Obesity Commentary



The pivotal role of psychology in a comprehensive theory of obesity

Health Psychology Open January-June 2016: 1–4 © The Author(s) 2016 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/2055102916634365 hpo.sagepub.com



Patrick M Markey² and Christopher S Nave¹

Charlotte N Markey¹, Kristin J August¹, Lindzee C Bailey¹,

Abstract

The target article offers a comprehensive approach to conceptualizing psychological factors contributing to obesity. Strengths of Marks' theory include giving body image a central focus, discussing the importance of emotional states on food reliance, and conveying avenues for interventions and treatment. Marks' approach carefully delineates the interpersonal nature of obesity, although our work suggests that romantic partners are an especially important and understudied factor relevant to eating behaviors, body image, and obesity risk. The target article is an important step toward understanding the complex factors that contribute to obesity.

Keywords

body image, diet, eating behavior, food, obesity

Although efforts to raise awareness about the increasing rates of obesity and related health consequences have been pervasive in the 21st century, a recent report suggests that rates continue to rise, with 38 percent of US adults estimated to be obese as of 2014 (Ogden et al., 2015). Furthermore, The Lancet indicates a 45 percent rise in the prevalence of diabetes from 1990 to 2013, a development attributed primarily to obesity and indicative of the profound reach of obesity-related disability (Bukhman et al., 2015). These figures would be less disheartening if treatment for obesity did not remain so elusive. Dieting is often conceptualized as the first line of defense (assuming prevention is not effective), yet the effectiveness of dieting is nothing short of abysmal (Markey, 2014). In fact, some research (Mann et al., 2007) indicates that dieting may be counterproductive in efforts to reduce weight; weight *gain* is often a more likely result than weight loss. This leaves the most invasive surgical treatments to be the most likely methods for producing long-term weight loss, but these cosmetic and weight loss treatments present both risks and expenses that make them less than desirable for many (and an untenable solution to the global obesity problem; Markey, 2014; Markey and Markey, 2015; Sarwer, 1998).

Clearly, a greater understanding of the complex factors that contribute to obesity is necessary for prevention,

intervention, and treatment efforts to produce better results. Because this area of study is largely data-driven, in that emphasis and acclaim are given to the latest studies that produce the greatest weight loss, theories of obesity are relatively rare and those that prevail focus on the interplay between biological and environmental factors in producing obesity (see Taubes, 2013). In other words, the nature of the problem of obesity lends itself to applied work more often than theoretical work. However, the current obesogenic environment is arguably (Brownell and Horgen, 2004; Roberto et al., 2015) the leading contributor to obesity rates, and understanding and altering this environment will require a psychosocial focus. Marks' Homeostatic Theory of Obesity offers a comprehensive approach to conceptualizing factors contributing to obesity, thereby addressing the field's relative lack of theoretical understanding. Marks' description of a "Circle of Discontent" (COD) that links body dissatisfaction, negative affect, overconsumption, and weight gain hones in on some of the primary psychosocial

¹Rutgers University, USA ²Villanova University, USA

Corresponding author:

Charlotte N Markey, Rutgers University, 311 North 5th Street, Camden, NJ 08102, USA. Email: chmarkey@camden.rutgers.edu

Creative Commons Non Commercial CC-BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 3.0 License (http://www.creativecommons.org/licenses/by-nc/3.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage). factors that could be targeted in obesity interventions and treatment paradigms.

Unlike most research that examines the causes and consequences of obesity, Marks gives body image a central role in his theoretical approach. It is well established that body size (i.e. body mass index (BMI)) and body dissatisfaction are positively related (Markey and Markey, 2005), and that the relationship between these two constructs is likely reciprocal (higher weight statuses producing body dissatisfaction and body dissatisfaction contributing to maladaptive eating patterns that likely lead to increases in weight status; Markey and Markey, 2005). Marks reminds us that depression and self-esteem are an important part of this equation; general negative affect is associated with body dissatisfaction, patterns of consumption, and directly with weight status. One intriguing factor that follows from Marks' theoretical approach is the discussion of self-compassion as a possible avenue for intervention and treatment of body dissatisfaction and, thus, obesity. Self-compassion (see Neff, 2003) includes elements of self-kindness and self-awareness that have been shown to reduce body dissatisfaction. Thus, it seems possible to focus one aspect of obesity treatment on enhancing self-compassion and reducing self-criticism so that individuals can become more in tune with physiological cues signaling hunger and satiety and expend less energy engaged in a mental "war" with their bodies.

It may seem counterintuitive to focus on body image and mood enhancement as components of obesity treatment. After all, some could argue that weight loss would independently improve body image and mood. However, Marks reminds us that "people eat to calm themselves, reward themselves, assuage sadness or guilt or to reduce feelings of isolation" (p. 14). In other words, food has many meanings and uses for people, and reducing emotional states that lead to a reliance on food as a panacea may be an important step in reducing obesity. Breaking the cyclical nature of the mood-food relationship is particularly important given recent research that delineates the ultimately unsatisfying role of "comfort foods" in people's lives (Wagner et al., 2014). Although people expect high calorie (typically nonnutritive; e.g., chocolate) foods to produce a mood-enhancing effect, there is evidence that they overattribute the effects of particular foods on their mood when usually any food (or no food at all!) would result in improvements in mood. Indeed, it is the passage of time, not consumption, that may be responsible for improvements in mood (Wagner et al., 2014). Conditioning people to pass time in more productive ways-for example, through exercise or spending time with supportive others-may contribute to effective coping and weight reduction.

The interpersonal nature of obesity is an important element of Marks' theoretical approach. In fact, the three primary causes of overweight and obesity that Marks posits all have an interpersonal component worthy of further examination. First, negative public perceptions of large body size that lead to individuals' dissatisfaction with their own body size are inherently interpersonal as they require individuals to perceive themselves in response to others' perceptions. Second, high levels of negative affect associated with body dissatisfaction may be dampened by emotional support or, alternatively, exacerbated by inadequate or inappropriate social network involvement (Cohen, 2004). And third, parents, peers, and significant others play a significant role in our eating habits (Markey, 2014). For example, as some of our own work addressing romantic couples suggests, men and women who are relatively heavy and who have relatively thin romantic partners are at particular risk for engaging in emotional eating (Markey et al., 2008, in press). Emotional eating also may be in response to stress associated with relationships, which have been found to be the most common daily stressor (Bolger et al., 1989).

Although we agree with Marks' emphasis on the social and developmental aspects of weight gain (particularly the role of parents), we believe our work suggests this emphasis could be extended through the inclusion of research pertaining to romantic partners. Not only has a modest correlation among married partners been found for weight status (Hur, 2003; Markey et al., 2001), but also specific relationship experiences are associated with eating behaviors and weight status. For example, romantic partners often support and regulate the eating behaviors of their significant other (August et al., in press; Markey et al., 2001, 2008), which is more likely to occur if their significant other is heavy (Markey et al., in press). Thus, leveraging appropriate involvement by romantic partners may be an important component of obesity interventions.

Marks' consideration of the interpersonal nature of obesity focuses on attachment theory and the role of caregivers in infancy in shaping relationships and identity throughout adolescence and adulthood. Gender plays an important role in these identities and is central to any discussion concerning eating behaviors. Marks aptly notes important gender differences with respect to BMI and body dissatisfaction, as well as those affecting dieting practices. In doing so, he highlights a strong need to address such differences regarding obesity and body dissatisfaction interventions. Research suggests that although men tend to have less dissatisfaction with their weight and attempt weight loss less often than women, their weight loss strategies are likely to include increased exercise and reduced fat intake, while women's strategies tend to include dieting and prescription pills (Tsai et al., 2015). Women may be more susceptible to emotional disinhibition of eating (LeBlanc et al., 2015), but are more likely than men to consume adequate amounts of fruits and vegetables on a regular basis (provided sufficient emotional and informational support; Rugel and Carpiano, 2015). These findings indicate that although proper diet and exercise practices are encouraged for all individuals (to which men respond relatively well), women may see more beneficial results from interventions that emphasize emotional support and encouragement toward meeting dietary and exercise goals.

In addition to a greater exploration of gender issues, Marks' theory would have an even greater impact if it delineated explicit links between the COD and modes of intervention and treatment. What Marks offers in terms of breadth leaves some depth obscured. But, digging into the applied issues is no small challenge. After all, how do we keep people from overeating the overabundance of energydense, palatable foods that surround them (and then, address the negative mood that follows)? How do we address mental health contributors to body dissatisfaction and learned helplessness in an obesogenic environment? How do we create a sense of efficacy-and enjoymentconcerning food that allows for the establishment of healthy eating habits? And, how can we eliminate stigma against the already obese that reduces their life satisfaction and inhibits their ability to maintain weight loss?

Changing the environment has the potential to change individuals' maladaptive behaviors that predict obesity (Brownell and Horgen, 2004; Hill et al., 2003). Systemic, environmental contributors to obesity may be addressed by public policy and legislation. Marks acknowledges this and provides suggestions (e.g. monitoring fashion advertisements, taxing soda) that are supported by leading public health professionals and advocates in obesity prevention (Brownell and Frieden, 2009; Khan et al., in press). However, these mechanisms are not particularly psychological in nature and will not necessarily address the COD that Marks raises as central to the creation of the obesity epidemic. So, what will?

Marks' theoretical approach raises a critical and often ignored question: How does an appreciation of the psychological nature of obesity contribute to prevention, intervention, and treatment efforts? We believe that psychologists have much to offer in solving the obesity crisis, but the success will require cooperation among experts across disciplines including medicine, health policy, psychology, nutrition, public health, and sociology. Marks' comprehensive theory of obesity is a step toward this necessary coordination and we are hopeful it will help to reduce the reach of obesity and its deleterious consequences.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

August KJ, Kelly CS and Markey CM (2015) Marriage, romantic relationships & mental health. In: Friedman H (ed.) *Encyclopedia of Mental Health* (2nd edn). San Diego, CA: Elsevier.

- Bolger N, DeLongis A, Kessler RC, et al. (1989) Effects of daily stress on negative mood. *Journal of Personality and Social Psychology* 57: 808–818.
- Brownell KD and Frieden TR (2009) Ounces of prevention— The public policy case for taxes on sugared beverages. *New England Journal of Medicine* 360(18): 1805–1808.
- Brownell KD and Horgen KA (2004) Food Fight: The Inside Story of The Food Industry, America's Obesity Crisis, and What We Can Do About It. New York: McGraw-Hill Education.
- Bukhman G, Bavuma C, Gishoma C, et al. (2015) Endemic diabetes in the world's poorest people. *The Lancet Diabetes & Endocrinology* 3(6): 402–403.
- Cohen S (2004) Relationships and health. *American Psychologist* 59: 676–684.
- Hill JO, Wyatt HR, Reed GW, et al. (2003) Obesity and the environment: Where do we go from here? *Science* 299(5608): 853–855.
- Hur YM (2003) Assortative mating for personality traits, educational level, Religious affiliation, height, weight, and body mass index in parents of a Korean twin sample. *Twin Research* 6(6): 467–470.
- Khan R, Misra K and Singh V (in press) Will a fat tax work? Marketing science.
- LeBlanc V, Bégin C, Corneau L, et al. (2015) Gender difference in dietary intakes: What is the contribution of motivational variables? *Journal of Human Nutrition and Dietetics* 28(1): 37–46.
- Mann T, Tomiyama JA, Westling E, et al. (2007) Medicare's search for effective obesity treatments: Diets are not the answer. *The American Psychologist* 62: 220–233.
- Markey CN (2014) Smart People Don't Diet: How Psychology, Common Sense, and the Latest Science Can Help You Lose Weight Permanently. Boston, MA: Da Capo/Lifelong Books.
- Markey CN and Markey PM (2005) Relations between body image and dieting behaviors: An examination of gender differences. Sex Roles 53: 519–530.
- Markey CN and Markey PM (2015) Can women's body image be "fixed"? Body image and cosmetic surgery. In: McHugh MC and Chrisler JC (eds) *The Wrong Prescription for Women: How Medicine and Media Create a "Need" for Treatments, Drugs and Surgery*. Santa Barbara, CA: ABC-CLIO, pp. 221–237.
- Markey CN, Gomel JN and Markey PM (2008) Romantic relationships and eating Regulation: An investigation of partners' attempts to control each others' eating behaviors. *Journal of Health Psychology* 13(3): 422–432.
- Markey CN, Markey PM and Birch LL (2001) Interpersonal predictors of dieting practices among married couples. *Journal* of Family Psychology 15(3): 464–475.
- Markey CN, Markey PM, August KJ, et al. (in press) Gender, BMI, and eating regulation in the context of same-sex and heterosexual couples. *Journal of Behavioral Medicine*.
- Neff K (2003) Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity* 2(2): 85–101.
- Ogden CL, Carroll MD, Fryar CD, et al. (2015) Prevalence of obesity among adults and youth: United States, 2011–2014. *NCHS Data Brief* 219: 1–8.

- Roberto CA, Swinburne B, Hawkes C, et al. (2015) Patchy progress on obesity prevention: Emerging examples, entrenched barriers, and new thinking. *The Lancet* 385(9985): 2400–2409.
- Rugel EJ and Carpiano RM (2015) Gender differences in the roles for social support in ensuring adequate fruit and vegetable consumption among older adult Canadians. *Appetite* 92(1): 102–109.
- Sarwer DB (1998) Psychological characteristics of women who undergo single and multiple cosmetic surgeries. *Annals of Plastic Surgery* 40(3): 309.
- Taubes G (2013) The science of obesity: What do we really know about what makes us fat? An essay by Gary Taubes. *BMJ* 346: f1050.
- Tsai SA, Lv N, Xiao L, et al. (2015) Gender differences in weight-related attitudes and behaviors among overweight and obese adults in the United States. *American Journal* of Men's Health. Epub ahead of print 15 January. DOI: 10.1177/1557988314567223.
- Wagner HS, Ahlstrom B, Redden JP, et al. (2014) The myth of comfort food. *Health Psychology* 33(12): 1552–1557.