğu görülmüştür (Beauducel ve Wittmann, 2009; Bentler, 1990; Çokluk, Şerciçoglu ve Büyükoztürk, 2010; Meydan ve Şeşen, 2011; Şimşek, 2007). Modele ilişkin uyum indeksleri, kadınlar için GFI=.91, CFI=.93 and RMSEA =.11; erkekler için GFI=.91, CFI =.93 and RMSEA =.11 olarak bulunmuş ve iyi düzeyde uyuma işaret ettiği görülmüştür. BAS’in önerilen iki faktörlü modeline ilişkin faktör yükleri kadınlar için λ= 0.52 ve λ= 0.86 arasında; erkekler için λ= 0.54 ve λ= 0.90 arasında anlamlı düzeyde bulunmuştur (p< .001)

Ölçüt geçerliği çalışması sonuçlarına hem kadın hem erkek örneklemlerinde BAS’ın her iki faktörü ile Sosyal Görünüş Kaygısı puanları arasında negatif ve anlamlı bir ilişki bulunmuştur. Kadın örnekleminde 1. Faktör olan Genel Beden Memnuniyeti ile Sosyal Görünüş Kaygısı arasındaki ilişki r = -41; 2. Faktör olan Beden İmajına Yatırım ile Sosyal Görünüş Kaygısı arasındaki ilişki r =-.22; erkek örnekleminde ise olan Genel Beden Memnuniyeti ile Sosyal Görünüş Kaygısı arasındaki ilişki r = -37; Beden İmajına Yatırım ile Sosyal Görünüş Kaygısı arasındaki ilişki r = -.26 olarak bulunmuştur Diğer yandan t-test sonuçları kadın ve erkeklerin her iki boyutta da BAS puanları arasında anlamlı bir fark olmadığı göstermiştir. (Genel Beden Memnuniyeti t (1,005) = 0.315, p > 0.05, Beden İmajına Yatırım  t (1,298) = 0.195, p > 0.05).
Ölçüt geçerliği çalışmasında BAS ile SAAS puanları arasındaki ilişki incelenmiştir. BAS’ın önerilen iki faktörlü modeli ve SAAS arasında hem kadın hem erkek örneklemi için negatif ve anlamlı bir ilişki olduğu bulgusuna ulaşılmıştır. Bu sonuçlar, sosyal görünüş kaygısının negatif beden imajına sahip olmanın sonucu olduğu bulgusuya ilişkilendirilebilir (Doğan, 2010). Güvenirlik kapsamında elde edilen Cronbach’s alfa ve bileşik güvenirlik katsayları BAS’a ilişkin önerilen modelin güvenilir olduğunu göstermiştir.

Araştırmanın bir diğer bulgusu, genel olarak kadın ve erkeklerin beden memnuniyetleri arasında fark bulunmamasıdır. Tylka (2013) tarafından yapılan çalışmada erkekler bedene ilişkin tutum konusunda kadınlara oranla daha yüksek puan almışlar fakat bedene yönelik davranışlar konusunda iki grup arasında anlamlı bir fark bulunmamıştır. Lobera ve Rios (2011) ve Swami ve diğ. (2008), Swami ve Jaafar (2012) tarafından yapılan araştırmalarda erkeklerin kadınlara oranla daha yüksek düzey beden memnuniyetine sahip olduğu ortaya konmuştur. Literatürle paralel bulunmayan bu bulgu Türkiye’de eğitim fakültesi öğrencilerinin cinsiyete bağlı olmakszın ortak kaygılarnın öğretmen olarak atanabilmesi; bu nedenle bedene ilişkin sorunların daha arka planda kalması olabileceğini olarak yorumlanmıştır. Farklı fakültelerde eğitim gören kız ve erkek öğrencilerden oluşan örneklerde BAS’in faktör yapısının yeniden incelenmesi önerilmektedir. Ayrıca, ölçeğin faktör yapısının Türkiye’deki ortaokul, lise öğrencileri ve yetişkin gruplarında da araştırılmıp, beden memnuniyetinin farklı değişkenlerle ilişkisinin incelenmesinin bu konudaki literatüre önemli katkı sağlayacağı düşünülmektedir.