

Attitudes to body shape and dieting in adolescent girls

Jane Wardle

Introduction

Among women, there is a marked socio-economic gradient in obesity in most older industrial countries. In the UK, women from social class V have almost twice the risk of obesity of women in social class I.¹ The gradient by socio-economic status (SES) appears to be less pronounced in men and children, but there is evidence to suggest that it is becoming more like the female gradient over time.

Among the factors which may contribute to the socio-economic gradient in obesity is dietary restraint, i.e. voluntary efforts at weight control. Levels of dietary restraint are higher in higher SES women; and they also use more 'healthy' weight control practices such as decreasing fat and increasing exercise. Why should there be SES differences in weight control practices? Differences in attitudes to diet, weight and body shape are one possibility. Contemporary Western cultures idealise thinness, especially for women, and it has been suggested that these pressures could be stronger in higher SES women.

Exploring possible differences in attitudes and practices regarding body shape and dieting is a complex task. A major difficulty is that, because dieting is itself usually triggered by feeling overweight, it is difficult to use cross-sectional data to explore the contribution of dieting to weight differentials. One option is therefore to examine differences in dieting attitudes and practices before the development of a significant gradient in weight. Childhood and adolescence provides the opportunity to address this issue.²

As one part of our project, we examined attitudes to body shape and weight control practices in relation to social background in adolescent girls. The social gradient in weight was predicted to be minimal at this age, allowing us to examine SES differences in weight-related attitudes without the complications of differential experience of overweight.

Methods

We conducted a school-based survey of girls aged 13-15 years (n=1248). Seven schools in Wirral and West Cheshire were selected to represent a range of deprivation levels, based on the proportion of children receiving free school meals in each school. All children attending school on the days of data collection took part, so participation levels were extremely high. Socio-economic circumstances were measured through a 'family affluence scale' (FAS), based on a range of indicators, including housing tenure, car access, ownership of computer, and the option of free school meals. The FAS, based on ones used in other studies of young people,³ had high completion rates and good validity.

We used and adapted well-validated questionnaires to measure social ideals of appearance, body dissatisfaction, dietary restraint and nutritional knowledge. We also developed new measures, including a BMI-calibrated figure-rating scale, which consisted of a series of 12 line drawings of female figures adapted from photographs of young women of known BMI (body mass index). Participants were asked to identify the figure which they thought was the most attractive, how they should ideally like to look and the figures which they thought were too fat and too thin. Finally, weight and height measures were taken.

Results

Table 1 confirms that there is an SES gradient in height, but no significant gradient in weight or BMI at this age. There were also no socio-economic differences in body size ideal. The figures picked as 'most attractive' or 'as I should ideally like to look' were the same in all affluence groups, and all were thin. However there were important (and significant) differences in other aspects of body image (Table 2). Greater awareness of the social ideals of thinness was reported by higher SES girls. Exposure to social pressures for thinness also varied significantly by SES, with higher SES girls reporting more talk about weight and dieting with family and friends; their parents were more likely to be trying to lose weight. Table 2 also shows that higher SES girls had more body dissatisfaction, had a higher dietary restraint score, practised more healthy weight control habits and had greater nutritional knowledge.

Table 1: Demographic and anthropometric characteristics of the four affluence groups

	Full sample (n=1248)	Family affluence score			
		0,1,2 (n=271) low affluence score	3 (n=263)	4 (n=374)	5 (n=340) high affluence score
Age (years)	14.4	14.5	14.4	14.4	14.5
Weight (kgs)	56.1	55.7	54.6	57.1	56.4
Height (metres)	161.0	159.3	160.6	161.4	162.1
BMI	21.6	21.9	21.1	21.8	21.4
% overweight (BMI>25)	15.3	18.4	11.5	18.2	12.7

Table 2: Weight related attitudes and behaviours

	Family affluence score - Mean (sd)				significance level
	poor 0,1,2 (n=271)	3 (n=263)	4 (n=374)	affluent 5 (n=340)	
Awareness of social ideals of weight ¹	6.1 (3.3)	6.4 (3.2)	6.5 (3.1)	7.0 (2.9)	p=0.003
Family talks about weight and dieting %	58.9	64.0	65.9	67.5	p=0.034
Friends talk about weight and dieting %	75.0	82.6	84.3	87.8	p=0.000
Father tries to lose weight %	17.6	26.9	30.2	28.0	p=0.009
Mother tries to lose weight %	53.9	66.4	65.9	66.4	p=0.006
Body dissatisfaction scale ²	20.3 (9.4)	19.0 (8.8)	20.3 (8.9)	21.1 (8.4)	p=0.037
Restraint ³	12.0 (5.6)	11.4 (5.1)	11.9 (5.2)	12.6 (4.8)	p=0.052
Number of healthy weight control methods	2.2 (1.8)	2.0 (1.8)	2.3 (1.8)	2.5 (1.7)	p=0.005
Nutrition knowledge ⁴	11.3 (2.6)	11.6 (2.6)	12.2 (2.6)	12.5 (2.6)	p=0.000

Notes:

1. Higher score = greater awareness of the social ideal of thinness

2. Higher score = greater dissatisfaction

3. Higher score = greater restraint

4. Higher score = greater knowledge

Concluding comments

The study successfully recruited a large sample of adolescent girls from a range of SES backgrounds to examine the relationship between SES and weight control. As we had hoped, SES differentials in weight were minimal at this age, giving us the opportunity to find out whether attitudes and practices varied by SES without the complication of differences in weight.

Our results provide strong support for the hypothesised SES differences in weight-related attitudes and behaviours. Girls from the more affluent families were more accepting of the ideal of thinness although ideals for body size appeared not to vary across the SES groups. The social environments of the higher SES girls provided more modelling of weight control, in the form of discussion of the issues of weight control in the family, and friends and family members who were trying to lose weight. As predicted, higher SES girls were also more dissatisfied with their bodies, and reported more restrained eating and more healthy weight control.

The results of this study suggest that social background may promote differences in attitudes towards weight which have the potential to influence body image, diet and weight, both for better and for worse. Chronic dietary restraint was higher and body image was poorer in the

higher SES girls, which might raise the risk of eating disorders. At the same time, nutritional knowledge was greater, and eating habits were better: factors which are probably necessary, but not sufficient, for managing weight control. While longitudinal and experimental studies are now needed to assess the balance of costs and benefits of weight concern, the study is an important step in establishing the causal pathways which run from SES to obesity.

Jane Wardle is Director of the Imperial Cancer Research Fund Health Behaviour Unit at the Department of Epidemiology and Public Health, University College London.

References

1. Prescott-Clarke, P. & Primatesta, P. (eds.) (1995) *Health Survey for England*, London: HMSO.
2. Wardle, J. et al. (1995) 'Social variation in attitudes to obesity in children' *International Journal of Obesity*, 19, 562-569.
3. Currie, C. E. et al. (1997) 'Indicators of socio-economic status for adolescents: the WHO Health Behaviour in School-aged Children Survey' *Health Education Research*, 12, 385-397.