



Published in final edited form as:

Body Image. 2021 March ; 36: iii–v. doi:10.1016/j.bodyim.2020.12.002.

Inconsistencies in the conceptualisation and operationalisation of internalized weight stigma: A potential way forward

Emma Austen*,

Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

Rebecca L. Pearl,

Center for Weight and Eating Disorders, Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

Scott Griffiths

Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

1. Introduction

Weight stigma refers to the stereotyping and devaluation of individuals who deviate from societal body ideals, processes most often experienced by people with higher body weights (Tomiya et al., 2018). Evidence suggests that experiencing weight stigma facilitates negative outcomes, including disordered eating, anxiety, and depression, in part through *internalized weight stigma* (IWS): a process of self-devaluation due to body weight (Pearl & Puhl, 2018; Wellman, Araiza, Solano, & Berru, 2019).

In their recent paper, Meadows and Higgs (2020) investigated the conceptual overlap of one widely used measure of IWS, the Weight Bias Internalization Scale (WBIS; Durso & Latner, 2008), with measures of self-esteem and body image. The authors hypothesised that these constructs may be better represented by an underlying self-judgement trait. This prediction was supported through a bifactor analysis examining the shared and unique variance among these measures, which revealed that more than three quarters of the variance in both IWS and body image were accounted for by an overarching body image-related self-judgement factor. Notably, taking into account the shared variance of IWS with body image and self-esteem, IWS was no longer a significant mediator of the relationship of experienced weight stigma with eating behaviours. Although Meadows and Higgs address just one specific relationship of weight stigma experiences and adverse outcomes mediated by IWS, their findings raise the question of why IWS was not fully distinct from related self-esteem and body image constructs.

In light of this challenge of delineating IWS (as measured by the WBIS) from other related measures, Meadows and Higgs (2020) called for greater conceptual clarity in IWS

*Corresponding author at: Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Victoria, Australia. eausten@student.unimelb.edu.au, (E. Austen).

CRedit authorship contribution statement

Emma Austen: Conceptualization, Writing - original draft, Writing - review & editing. **Rebecca L. Pearl:** Conceptualization, Writing - review & editing. **Scott Griffiths:** Conceptualization, Writing -review & editing.

research. We agree with this recommendation, and expand upon it in this commentary by identifying three related processes that limit conceptual clarity in this area of research: (i) the interchangeable use of terms to refer to IWS, (ii) the inconsistent definitions of those terms, and (iii) the varying operationalisations of those terms.

2. Interchangeable use of terms to refer to internalized weight stigma

Meadows and Higgs (2020) proposed that the conceptual ambiguity of measures of global self-esteem, body image, and IWS, may lead to a *jangle fallacy*: a circumstance wherein multiple terms, treated as different constructs, are used to describe ostensibly identical processes (Kelley, 1927). We extend this notion of a jangle fallacy in IWS research specifically to the term *internalized weight stigma*, in that this is one of many terms researchers have used to describe identical or highly similar processes. Other terms include weight bias internalization (or WBI; Durso & Latner, 2008; Pearl & Puhl, 2014, 2018), internalized weight bias (Hayward, Vartanian, & Pinkus, 2018; Latner, Barile, Durso, & O'Brien, 2014; Purton et al., 2019), and weight self-stigma (Griffiths, Williamson, Zucchelli, Paraskeva, & Moss, 2018; Lillis, Luoma, Levin, & Hayes, 2010). The interchangeable use of these terms creates difficulty in determining whether different researchers are referring to the same phenomenon, or if the meanings of these terms (e.g., internalization versus self-stigma) do indeed diverge in some ways.

3. Inconsistent definitions of the terms used to refer to internalized weight stigma

Further limiting conceptual clarity is the fact that these terms, although referring to similar if not identical processes, are themselves defined inconsistently. Seemingly all existing definitions of IWS (and its alternative terms listed above) describe it as a process of self-devaluation due to body weight (Durso & Latner, 2008; Lillis et al., 2010; Pearl & Puhl, 2014). Facets of IWS addressed by some, but not all, definitions include one's awareness of their stigmatized identity (Pearl & Puhl, 2018; Puhl, Himmelstein, & Quinn, 2018), and anticipated stigmatization from others (Griffiths et al., 2018; Lillis et al., 2010). Many definitions of IWS also suggest that, in order to internalize weight stigma, an individual must endorse negative weight stereotypes (Durso & Latner, 2008; Meadows & Calogero, 2018; Pearl & Puhl, 2018). No single definition, or resultant operationalisation, of IWS encompasses all of the components defined here; thus, the relationships among these elements are unclear.

Conceptualisations of self-stigma in the mental illness literature provide a useful framework for understanding and assessing the relationships among these components. Four core components of mental illness self-stigma are identified in this literature: (i) the awareness of negative stereotypes about mental illness (*stereotype awareness*), (ii) endorsement of these negative stereotypes surrounding mental illnesses (*stereotype agreement*), (iii) application of these stereotypes to oneself (*self-concurrence*), and (iv) resultant self-devaluation (*self-esteem decrement*) (Corrigan, Larson, & Ruesch, 2009, 2012; Link, 1987). This process occurs in a stepwise fashion, such that stereotype awareness precedes stereotype agreement, which then leads to self-concurrence and subsequent self-esteem decrement (Corrigan et al.,

2009, 2012). Many researchers have drawn from this framework in their conceptualisations of IWS, and yet it is not clear that existing IWS measures assess all aspects of this internalization process. It is also not known whether all of these components (e.g., stereotype agreement) are present in individuals with high levels of IWS, or whether explicit (versus implicit) measures are able to capture all components. This is a particularly important consideration in the development of interventions to prevent and reduce IWS and its associated adverse outcomes, which may specifically target one or more of these facets of internalization. Future research may test whether IWS maps onto the framework of internalized stigma of mental illness, or whether divergences may emerge between different forms of self-stigma.

4. Varying operationalisations of internalized weight stigma

The interchangeable terms and inconsistent definitions of IWS have likely contributed to the varied operationalisations (i.e., self-report questionnaires) of IWS. If existing definitions do not capture the processes subsumed in IWS in their entirety, neither will their resulting operationalisations. This sequence of consequences is demonstrated in Meadows and Higgs' (2020) findings that the WBIS may not fully capture the multidimensionality of IWS, nor its distinctiveness from alternative processes.

Meadows and Higgs' (2020) bifactor analyses revealed that WBIS items with acceptable factor loadings on the construct-specific IWS factor, when taking into account its shared variance, more accurately reflected processes of self-devaluation, fear of negative evaluation, and psychological distress. The authors note that these elements mirror those captured by the Weight Self-stigma Questionnaire (WSSQ; Lillis et al., 2010), another widely used measure of IWS that comprises two subscales assessing fear of enacted stigma and self-devaluation, respectively. In prior studies, the WBIS items have repeatedly shown to load onto a single factor (Durso & Latner, 2008; Durso, Latner, & Ciao, 2016). However, Meadows and Higgs (2019) re-analysed the 19 original scale items (some of which were later eliminated for low factor loadings) and found a two-factor solution (WBIS-2F) reflecting weight-related distress and weight-related self-worth, respectively. Together, these findings suggest that, commensurate with the numerous components of IWS defined throughout the literature, IWS may be better operationalised as a multidimensional construct. As noted by Meadows and Higgs (2020), whether the existing multidimensional measures of IWS (i.e., WSSQ; WBIS-2F) fully capture the process of IWS, and its distinctiveness from related constructs, also needs to be determined.

In sum, it is evident that the inconsistent operationalisations of IWS may arise, in part, from its varied definitions throughout the literature. If IWS is a more multidimensional construct than is captured by measures like the WBIS, then revisiting its conceptualisation could help to elucidate the relationships of its various components with adverse outcomes, and thereby highlight precise intervention targets.

5. A way forward: bringing conceptual clarity to internalized weight stigma

Meadows and Higgs (2020) suggested that one way to tackle the inconsistent conceptualisation of IWS is to replicate their research with alternative IWS measures (e.g., WSSQ, WBIS-2F), to tease out the elements of IWS that are distinct from self-esteem and body image processes. We suggest that addressing these issues at their conceptual roots is another useful approach. A promising next step could be a Delphi study: a process wherein a panel of ‘experts’ (i.e., people with experience or knowledge of a particular topic, such as researchers or those with a lived experience) work to arrive at a consensus about an area of research that lacks clarity (Sumsion, 1998).

The Delphi method has been recently employed in the weight stigma literature to develop consensus and advice surrounding the best methods to reduce weight stigma in research and practice (Hart, Ferreira, Ambwani, Gibson, & Austin, 2020), and to facilitate the commitment of researchers, scientists, and public health officials to this goal (Rubino et al., 2020). We believe that a necessary part of reducing weight stigma and its outcomes is determining what specific processes must be targeted by interventions – in particular, by providing conceptual clarity around the processes encompassed within IWS. Therefore, we suggest conducting a Delphi study that specifically addresses issues of conceptual clarity in IWS research.

This may be achieved by presenting ‘experts’ in IWS (e.g., researchers, clinicians, those with a lived experience of weight stigma, and other potential stakeholders) with several rounds of questions to reach consensus about what the internalization process involves (e.g., stereotype awareness, self-devaluation, explicit versus implicit endorsement of weight stereotypes, etc.). Points of agreement would then be explored further via additional rounds of questioning and discussion. This iterative process of gathering and summarising feedback could provide us with a definition that the majority of experts agree is useful in conceptualising IWS. Adoption of a common definition, perhaps informed by frameworks of mental illness self-stigma (Corrigan et al., 2009, 2012), could provide a universal language for speaking about IWS and allow for the development of comprehensive operationalisations of this construct. Through this, researchers could be more confident that we are describing, measuring, and developing interventions for the same phenomenon.

6. Conclusion

Meadows and Higgs’ (2020) findings highlight the need for greater conceptual clarity in IWS research. Specifically, the clarification of the specific components subsumed in IWS is one step that should be considered if researchers wish to observe the full impacts of this process upon mental and physical health outcomes. Developing a consensus definition, and subsequent operationalisations, of IWS will ultimately help to achieve what is the overarching goal of this body of research: that is, to develop interventions to reduce the incidence and severity of the mental and physical health-related consequences to which IWS contributes.

Acknowledgements

Emma Austen is supported by an Australian Government Research Training Program Scholarship.

References

- Corrigan PW, & Rao D (2012). On the self-stigma of mental illness: Stages, disclosure, and strategies for change. *The Canadian Journal of Psychiatry*, 57(8), 464–469. 10.1177/070674371205700804 [PubMed: 22854028]
- Corrigan PW, Larson JE, & Ruesch N (2009). Self-stigma and the “why try” effect: Impact on life goals and evidence-based practices. *World Psychiatry*, 8(2), 75–81. 10.1002/j.2051-5545.2009.tb00218.x [PubMed: 19516923]
- Durso LE, & Latner JD (2008). Understanding self-directed stigma: Development of the weight bias internalization scale. *Obesity*, 16(S2), S80–S86. 10.1038/oby.2008.448 [PubMed: 18978768]
- Durso LE, Latner JD, & Ciao AC (2016). Weight bias internalization in treatment-seeking overweight adults: Psychometric validation and associations with self-esteem, body image, and mood symptoms. *Eating Behaviors*, 21, 104–108. 10.1016/j.eatbeh.2016.01.011 [PubMed: 26826975]
- Griffiths C, Williamson H, Zucchelli F, Paraskeva N, & Moss T (2018). A systematic review of the effectiveness of Acceptance and Commitment Therapy (ACT) for body image dissatisfaction and weight self-stigma in adults. *Journal of Contemporary Psychotherapy*, 48(4), 189–204. 10.1007/s10879-018-9384-0 [PubMed: 30369631]
- Hart LM, Ferreira KB, Ambwani S, Gibson EB, & Austin SB (2020). Developing expert consensus on how to address weight stigma in public health research and practice: A Delphi study. *Stigma and Health*, 10.1037/sah0000273. Advanced online publication
- Hayward LE, Vartanian LR, & Pinkus RT (2018). Weight stigma predicts poorer psychological well-being through internalized weight bias and maladaptive coping responses. *Obesity*, 26(4), 755–761. 10.1002/oby.22126 [PubMed: 29427370]
- Kelley TL (1927). *Interpretation of educational measurements*. New York, NY: Macmillan.
- Latner JD, Barile JP, Durso LE, & O’Brien KS (2014). Weight and health-related quality of life: The moderating role of weight discrimination and internalized weight bias. *Eating Behaviors*, 15(4), 586–590. 10.1016/j.eatbeh.2014.08.014 [PubMed: 25215477]
- Lillis J, Luoma JB, Levin ME, & Hayes SC (2010). Measuring weight self-stigma: The Weight Self-stigma Questionnaire. *Obesity*, 18(5), 971–976. 10.1038/oby.2009.353 [PubMed: 19834462]
- Link BG (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations of rejection. *American Sociological Review*, 52(1), 96–112. 10.2307/2095395
- Meadows A, & Calogero RM (2018). Studies on weight stigma and body image in higher-weight individuals. In Cuzzolaro M & Fassino S (Eds.), *Body image, eating, and weight* (pp. 381–400). Springer.
- Meadows A, & Higgs S (2019). The multifaceted nature of weight-related self-stigma: Validation of the two-factor Weight Bias Internalization Scale (WBIS-2F). *Frontiers in Psychology*, 10(808) 10.3389/fpsyg.2019.00808
- Meadows A, & Higgs S (2020). A bifactor analysis of the Weight Bias Internalization Scale: What are we really measuring? *Body Image*, 33, 137–151. 10.1016/j.bodyim.2020.02.013 [PubMed: 32155463]
- Pearl RL, & Puhl RM (2014). Measuring internalized weight attitudes across body weight categories: Validation of the modified Weight Bias Internalization Scale. *Body Image*, 11(1), 89–92. 10.1016/j.bodyim.2013.09.005 [PubMed: 24100004]
- Pearl RL, & Puhl RM (2018). Weight bias internalization and health: A systematic review. *Obesity Reviews*, 19(8), 1141–1163. 10.1111/obr.12701 [PubMed: 29788533]
- Puhl RM, Himmelstein MS, & Quinn DM (2018). Internalizing weight stigma: Prevalence and sociodemographic considerations in US adults. *Obesity*, 26(1), 167–175. 10.1002/oby.22029 [PubMed: 29082666]

- Purton T, Mond J, Cicero D, Wagner A, Stefano E, Rand-Giovannetti D, ... & Latner J (2019). Body dissatisfaction, internalized weight bias and quality of life in young men and women. *Quality of Life Research*, 28, 1825–1833. 10.1007/s11136-019-02140-w [PubMed: 30783875]
- Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI, ... & Apovian CM (2020). Joint international consensus statement for ending stigma of obesity. *Nature Medicine*, 1–13. 10.1038/s41591-020-0803-x
- Sumsion T (1998). The Delphi technique: An adaptive research tool. *British Journal of Occupational Therapy*, 61(4), 153–156. 10.1177/030802269806100403
- Tomiyama AJ, Carr D, Granberg EM, Major B, Robinson E, Sutin AR, ... & Brewis A (2018). How and why weight stigma drives the obesity 'epidemic' and harms health. *BMC Medicine*, 16(1), 123. 10.1186/s12916-018-1116-5 [PubMed: 30107800]
- Wellman JD, Araiza AM, Solano C, & Berru E (2019). Sex differences in the relationships among weight stigma, depression, and binge eating. *Appetite*, 133, 166–173. 10.1016/j.appet.2018.10.029 [PubMed: 30385263]