

in brief...

Eating disorders: the impact of self-image and peer pressure

It is widely believed that the proliferation of anorexia and bulimia among young women in Europe is heavily influenced by social attitudes towards physical appearance. A new study by **Joan Costa-i-Font** and **Mireia Jofre-Bonet** confirms this fact and argues for government intervention to prevent a potential epidemic of eating disorders.

There has been a growing debate in many countries about potentially life-threatening eating disorders, especially since the Brazilian model Ana Carolina Reston died from anorexia in 2006. Policy interventions to curb both the rise in eating disorders and excessive preoccupation with self-image are increasingly being used. They include regulation of the fashion industry and advertisements, as well as support campaigns through social networks (Borzekowski et al, 2010) and the media (Burke, 2009).

More generally, it is becoming increasingly apparent that standards of physical appearance are important and powerful motivators of human behaviour, especially influencing preoccupations around health and food.

Excessive preoccupation with self-image is regarded as a contributing factor to the proliferation of eating disorders, especially among young women.

For example, a study published in the *British Medical Journal* earlier this year finds that girls and women in the UK are ten times more likely than boys and men to suffer from anorexia or bulimia. It also shows that the number of new cases of eating disorder per 100,000 people aged 10-49 rose steadily from 32.3 in 2000 to 37.2 in 2009.

Younger women are more sensitive to social changes that influence their self-image

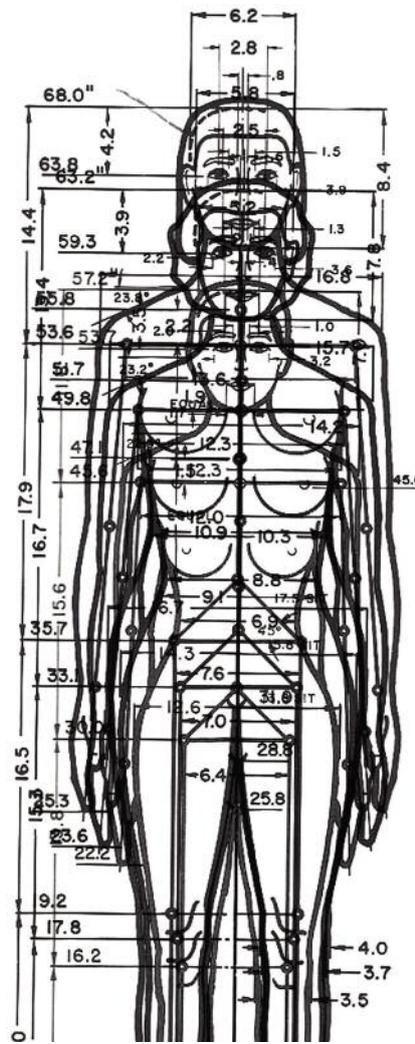
Anorexia and bulimia can be characterised by a distorted body image accompanied by an eating obsession. But how do people get a distorted body image? Social scientists typically think of social image as being continually under construction and essential in determining physical, psychological and social equilibrium (Schilder, 1958; Orbach, 1993). When applied to eating disorders, this could explain some of the forms of weight aversion extreme enough to require policy attention.

In our latest study, we argue that a distorted self-image influences health-related behaviour, specifically eating disorders. We test our claims empirically using European data and find evidence that young women with a

distorted self-image choose a net caloric intake that is below the optimal intake. Self-image is measured as 'self-reported perception of weight'.

We argue that the distortion is driven by the influence of 'peer weight' (which is likely to influence their self-image or *social identity*) on the likelihood of anorexia, and the influence of self-image on individual weight. In other words, we find that the larger the body mass of a young woman's peers, the lower the likelihood that she will be anorexic (conditioned on her individual predisposition to have distorted thoughts).

Our results take advantage of the heterogeneity in weights and perceptions of weight in data on several cohorts of women in European countries. We use this to examine empirically the hypothesis that social pressure through stereotypes about the



ideal weight induces a distorted self-perception of one's own body, which can subsequently lead to the development of anorexia.

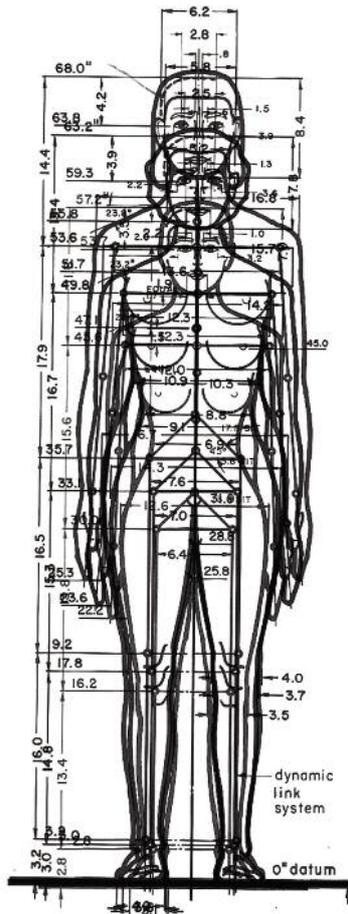
There is a large body of evidence that such 'network effects' are associated with a higher propensity to be obese (for example, Costa-Font and Gil, 2004) and can explain obesity gaps between countries (Costa-Font et al, 2010). Our new study is the first to use this idea to show that younger women's preferences are at least as prone to being conditioned by network effects as those of their adult counterparts.

We suggest that younger women trade-off their health against the goal of meeting standards of beauty indirectly produced by their self-image. We also confirm the results of epidemiological research that weight-related eating disorders happen mostly at younger ages and require attention before they extend to older age groups. We know that a significant percentage of younger women who are anorexic remain so as they get older.

In the data we analyse, anorexia affects 3% of women aged between 15 and 34, just slightly higher than the percentage affected by severe anorexia. Both conditions follow a decreasing pattern up to the age of 35, after which they remain relatively constant at about 1%. We find that the prevalence of anorexia is just below 4% for the younger age group (15-24) and just below 2% among women aged 25-34. But it is worth noting that the *International Journal of Eating Disorders* finds that 10% or more of late adolescent and adult women report symptoms of eating disorders.

We find evidence that younger women are more likely to suffer anorexia, as they are more sensitive to changes in the social environment that influence their self-image. Secondary education or having been to university decrease the likelihood of being anorexic or severely anorexic, which indicates that policy interventions might need to take place between primary and secondary education to exert an influence.

Our results suggest that government intervention to redress people's distorted self-image would be justified to prevent a potential epidemic of eating disorders. The distorted self-perception of women with eating disorders, and the importance of peer effects, may prompt governments to take action to compensate for social pressure on women driving the tension between ideal weight and health.



This article summarises 'Anorexia, Body Image and Peer Effects: Evidence from a Sample of European Women' by Joan Costa-i-Font and Mireia Jofre-Bonet, published in 2013 in *Economica* 80(317): 44-64; earlier version available as CEP Discussion Paper No. 1098 (<http://cep.lse.ac.uk/pubs/download/dp1098.pdf>).

Joan Costa-i-Font is reader in political economy at the LSE and a research associate in CEP's wellbeing programme. **Mireia Jofre-Bonet** is professor of health economics at City University London.

Further reading

Dina Borzekowski, Summer Schenk, Jenny Wilson and Rebecka Peebles (2010) 'e-Ana and e-Mia: A Content Analysis of Pro-eating Disorder Web Sites', *American Journal of Public Health* 100(8): 1526-34.

Eliza Burke (2009) 'Pro-anorexia and the Internet: A Tangled Web of Representation and (Dis)embodiment, Counselling, Psychotherapy, and Health', *The Use of Technology in Mental Health Special Issue* 5(1): 60-81.

Joan Costa-i-Font, Daniele Fabbri and Joan Gil (2010) 'Decomposing Cross-country Differences in Levels of Obesity and Overweight: Does the Social Environment Matter?', *Social Science and Medicine* 70(8): 1185-93.

Joan Costa-i-Font and Joan Gil (2004) 'Social Interactions and the Contemporaneous Determinants of Individuals' Weight', *Applied Economics* 36(20): 2253-63.

Susie Orbach (1993) *Hunger Strike: The Anorectic's Struggle as a Metaphor for Our Age*, Penguin.

Paul Schilder (1958) *The Image and Appearance of the Human Body*, International Universities Press.

The larger the body mass of a woman's peers, the lower the likelihood she will be anorexic