

## Paper

# Same Pie, Different Portions: Shape and Weight-Based Self-Esteem and Eating Disorder Symptoms in a Georgian Sample

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**Objective:** Current diagnostic criteria for eating disorders emphasize the importance of issues concerning weight and shape for self-esteem and self-worth. However, this requirement is based on patients presenting at clinics in Western countries and it is not clear whether such overvaluation of weight and shape is also a feature of eating pathology in non-Western women.

**Method:** Two hundred and forty-five women from Georgia (part of the former Soviet Union) completed a number of questionnaires measuring eating pathology, anxiety and depression. In addition, participants completed two measures concerning their evaluation of weight and shape (overvaluation of weight/shape and shape- and weight-based self-esteem).

**Results:** Both overvaluation of weight and shape and shape- and weight-based self-esteem were significantly correlated with measures of eating pathology, even after partialling out the effects of anxiety and depression. In addition, the majority of these women desired a thinner body shape. Despite the associations between weight/shape-based self-esteem and eating pathology, the overall degree to which women based their self-esteem on weight and shape was less than that reported in other studies using Western samples.

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**Conclusion:** *Despite differences in culture, language and location, the women of Georgia appear to share with Western women their dissatisfaction with body shape. In addition, processes that underlie eating pathology may also be similar (namely overvaluation of weight/shape and shape- and weight-based self-esteem). Given that Georgian women have had differing exposure to western consumerism and marketing it is interesting that the same processes may be operating. With increasing exposure to a Western ideal of thinness portrayed in films, fashion and advertising, we can perhaps expect an increase in the prevalence of pathological eating syndromes. Copyright © 2001 John Wiley & Sons, Ltd and Eating Disorders Association.*

**Keywords:** self-esteem; overvaluation of weight and shape; non-Western women

## INTRODUCTION

Self-esteem is an important issue in eating disorders. While women seeking care for eating disorders report low self-esteem (e.g. Williams *et al.*, 1993), it is also of aetiological importance, predicting the later development of eating pathology (Wood *et al.*, 1994; Button *et al.*, 1996), at least in Western countries. It is hypothesized in socio-cultural theories that it is those who have low self-esteem that tend to adopt the thin ideal, leading them to strive to attain slimness as a way to improve self-esteem and self-image (e.g. Stice, 1994). Interestingly, however, self-esteem improves with recovery from bulimia nervosa (Troop *et al.*, 2000). Self-esteem is not a unitary construct and Fleming and Courtney (1984) show that it may be made up of an evaluation of a number of competencies, some of which may be more or less important for one's overall level of self-satisfaction. Certainly in the treatment literature it has been assumed for decades that the ability to build women's competencies is critical for recovery from bulimia (Weiss *et al.*, 1985). The degree to which issues concerning weight and shape influence feelings of self-worth has also achieved diagnostic status (Garfinkel, 1992) and is reflected in the current DSM-IV (APA, 1994) in terms of 'overvaluation' of weight and shape or 'undue influence' of weight and shape on self-esteem.

A series of studies by Josie Geller and colleagues has established the validity and clinical utility of a measure of Shape- and Weight-Based Self-Esteem (SAWBS: Geller *et al.*, 1997, 1998). They showed that level of eating pathology is directly related to the degree to which individuals base their self-esteem on weight and shape and this is true both for adults (Geller *et al.*, 1997; N. A. Troop *et al.*, unpublished data) and

adolescents (Geller *et al.*, 2000). Furthermore, shape and weight-based self-esteem is higher in eating disorder patients than in both depressed and non-psychiatric controls (Geller *et al.*, 1998) and females report higher levels of shape and weight-based self-esteem than do males (N. A. Troop *et al.*, unpublished data).

However, the studies reported above have used Canadian or British samples and it is not clear whether this is also a feature of eating disorders in other cultures. Cross-cultural research has suggested that some of the features identified in the West as being part of eating disorder syndromes do not appear in presentations of eating disorders in other parts of the world. For example, while fear of weight gain, 'fear of fatness' or 'weight phobia' are considered part of the clinical picture of anorexia nervosa in the West (e.g. Crisp, 1967; Russell, 1970), anorexia nervosa in Hong Kong is more likely to be reported by sufferers as being due to physical problems such as stomach pains (Hsu and Lee, 1993). It is possible, therefore, that overvaluation of weight and shape, or their undue influence on self-esteem, may not be reported in presentations of eating disorders elsewhere in the world.

In another report (K. Tchanturia *et al.*, unpublished data) we established, using standard assessment tools developed in the West, that eating disorders do seem to exist in Georgia (former Soviet Union). However the role of shape and weight and the patterning of symptoms in the few clinical cases identified was unclear. There was some suggestion of differences in attributions for symptoms, namely that they were the result of external causes (e.g. 'the terrible social situation') rather than internal (e.g. in the West, 'because I'm a bad person') or somatic causes (e.g. in China, 'because of stomach pains').

Using a sample of relatively 'at risk' Georgian women, the present report focuses on the relationship between eating pathology and the degree to which issues concerning weight and shape influence self-worth.

## METHOD

### *Sample characteristics*

Participants were chosen to maximize the chances of identifying the presence of eating disorder symptoms and, rather than obtain a normative, representative sample of Georgian women, we targeted what may be a relatively *at-risk* sample. Based on the results of a number of pilot focus groups, we targeted several sources including female patients at a somatic clinic ( $n = 33$ ) or in psychotherapy ( $n = 26$ ), female students ( $n = 57$ ), women in a diet/shaping club ( $n = 22$ ) as well as office

staff ( $n = 18$ ), housewives ( $n = 14$ ), a random sample of convenience ( $n = 35$ ) and Georgian emigrants currently residing in the UK and Europe ( $n = 39$ ). In total, 245 women participated in this study with a mean age (SD) of 31.1(10.7) years (range from 16 to 62 years).

### Measures

A number of standard questionnaires were translated into Georgian. Back translation into English indicated adequate translation. The psychometric properties of these translations are reported in detail elsewhere (K. Tchanturia *et al.*, unpublished data). The specific symptom measures used were, Eating Attitudes Test (EAT: Garner *et al.*, 1982), Binge Investigatory Test, Edinburgh (BITE: Henderson and Freeman, 1987) and the Hospital Anxiety and Depression Scale (HADS: Zigmond and Snaith, 1983). However, because of problems in understanding and completing the severity subscale of the BITE, only scores on the symptoms subscale are presented.

Body dissatisfaction was determined using line drawings and is calculated from two variables. The first is *perceived actual body shape* and the second is *ideal body shape*. Actual and ideal body shapes are selected from an array of figures presented pictorially. Body dissatisfaction is calculated by subtracting the *perceived actual body shape* from the *ideal body shape*. Thus, a score of zero indicates that actual and ideal body shapes are the same and there is, in fact, no dissatisfaction. A score less than zero indicates body dissatisfaction such that the individual wishes to have a *smaller* body shape than she currently has while a score greater than zero indicates body dissatisfaction such that the individual wishes to have a *larger* body shape than she currently has. Groups are thus created according to whether body dissatisfaction is negative, zero or positive.

Two measures were used to determine weight and shape concerns. The first was the Shape- and Weight-Based Self-Esteem Scale (SAWBS: Geller *et al.*, 1997). Respondents are given a list of attributes that they may feel are important for their self-esteem (e.g. relationships, face, personal development, weight and shape). They are then asked to rank those that were checked in order of importance (1 = most important) and, finally, to divide up a circle into sections to indicate just how important each attribute is for their self-esteem. Large segments indicate that the associated attribute is important, small segments indicate that the associated attribute is not so important. The value of interest is the size of the angle of the segment reflecting the importance of weight and shape and can range from 0 (where the segment is not represented at all) to 360 where weight and shape is considered to be the only attribute that

contributes to one's self-esteem. The second measure of weight and shape concern was a single item from a questionnaire devised to determine the presence of bulimia nervosa and binge eating disorder, the Questionnaire for Eating and Weight Problems (QEWP: Spitzer *et al.*, 1992). Specifically, the item asks participants to indicate on a 5-point scale the degree to which they value the importance of weight and shape for their self-esteem (1 indicates *no importance* of weight and shape, 5 indicates *extreme importance*).

### *Procedure*

Participants were given the questionnaires to complete in their own time either by the first author directly or, more usually, via a 'gatekeeper' such as therapist etc. Participants were assured of confidentiality although contact details were asked for in order to facilitate follow-up interviews (this is reported elsewhere).

## RESULTS

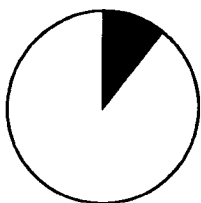
### *Overvaluations of weight and shape, shape- and weight-based self-esteem*

For the sample as a whole, the mean score on the SAWBS = 38.2 (SD = 41.2) and mean score on the overvaluation item of the QEWP = 2.3 (SD = 1.0). The intercorrelation between the two was 0.22 ( $p < 0.005$ ). Although significant, the size of this correlation is surprisingly low considering they are intended to measure essentially the same construct.

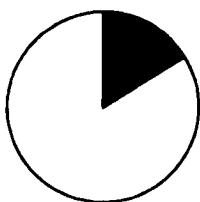
Figure 1 shows the average portion of self-esteem that is based on weight and shape in each of seven different adult female samples. The first pie chart represents the current Georgian sample. Geller *et al.* (1997, 1998) have reported on two student samples as well as eating disorder patients and other psychiatric controls, all collected in Canada. Troop *et al.* (unpublished data) reported on two other female samples—female undergraduates and an adult non-student sample.

In comparison with all but one of these samples (based on estimates of pooled variances), the present Georgian group reported that the degree to which their self-esteem was based on weight and shape was significantly less than that for all other (Western) adult groups, even those of non-eating disordered women (all  $t$ -values  $> -3.32$ ). The only exception to this is in comparison to the female undergraduates reported by Troop *et al.* (unpublished data) ( $t(297) = -1.25$ ). These students were drawn from the University of Essex which has a very high proportion of non-UK students, with Greek students in particular accounting for approximately 40 per cent of the student body.

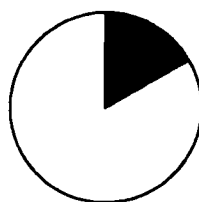
**Georgian sample (present study)**



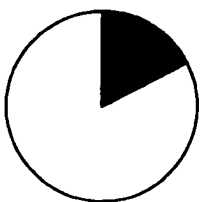
**Students (Geller et al., 1997)**



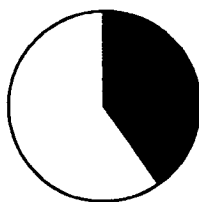
**Students (Geller et al., 1998)**



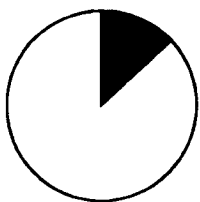
**Psychiatric (Geller et al., 1998)**



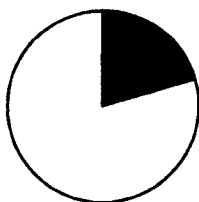
**ED patients (Geller et al., 1998)**



**Students (Troop et al., unpublished)**



**Adults (Troop et al., unpublished)**



*Figure 1. Comparison of SAWBS scores between Georgian and other samples.*

Table 1 gives the correlations between the two weight/shape variables and other eating disorder symptoms scales. In general, both weight/shape variables are significantly related to eating disorder symptoms. However, there are two points of particular interest. The overvaluation of weight/shape shows slightly higher correlations with

**Table 1. Correlations between weight/shape variables and eating disorder symptoms**

|                  | Bivariate correlations |                   | Partial correlations* |                   |
|------------------|------------------------|-------------------|-----------------------|-------------------|
|                  | SAWBS                  | Overvaluation     | SAWBS                 | Overvaluation     |
| Age              | –0.02                  | –0.02             | 0.03                  | –0.01             |
| BMI              | 0.16 <sup>†</sup>      | 0.04              | 0.06                  | 0.09              |
| EAT–total        | 0.26 <sup>†</sup>      | 0.41 <sup>†</sup> | 0.27 <sup>†</sup>     | 0.31 <sup>†</sup> |
| EAT–diet         | 0.24 <sup>†</sup>      | 0.42 <sup>†</sup> | 0.27 <sup>§</sup>     | 0.32 <sup>†</sup> |
| EAT–bulimia      | 0.26 <sup>†</sup>      | 0.29 <sup>†</sup> | 0.35 <sup>†</sup>     | 0.28 <sup>†</sup> |
| EAT–oral control | 0.12                   | 0.17 <sup>†</sup> | 0.04                  | 0.09              |
| BITE–symptom     | 0.16 <sup>†</sup>      | 0.36 <sup>†</sup> | 0.22 <sup>†</sup>     | 0.30 <sup>†</sup> |

\*Correlations partialling out the effect of HADS scores of anxiety and depression.

<sup>†</sup> $p < 0.05$ ; <sup>§</sup> $p < 0.01$ ; <sup>‡</sup> $p < 0.001$ .

eating disorder symptoms than does the SAWBS. On the other hand, when levels of anxiety and depression are partialled out the size of the correlations between overvaluation of weight/shape and other eating disorder symptoms generally reduces while that for the SAWBS, if anything, actually increases slightly.

Scores on the EAT–total and BITE–symptom were regressed onto SAWBS and overvaluation of weight/shape in order to determine whether both were required to predict eating pathology. Weight/shape variables were significantly predictive of EAT–total scores ( $F(2, 155) = 13.53$ ,  $p < 0.001$ ,  $\text{Adj}R^2 = 0.14$ ) and both SAWBS and overvaluation of weight/shape were required to predict scores ( $t = 2.54$ ,  $p < 0.05$  and  $t = 3.89$ ,  $p < 0.001$  respectively). Weight/shape variables were also predictive of BITE–symptom scores ( $F(2, 155) = 10.63$ ,  $p < 0.001$ ,  $\text{Adj}R^2 = 0.11$ ). However, this time only overvaluation of weight/shape was significantly related to BITE–symptom scores ( $t = 4.01$ ,  $p < 0.001$ ) and SAWBS score was not an independent predictor ( $t = 1.33$ ,  $p = 0.18$ ).

### *Body dissatisfaction*

According to the measure of body dissatisfaction, 159 women desired a smaller body shape, 29 were at their desired body shape and 16 desired a larger body shape. That the vast majority desired a smaller body shape parallels findings in the West.

Two one-way analyses of variance were performed with body dissatisfaction as the independent variable and the two weight/shape variables as the dependent variables. There was no significant difference between body dissatisfaction groups on SAWBS scores ( $F(2, 162) = 0.27$ ,  $p = 0.77$ ) but there was a significant difference between groups on

overvaluation of weight/shape ( $F(2, 203) = 5.87, p < 0.005$ ). A *post hoc* Duncan's multiple range test for multiple comparisons indicated that those who desired a larger body shape had lower levels of overvaluation of weight/shape (mean = 1.56) than did those who were either not dissatisfied (mean = 2.28) or who desired a smaller body shape (mean = 2.40) (these two latter groups did not differ from each other significantly).

## DISCUSSION

This report explored the relationship between the overvalued importance and undue influence of weight/shape on self-esteem with eating pathology in a sample of East European women. In Georgian women, the degree to which self-esteem is based on weight and shape is generally lower than that for adult women reported in studies carried out in Canada and the UK. However, as in the West, issues concerning the importance or influence of weight and shape are still significantly related to eating pathology.

Although the QEWP subscale of overvaluation of weight and shape was generally more highly related to eating pathology than was the SAWBS, the size of the association decreased slightly for the QEWP subscale and increased slightly for the SAWBS once variance shared with symptoms of depression and anxiety were partialled out. This suggests that the SAWBS is less affected by non-specific pathology than is the QEWP subscale of overvaluation of weight/shape.

Despite being statistically significant, the size of the association between SAWBS and the QEWP subscale with eating pathology was generally only moderate at best. For the four significant partial correlations, the size of the mean correlation was 0.28 for the SAWBS and 0.30 for the QEWP subscale. Other studies using the SAWBS in non-clinical populations in Canadian and British samples have shown correlations of a similar magnitude (e.g. Geller *et al.*, 1997, 1998; N. A. Troop *et al.*, unpublished data).

The present study used women from a range of backgrounds and so the results could be argued to be generalizable, although we did attempt to use groups of women that might increase our chances of identifying those with eating pathology. One weakness, however, is that all measures were self-report although we have established sound psychometric properties of these translated measures elsewhere (K. Tchanturia *et al.*, unpublished data).

In conclusion, we have found that eating pathology in Georgian women is associated with an overvaluation of weight and shape and an



undue influence of weight and shape on self-esteem. In addition, the size of this association seems to be similar to that found in non-clinical Western samples.

## ACKNOWLEDGEMENTS

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