Promoting Positive Body Image and Tackling Overweight/Obesity in Children and Adolescents: A Combined Health Psychology and Public Health Approach

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Abstract

This article draws attention to the dual global problems of disordered eating and overweight/obesity among children and adolescents. It is well recognised that the main risk factor for disordered eating is body dissatisfaction, yet public health messages to tackle overweight/obesity are likely to increase body dissatisfaction. This tension between key public health messages and a health psychology approach is examined, with the goal of seeking a common way forward. We focus on the UK as a case study, where there is currently no statutory education in schools on body image. Since more prescriptive guidance on the curriculum covering personal/social/health issues is soon to be introduced, it is timely to consider the content, and in particular its impact on body image as well as overweight/obesity. Having reviewed current interventions and policy, we argue for a more holistic approach to the obesity problem, using a whole school approach to create a body confident culture.

Main text

Disordered eating can be defined as problem eating attitudes and behaviours that exist on a continuum from concerns about weight and shape (body dissatisfaction), to extreme weight control behaviours such fasting, purging and excessive exercise, to eating disorders such as anorexia and bulimia nervosa (Ricciardelli & McCabe, 2004). Body dissatisfaction is recognised as a consistent and robust risk factor for the development of dieting behaviours, disordered eating, and eating disorders (Stice, 2002). Once thought to be an issue primarily experienced by women and girls, it is now recognised that body dissatisfaction is reported by a significant percentage of both girls and boys (Paxton, Eisenberg & Neumark-Sztainer, 2006).

Body dissatisfaction, disordered eating and eating disorders are significant public health concerns given their wide-ranging and serious health and psychological consequences, such as reduced self-esteem (Tiggemann, 2005), depression (Brausch & Gutierrez, 2009), drug and alcohol use (Holderness, Brooks-Gunn, & Warren, 1994), unsafe sexual behaviours (Schooler, 2013), smoking onset (Kaufman & Augustson, 2008), reduced physical activity (Neumark-Sztainer et al., 2006), and overweight and obesity (Haines et al., 2010). While there are many frameworks for understanding the development of body dissatisfaction, the dominant model is one of sociocultural influences in which sociocultural pressures (e.g., appearance-focused messages from the media, peer and familial pressures) to conform to societal appearance ideals increase body dissatisfaction and symptoms of disordered eating (Thompson et al., 1999).

At the same time, obesity and overweight pose a significant threat to public health. Prevalence among children and adolescents has increased substantially in the last 30 years, with 23.8% of boys and 22.6% of girls from developed countries classified as overweight or obese (Ng et al., 2014). This has serious implications for young people's health, placing them at increased risk of developing chronic diseases such as type 2 diabetes (Abdullah et al., 2010), cancer (World Cancer Research Fund, 2015) and several other conditions (Guh et al., 2009) in adulthood. It also puts intense financial pressure on service provision; in the UK alone, the direct costs of obesity to the NHS are estimated to be 4.2 billion (Department of Health, 2012).

In addition to adverse impacts upon physical health, childhood overweight and obesity can also impose harmful psychological effects. Indeed, higher body mass index (BMI) can directly increase the risk for disordered eating among boys and girls (Stice et al; 2002; Micali et al., 2015). However,

effects upon eating pathology can also be indirect, for example via body dissatisfaction and depressive symptoms (Ferreiro et al., 2012; McCabe & Ricciardelli, 2005) or via earlier puberty for girls (Davison et al., 2003; Kaplowitz et al., 2001) which moves girls away from the Westernised beauty ideal emphasising a pre-pubertal body shape. These direct and indirect effects of overweight and obesity brings us full circle, back to the problem of disordered eating, showing that the two are linked, and indeed have shared risk factors.

We will now consider the policy context around interventions to address the problems of disordered eating and obesity, using the UK as a case study. Work to reduce levels of disordered eating has largely focussed on reducing body dissatisfaction, a key modifiable risk factor for the development of disordered eating. Interventions to address the negative effects of poor body image may be at the societal level, e.g., through mass media campaigns such as Sport England's "*This Girl Can*" initiative, or at the family level (Diedrichs et al., 2016). Alternatively, they may be targeted through schools or other youth organisations - for example, "*Happy Being Me*" which was implemented in UK primary schools (Bird et al., 2013). While such intervention approaches have been shown to reduce eating disorder risk factors, symptoms and onset (e.g., Stice et al., 2013), broader uptake (e.g., in schools and community settings) has been somewhat limited (Diedrichs, 2016). Although schools are ideally placed to create a culture which promotes positive body image, Personal, Social and Health Education (PSHE) is currently a non-statutory subject (Department for Education, 2013). A very broad framework is offered as guidance, with schools selecting areas they judge to be most relevant and there is no compulsory training for teachers (PSHE Association, 2018). Any focus on topics such as body image is likely to be minimal, and may well be delivered by teachers who have limited or no training on the topic. Solutions may lie in more specific training for teachers, or using dedicated facilitators to run these sessions (Diedrichs et al., 2015). It is likely that the PSHE curriculum will soon become more standardised (Department for Education, 2017) so there exists an opportunity to update the content using the most recent evidence about effective interventions to promote positive body image in schools.

School settings provide more overt education about both physical activity and healthy eating as strategies to reduce overweight and obesity, as evidenced by initiatives such as the WHO's *Healthy Schools* (Langford et al., 2015). However, in terms of the weekly curriculum, current UK guidance on physical education in schools is to provide a minimum of just two hours a week, and in a crowded curriculum this minimum has become the norm for the majority of schools (OfSTED, 2013). In 2012 the UK government removed the requirement for a minimum outdoor space for team games (Department for Education, 2012), potentially impacting further on opportunities for outdoor physical education. Extra-curricula school-based interventions designed to promote healthy weight and tackle overweight and obesity typically involve exercise and/or diet. Evidence about the effectiveness of such programmes is mixed (Mears & Jago, 2016), and a particular problem is sustaining the benefits in the longer-term (Langford et al., 2015). In addition, though strictly a surveillance programme, the National Child Measurement Programme (NHS Digital, 2017) which has operated in England since 2006 is another school-based initiative which provides targeted advice to families about overweight and obesity. Recent work has considered the most appropriate way to communicate these messages, and the evidence indicates that current strategies are inappropriate, and associated with concerns over weight-related stigma (Gillison, Beck, & Lewitt, 2014; Nnyanzi et al., 2016).

More generally, interventions which aim to reduce BMI may be seen to be at odds with the approach of promoting positive body image and body acceptance. Universal interventions to reduce overweight/obesity could be criticised for assuming that weight loss is desirable for everyone, and also risk stigmatising overweight children and increasing body dissatisfaction and other psychological problems (Puhl & Brownell, 2001). The mental health of young people is of course high up on the public health agenda. One million young people in the UK voted body image as one the most relevant and important issues in their lives in the UK Youth Parliament's 'Make Your Mark' ballot in 2016 (British Youth Council, 2016). For this reason, we argue that public health policy needs to be less judgemental about overweight and obesity, and be more closely aligned with the health psychology approach.

Given the recognised shared risk factors between disordered eating and overweight/obesity, some have suggested that interventions should aim to tackle both issues concurrently (Wilksch et al., 2015). Health and education policies must have due regard for the long-term impacts of body dissatisfaction in childhood and adolescence. A more consistent and holistic message could help to address both obesity and disordered eating. A trial which compared two interventions aimed at preventing disordered eating with an obesity-reduction program (*Life Smart*) found that it was one of those aimed at reducing the risk of disordered eating (*Media Smart*) that had the most beneficial effects on both weight and shape concerns, physical activity levels and screen time (Wilksch et al., 2015). This suggests that interventions focused on preventing disordered eating could also be the most promising in combating overweight/obesity, which could be explained by the positive association between body appreciation and engagement in physical activity (Kantanista et al, 2015).

In light of these observations, future school-based interventions should:

1. give equal value to both mental and physical health in the school curriculum (i.e., consider possible harmful effects of interventions to promote healthy weight on psychological health)
2. adopt a whole school approach to positive body image, creating an environment that enables a body confident culture
3. focus on enjoying physical activity to feel good and keep well (recognising multiple other benefits: improved mental health, social benefits, self-esteem, learning to be part of a team) rather than losing weight or building muscle
4. task shift by training teachers to deliver school-based sessions, rather than external facilitators, to improve scalability.

Currently, health psychologists talk about the 'societal pressure for thinness' while public health professionals worry about the 'obesogenic environment'. We have demonstrated the importance of adopting a shared approach that is acceptable to both and ultimately works to improve the overall wellbeing of children and young people today, and their long-term physical and mental health as tomorrow's adults. We recommend a shift in focus from weight control and obesity prevention to fostering appreciation of the body in relation to its functionality as opposed to its appearance. This will encourage adolescents to feel positively connected with their bodies, which will ultimately increase the likelihood that they will engage in healthy behaviours.

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