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Letter to the editor

Why Bariatric Weighted Suits May Advance the Scientific Study of Weight Stigma

Claire Mills and Emily Ryall

TO THE EDITOR: Understanding the impact of excess body fat and its effect on quality and length of life is a major public policy focus (1). As such, obesity-prevention programs have focused on advocating a balanced and varied diet, daily calorie intake, and moderate to vigorous exercise (2,3). However, exercise and health professionals may lack empathetic understanding to assist populations with obesity in following these recommendations. The use of bariatric weighted suits (BWS) may be a means to bridge this gap of empathy and understanding. As such, we believe it necessary to contest three areas that are highlighted in Meadows et al.'s (4) letter to the editor, "Why Fat Suits Do Not Advance the Scientific Study of Weight Stigma."

The first concern we have is the repeated use of the term "fat suit." While we recognize that there is a movement that attempts to reclaim the term "fat" as a sign of empowerment, the label BWS currently has more neutral connotations and is the term more commonly used in the industry of care and nursing for which BWS were originally designed. Arguably, though the wider debate is still ongoing and consensus is to be reached as to its merits, it is more reasonable to use the more neutral term while still acknowledging the discourse around the term "fat."

In relation to this, Meadows et al. (4) criticize the use of BWS from an ethical perspective in that "the experiences of a marginalized group must be verified by the privileged in order to be considered legitimate." Meadows et al. imply that "the privileged" constitutes practitioners who might wear BWS to be able to empathize (legitimize) the experiences of populations with obesity. However, we reject the following conclusion: that this reinforces social stigma by "perpetuat[ing] the current power structure and constitutes another form of oppression." In contrast, if practitioners use BWS from a position of openness and understanding, then it may help to increase empathy and understanding and decrease the likelihood of oppression. Equally, it is important that the following two distinct issues on the topic are not conflated: the scientific consensus that obesity is linked with poor health and quality of life indicators and the value and respect afforded to all humans by virtue of their personhood. While public health policy is paternalistic in the sense that it provides recommendations about a good life, and this may include value judgements about body weight, this does not mean that those that do not fulfill this ideal (which is probably all of us) are therefore devalued as human beings. And though Meadows et al. argue that the use of BWS should not be necessary to be able to empathize with a particular population, there are clear and valid reasons why it can be of use. Arguably, the stigmatization of particular populations is caused by wider cultural issues related to respect for others that need to be addressed and not by BWS as Meadows et al. propose.

Noting the above, the substantive concern we have in relation to the letter by Meadows et al. (4) is that the uses of BWS are methodologically flawed. Of the eight papers that were cited, only one paper (5) used BWS. Within this paper, Incollongo Rodriguez et al. (5) did not report any specific methodological issues when using BWS but merely acknowledged that wearing BWS elicited psychological and behavioral reactions. As such, the papers do not clearly support Meadows et al.'s conclusion. Furthermore, Meadows et al. neglect literature that has suggested that using BWS can provide valid and meaningful data, particularly in respect to the physiological and biomechanical experience of populations with obesity. BWS can provide personal trainers, physical education teachers, coaches, and exercise and health professionals with an ability to recognize the physical limitations of those they work with and, as such, provide better and more empathetic support (6). Though it is accepted that wearing BWS will not completely replicate the lived experience, it can go toward partial experience and understanding (7). For example, in the Mills and Dee study (8), participants noted instant observable changes to their body shape, size, and weight, and physical limitations in everyday movements, including standing to sitting, sitting to standing, and running, were also evident. Furthermore, during 5 minutes of low-impact activity, participants' heart rates increased from 60 to 182 beats per minute. While there was an acknowledgement of rapid acclimatization in wearing BWS and an immediate increase in stresses placed on the heart from the added weight, this experience gave participants an instant phenomenological perspective that would not otherwise have been obtained (8,9).

To conclude, though we recognize that BWS provide only a partial and limited experience of people with obesity, we argue that its use can be valuable, particularly in providing wearers with a specific physiological and biomechanical experience that may lead to more suitable interventions and advice as health practitioners, especially around the promotion of exercise and physical activity. Rather than stigmatizing this population as Meadows et al. (4) suggest, the use of BWS, if used appropriately, can aid (scientific) understanding of factors involved in the pursuit of a healthy and active life.

References

1. Wyatt SB, Winters KP, Dubbert PM. Overweight and obesity: prevalence, consequences and causes of a growing public health problem. *Am J Med Sci* 2006;331:166-174.
2. World Health Organization. *Global Recommendations on Physical Activity for Health*. Geneva: WHO; 2010.
3. National Institute for Health and Care Excellence. Obesity prevention: working with people to prevent and manage overweight and obesity: the issues. <https://www.nice.org.uk/guidance/cg43/chapter/Workingwith-people-to-prevent-and-manage-overweightand-obesity-the-issues>. Published December 2006. Updated March 2015. Accessed June 14, 2018.
4. Meadows A, Daniëlsdóttir S, Calogero R, O'Reilly C. Why fat suits do not advance the scientific study of weight stigma. *Obesity (Silver Spring)* 2017;25:275.
5. Incollingo Rodriguez AC, Heldreth CM, Tomiyama JA. Putting on weight stigma: a randomized study of the effects of wearing a fat suit on eating, well-being, and cortisol. *Obesity (Silver Spring)* 2016;24:1892-1898.
6. Mills CD. What is it like to be obese? A practical example. *Obesity Research - Open Journal* 2015;2:e8-e9.
7. Mills CD. Can we really provide physical activity recommendations for obese people if we are not obese? A phenomenological perspective using a bariatric weighted suit (abstract). *J Obes Weight Loss Ther* 2017; doi:10.4172/2165-7904-C1-051
8. Mills CD, Dee S. Challenging perceptions on body image using a bariatric weighted suit with female University dancers. *Journal of Obesity and Bariatrics* 2016;3. doi:10.13188/2377-9284.1000019
9. Hales C, Gray L, Russell L, MacDonald C. A qualitative study to explore the impact of simulating extreme obesity on health care professionals' attitudes and perceptions. *Ostomy Wound Manage* 2018;64:18-24. School of Sport and Exercise, University of Gloucestershire, UK.

Correspondence: Claire Mills
(clairem@glos.ac.uk)

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