

the Behavior Therapist

special issue

Harms

Caused by the Misapplication
of Cognitive Behavioral Therapies
(Part 1)

Guest Editors: Ilana Seager van Dyk
Alexandria Miller

Ilana Seager van Dyk and Alexandria Miller

Introduction to the Special Issue: Harms Caused by the Misapplication
of Cognitive Behavioral Therapies (Part 1) • 245

Isaac L. Ahuvia and Jessica L. Schleider

Potential Harms From Emphasizing Individual Factors Over
Structural Factors in Cognitive Behavioral Therapy With
Stigmatized Groups • 248

Tyra Bergstrom, Brie M. Reid, Sharon Y. Lee, Laura R. Stroud

The History of Clinical Psychology and Its Relationship to Ableism:
Using the Past to Inform Future Directions in Disability-Affirming
Care • 255

*Bharat Bharat, Alex Dopp, Briana Last, Gary Howell, Erum Nadeem,
Clara Johnson, Shannon Wiltsey Stirman*

Deimplementation Strategies to End Sexual Orientation and Gender
Identity and Expression Change Efforts: Undoing a Harmful Legacy
of Behavior Therapy • 261

*Cheri A. Levinson, Hannah F. Fitterman-Harris, Shannon Patterson,
Erin Harrop, Chevese Turner, Michelle May, Dori Steinberg, Lauren
Muhlheim, Rachel Millner, Eva Trujillo-ChiVacuan, Jennifer Averyt,
Rebecka Peebles, Shira Rosenbluth, Carolyn Black Becker*

The Unintentional Harms of Weight Management Treatment:
Time for a Change • 271

Ash M. Smith, Jamie L. Taber, Danielle S. Berke

Resisting the Misuse of Theories Foundational to Cognitive Behavioral
Therapy in Anti-Trans Legislation • 282

[Contents continued on p. 246]

Introduction

to the Special Issue:

Harms Caused by the Misapplication of Cognitive Behavioral Therapies (Part 1)

Ilana Seager van Dyk, Massey
University

Alexandria Miller, Suffolk University

AS READERS of *the Behavior Therapist* likely know, cognitive behavioral therapy (CBT) is a psychological framework that focuses on the interconnection between thoughts, emotions, and behaviors as they relate to a client's presenting problem. CBT has been shown to be effective in treating a wide range of psychological distress across the lifespan, including anxiety and worry (e.g., Watts et al., 2015), depression (Watts et al.), posttraumatic stress (e.g., Thielemann et al., 2022), insomnia (e.g., Trauer et al., 2015), and eating disorders (e.g., Linardon et al., 2017), among others. However, there is growing evidence that the misapplication of CBT principles can, at the least, invalidate, and at the worst, perpetuate oppressive systems and actively harm minoritized individuals.

One example of such harm was highlighted last year when ABCT apologized for the field of behavior therapy's role in the development of so-called "conversion therapies" aimed at changing clients' nonheterosexual and/or non-cisgender identities (ABCT, 2022). These largely behavioral interventions, while no longer endorsed by prominent psychological organizations, continue to be used today and are linked with increased psychological harm, up to and including suicide (e.g., Green et al., 2020). When this apology was announced, many ABCT members learned for the first time

[continued on p. 247]

The Unintentional Harms of Weight Management Treatment: Time for a Change

Cheri A. Levinson and Hannah F. Fitterman-Harris,
University of Louisville

Shannon Patterson, *Equip Health*

Erin Harrop, *University of Denver, Graduate School of Social Work*

Chevese Turner, *Body Equity Alliance*

Michelle May, *Am I Hungry*

Dori Steinberg, *Equip Health*

Lauren Muhlheim, *Eating Disorder Therapy LA*

Rachel Millner, *Beyond Therapy and Nutrition Center*

Eva Trujillo-ChiVacuan, *Comenzar de Nuevo*

Jennifer Averyt, *Phoenix VA Health Care System*

Rebecka Peebles, *University of Pennsylvania*

Shira Rosenbluth, *Shira Rosenbluth, LLC*

Carolyn Black Becker, *Trinity University*

Cognitive-Behavioral Treatment for Weight Management (CBT-WM) Overview

Secondary to social pressures and biases related to the perceived value of thinness, as well as common beliefs about health dangers of higher weight, individuals experience significant pressure to avoid having a higher-weight body and participate in weight loss interventions (Centers for Disease Control and Prevention, 2020; Jovanovski, 2017). Importantly, this pressure has existed for decades (Puhl & Brownell, 2003). Cognitive and behavioral interventions for weight management (components discussed below; Table 1) are considered the first-line, evidence-based treatment (Dalle Grave et al., 2020; Hampl et al., 2023). These interventions include a variety of cognitive-behavioral strategies collectively designed to induce changes in diet and physical activity to create a calorie deficit intended to produce weight loss (Dalle Grave et al.; Kelley et al., 2016). Many variants of CBT-WM are manualized psychological treatments and are delivered by trained professionals, paraprofessionals, smartphone apps (e.g.,

“Noom”), medical programming within large hospital systems, and self-help books.

CBT-WM Components

To achieve weight loss, CBT-WM emphasizes behavioral strategies, such as self-monitoring of dietary behaviors and physical activity, creation of SMART (specific, measurable, attainable, relevant, and timely) goals, stimulus control, and problem solving (Dalle Grave et al., 2011; Dalle Grave et al., 2013; Kelley et al., 2016; see Table 1). CBT-WM intervention developers are increasingly incorporating broader treatment targets that include stress management, sleep, internalized weight stigma, and cognitions about weight, eating, and exercise (Dalle Grave et al., 2020; Geiker et al., 2018; Pearl, Bach, et al., 2022; Xenaki et al., 2018). However, the primary focus of treatment remains weight loss, with the expectation that weight loss will improve health and quality of life. More intensive treatments also emphasize weight loss maintenance (e.g., Dalle Grave et al., 2020; also see below).

Dietary components of CBT-WM promote dietary restriction with the goal to create a 500–1,000 caloric deficit each day

that, theoretically, could cause weight loss of 1–2 pounds per week (Dalle Grave et al., 2013). Caloric intake goals typically range from 1,200–1,800 calories per day, and there is no consistent recommendation for how those calories should be distributed across macronutrients (e.g., fat, carbohydrates, protein). Many interventions also offer tools such as meal replacement products (e.g., prepackaged meals) and structured meal plans. Physical activity goals range from 150–250 minutes of moderate to vigorous physical activity per week.

Recently, a new variant of CBT-WM specifically targeting “obesity” (CBT-OB) was created by adding personalized cognitive strategies and procedures. CBT-OB targets adoption of a long-term lifestyle conducive to losing and then controlling weight, and a stable “weight-control mindset” (Dalle Grave et al., 2020). Targeting cognitions in CBT for weight loss is not new. In various forms of CBT-WM, clients evaluate whether their automatic thoughts are accurate or biased (Beck, 2007; Dalle Grave et al., 2013). Automatic thoughts may be about eating, weight, shape, control, and other related topics (e.g., interpersonal thoughts; Werrij et al., 2009). For instance, a client might be taught to challenge an all-or-nothing thought that “eating a whole bowl of food is inevitable if they take one bite” (Werrij et al., 2009). Importantly, we consider any weight loss/management protocol that includes CBT strategies as falling under the CBT-WM umbrella. A primary source for these protocols is large RCTs (discussed below) that are then implemented and modified in everyday clinical practice.

Outcome Data on CBT-WM

Does CBT-WM Lead to Weight Loss?

A comprehensive review of CBT-WM studies is beyond the scope of this paper. Readers are referred to other reviews for in-depth discussion (e.g., Comşa et al., 2020; Jacob et al., 2018; Mann et al., 2007; Nordmo et al., 2020). To briefly summarize, CBT-WM research generally supports the notion that many people attempting weight loss can “successfully” lose some weight short term (e.g., Nordmo et al.; short term defined as within 1 year; long term defined as more than 1 year). It is important to note that as little as 5% weight loss is typically viewed as success in CBT-WM trials, in part because some people experience some medical benefits at that level (Wing et al., 2011). More substantial weight loss also is harder for many to achieve; thus, 5% was adopted as a more

Table 1. Potential Harmful Effects of CBT-WM

Core Intervention	CBT Weight Management/Obesity Strategy	Potential Harmful Effects
Challenging Automatic Thoughts/Cognitions	Adapting weight-loss mindset vs. weight-gain mindset	Implies that an individual's weight gain is due to an individual's mindset and behaviors and ignores the multifactorial factors contributing to weight, including social determinants of health.
	The myth of Individualism in weight determination	Implies that if an individual only tries hard enough or ascribes to a certain set of behaviors, that weight loss is inevitable (bootstraps mentality; "If I can do it, you can too" "Think your way to successful weight management"- Laliberte al., 2009).
Goal Setting	Focus on weight loss as a goal	Although there is encouragement to think about potential outcomes in addition to weight loss, losing weight is still the primary goal. Recommending weight loss reinforces weight stigma, anti-fat bias, and fat phobia.
Stimulus Control	Increasing diet structure and limiting food choices	By encouraging significant restriction and limiting food choices, individuals may have difficulties incorporating these foods after treatment and/or may experience binge-eating in response to this restriction during or after treatment.
Skill building-Substitution	Encouraging individuals to ignore internal eating cues	This strategy is recommended to help individuals restrict their intake in the short-term, but can lead to further disconnection from valuable internal eating cues such as hunger, satisfaction, and enjoyment.
Goal Setting	Recommending specific diets	These specific diets (e.g., high protein) may be unrealistic to follow long-term and likely to lead to weight gain once stopped.
Goal Setting	Allowing individuals to choose a diet	Encouraging individuals to choose their own diet can also lead to dietary changes that are unrealistic for long-term maintenance and could lead to excessive restriction.
Self-Monitoring/Calorie Tracking	Focus on metrics	Tracking weight changes, calories or other dietary tracking, and specific numbers for exercise can increase risk of excessive focus on these areas and disordered eating behaviors.
Increasing Social Support	Involving significant others, friends, or co-workers	May lead to stressful dynamics in relationship for individual and/or increase the risk of disordered eating behaviors such as eating in secret.
Stimulus Control	Specifically encouraging eating disorder behaviors	Individuals are advised to complete the following daily: measure all food; weigh yourself; stay within allotted "units"; use distracting techniques when hungry; put utensils down between every bite and count to 10 before picking up again; take a sip of water "every minute

Table 1 continued on next page

Table 1 continued

Core Intervention	CBT Weight Management/Obesity Strategy	Potential Harmful Effects
Cognitive restructuring/ Contingency Management	Encouraging disordered eating cognitions	<p>or two”; “wrap up a small piece of “highly tempting foods” that you hadn’t planned to eat and take it home for the next day; of course, you’ll need to plan to eat less of some other food that day” (Beck, 2007).</p> <p>Beck (2007) provided the following phrases on alternative thought response cards, “Do it anyway; even if I don’t feel like using a diet skill, I Have to do it anyway. If I only do what I feel like doing I won’t be able to lose weight and keep it off.”; “Put dieting first – I have to plan my life around exercise and dieting activities, not vice versa.”; “Exercise no matter what. Say NO CHOICE”; “I’d rather be thinner; being thinner is SO much more important to me than eating this food”; “It’s NOT OKAY to eat this. I’m going to be very sorry if I do”; “CELEBRATE; I should celebrate each half pound loss!” (Beck, 2007).</p>

achievable “success” goal even though some researchers describe this goal as both “nonmedical” and “arbitrary” (Tomiya et al., 2013). Importantly, 5% weight loss has been shown to produce negative health impacts in those with atypical anorexia nervosa (A-AN; Forney et al., 2017), indicating that it is harmful for some. Even so, such modest weight loss is not experienced as success by many people in or outside of trials. Moreover, short-term weight loss is not the goal for those who provide or seek CBT-WM. Crucially, most of these limitations have been well known for over three decades (Wooley & Garner, 1991). With regards to longer-term weight loss, treatments can be divided into those that provide ongoing follow-up support and those that do not. Unsurprisingly, those that provide support throughout follow-up appear to produce more sustained results than those that do not (Nordmo et al.).

A critical question is whether high-quality research indicates that the average person who receives CBT-WM can accomplish stable, sustained, and substantial weight loss without ongoing treatment. Unfortunately, much of the relevant research is of poor methodological quality, limiting the conclusions that can be drawn (see Nordmo et al., 2020, for review of CBT-WM research limitations). However, a recent review of the few high-quality studies found that weight gain for most participants was inevitable (Nordmo et al.). Specifically, this review found a mean

weight loss of 7.4% at treatment end across the eight high-quality studies that met inclusion criteria. Participants then regained an average of 0.14% of body weight per month with full weight regain occurring at 4 years. In summary, the best evidence suggests that those who undergo CBT-WM without years of follow-up care can largely expect to regain all lost weight (i.e., failure of CBT-WM goals). This finding is consistent with results reported over 50 years ago (Swanson & Dinello, 1970) and more recent conclusions by Mann et al. (2007). Unfortunately for CBT-WM proponents, the magnitude of the more sustained outcomes that occur with years-long prolonged treatment also are fairly unimpressive, particularly given the fact that (a) most people cannot afford years of treatment (financially or in terms of time) and (b) only a minority of participants in trials actually complete these long-term treatments. For instance, while Lantz et al. (2003) reported that those who completed 4 years of treatment experienced an average of 7.0 kg of weight loss (+ 10.5 kg) and that 41% maintained at least 5% weight loss, that represented a mere 16.5% of the original sample.

Perhaps the most impressive results to date come from the Look AHEAD trial (Look AHEAD Research Group, 2014), which randomized participants to an intensive lifestyle intervention (ILI) and diabetes psychoeducation (i.e., control group). We think it is critical to examine

these results since this trial, which ultimately stopped early because it failed to meet clinical endpoints (i.e., no difference between ILI and control group on cardiovascular disease outcomes), is often described as a highly successful weight loss trial. ILI consisted of 1 year of intensive weight loss treatment followed by up to 8 years of maintenance treatment (Look AHEAD Research Group). At 8-year follow-up, participants ($n = 2,570$) lost an average $4.7\% \pm 0.2\%$ of initial body weight. Roughly 50% of ILI participants met the $\geq 5\%$ weight loss goal, although 26.4% weighed more than at baseline. We argue this outcome is the “best-case scenario” with respect to creating weight loss given the 8 years of treatment, and is not a scenario that can be expected to generalize to the average person seeking weight loss treatment. Of the eligible prescreen participants ($n = 15,561$), only 16.5% ($n = 2,570$) were randomized into ILI (Look AHEAD Research Group). Moreover, even in this trial, ILI participants regained some weight during maintenance. Regarding the benefit of losing approximately 5% body weight long term, the Look AHEAD researchers state that ILI yielded a mean 10-year medical cost reduction of \$5,280/pt relative to the control condition. However, the cost of running ILI per patient over 10 years was \$16,896. This “best-case” weight-loss scenario was both extremely costly and impractical for the average patient. Finally, this study had many limitations, including

researcher conflict of interests, lack of assessment of mental health concerns, participant bias, and high dropout. Overall, weight loss was modest, despite intensive, long-term treatment, and occurred in only half of ILI participants, although this met the standard definition of “success.” Many of the concerns listed below were not addressed/assessed in this trial.

CBT-WM Trials: Improvement in Health Indices Not Correlated With Weight Loss

It is important to acknowledge that CBT-WM trials have produced significant, if often modest, changes in health indices (Tomiya et al., 2013). For instance, although Look AHEAD was stopped early because of lack of group differences on primary cardiovascular outcomes, ILI was associated with improvement on some other health metrics. For example, exploratory analyses indicated that ILI increased probability of partial remission of Type 2 diabetes (Gregg et al., 2012). Other analyses also found ILI decreased use of medications for diabetes, hypertension, and elevated lipids (Espeland et al., 2014). This is not unprecedented. Tomiya et al. noted modest improvements in various health indices during weight loss trials, including blood pressure, fasting blood glucose, and lipids, and somewhat larger effects on hypertension and diabetes medication use. However, they also found that such changes were not correlated with weight loss. As such, these improvements do not support a focus on weight loss; instead, they add to an extant literature showing that health indices can be positively impacted by changes in diet and exercise. We do not deny that dietary or exercise interventions may impact health conditions for those who have resources to invest in such endeavors; indeed, we and others (e.g., Tomiya et al.; Tylka et al., 2014) contend that researchers and clinicians can design and implement interventions aimed at helping individuals manage or improve health conditions using a sustainable, weight-inclusive approach that reduces harms (discussed below). A weight-inclusive approach focuses on empirically supported strategies that enhance health in both patient care and public health settings irrespective of where an individual lies on the spectrum of weight (Tylka et al.). As noted by Tomiya et al., focusing on weight and weight loss is problematic because both are poor proxies for health and health improvement.

Potential Harms of CBT-WM

As noted above, under the “best-case scenario,” CBT-WM produces very modest weight loss on average in approximately 50% of participants, even with 8 years of costly support. These results might be tolerable if they came with minimal harms. However, there are many potential harms that are outlined below. Importantly, we are not the first to raise significant concerns about the harm of interventions that focus on weight loss (e.g., Burgard, 2010; Raffoul & Williams, 2021; Talumaa et al., 2022; Tomiya et al., 2018; Tylka et al., 2014); this literature goes back 30 years (e.g., Brownell & Rodin, 1994; Wooley & Garner, 1991). Moreover, in a scoping review of unintended harms of public health interventions, approximately one third of papers focused on potential harm caused by “obesity-related” interventions (Allen-Scott et al., 2014).

Eating Disorders

Eating disorders (EDs) are associated with major medical complications and carry the second highest mortality rate of any psychiatric illness (Gibson et al., 2019). In the past 2 years, ED-related hospitalizations doubled, and prevalence rates are growing (Asch et al., 2021; Devoe et al., 2023). Up to 17% of the population will meet ED criteria prior to age 30 (Silén & Keski-Rahkonen, 2022). Notably, rates are likely underestimates given the lack of proper assessment for other specified EDs and a lack of recognition in the following groups: historically minoritized, higher weight, older adult, and nonfemale (Becker et al., 2019; Silén & Keski-Rahkonen; Wilfred et al., 2021). EDs are common, deadly, and impairing, and exacerbated by lack of recognition, treatment, and allocated resources (Deloitte Access Economics, 2020).

Dietary Restriction: Contributions to the Development of EDs

Like virtually all forms of psychopathology, EDs develop from an interaction of genetics and environment (Bulik et al., 2019; Reijonen et al., 2003). Significant data suggest that specific environmental risk factors trigger EDs; it is via these pathways that CBT-WM may increase risk for EDs. Notably, dietary restraint (purposefully attempting to limit caloric intake to lose weight; Fairburn, 2008)—often referred to as dieting—is a common risk factor for ED development (e.g., Bulik et al., 1997; Dakanalis et al., 2017; Fairburn; Hilbert et al., 2014). This extensive body of research

suggests that any person with a genetic vulnerability to an ED who engages in restriction (independently or through CBT-WM) is at increased risk for developing an ED.

While studies including individuals with clinical EDs have been excluded from recent meta-analyses of CBT-WM trials (Comşa et al., 2020; Jacob et al., 2018), eating behaviors have at times been assessed (Jacob et al.). When researchers assess ED behaviors within CBT-WM trials, they tend to focus on binge/emotional eating (Jacob et al.), even though (a) restricting EDs such as A-AN are common in people with higher-weight bodies (Harrop et al., 2021), and (b) restriction is present in most binge-spectrum EDs. The failure to assess restricting EDs is an oversight that may suggest CBT-WM implementers do not view restrictive behaviors as harmful, whereas in other settings (ED treatment) these are seen as very harmful. For instance, a recent CBT-WM meta-analysis found that cognitive restraint (i.e., dietary restraint) was assessed in 6 of 12 studies. Rather than viewing dietary restraint as an ED behavior that should be reduced, dietary restraint was instead viewed as a construct to increase (Jacob et al.). Trials also typically do not assess for compensatory behaviors or increases in overvaluation of weight/shape (Jacob et al.), even though overvaluation of weight/shape is commonly conceptualized as core ED pathology (Fairburn). In summary, we argue that the existing CBT-WM literature is so deeply flawed with regards to assessment of ED pathology that one cannot draw any empirical conclusions about the prevalence of EDs triggered/worsened by CBT-WM. For this reason, below we turn to reports of lived experiences that in other areas (e.g., so-called “conversion therapy”) have served as early and important red flags of harm.

What About the Use of CBT-WM to Treat BED in People Who Are Higher Weight?

Some research has investigated the use of CBT-WM to reduce binge eating and weight in higher-weight individuals who have binge eating disorder (BED; e.g., Grilo et al., 2011; Munsch et al., 2007), and some of these studies show overall reductions or no worsening of ED symptoms (including dietary restraint) during the assessment period, which has extended to 1 year in some studies. While on the surface this would seem to counter concerns about increasing ED symptoms, such studies are insufficient indicators of lack of harm for several reasons.

First, even relatively large trials exclude many people, which limits what such trials tell us to those who (a) undergo the extensive assessment battery and (b) choose to stay in the trial. For instance, only 18% of those screened and 48% of those evaluated were ultimately randomized into Grilo et al.'s (2011) trial of 125 participants; 30% of participants withdrew during the main phase of the trial. Second, temporary improvement in binge eating and other ED symptoms has been reported by individuals who participate in CBT-WM. Indeed, a recent study by Boutelle et al. (2023) showed significant decreases in ED symptoms during treatment, followed by significant increases when followed to one year. Kinavey and Sturtevant (2022), who write from the dual perspective of lived experience and clinicians and have treated many higher-weight individuals for EDs and weight stigma, discuss the temporary relief from symptoms (including binge eating) that often comes with starting a new weight loss plan in the short term (which can last many months) and the sense of success that comes with initial weight loss. They also discuss the intense disappointment when biology overrides the best of intentions and weight inevitably returns, as in most CBT-WM trials. Their discussion details what it is like to experience that cycle repeatedly over a lifetime and the long-term impact (e.g., shame) of repeated failures. This repetitive, but inevitable, cycle of failure also may engender learned helplessness (Tylka et al., 2014). If we listen to the lived experience of people who have been trying to lose weight for years, it becomes clear the BED CBT-WM studies are simply too short to tell us anything about the longer-term harms of CBT-WM. Finally, such trials do not typically assess internalized weight stigma or other potential harms (see below).

Weight stigma (WS). WS describes the negative attitudes, beliefs, stereotypes, and discrimination about and towards people in larger bodies that devalue this population (Pearl, Groshon, et al., 2022). Sources of WS include family, peers, educators, media, and healthcare providers (Puhl & Heuer, 2009). WS can be explicit (conscious and intentional) and implicit (unconscious). Medical education has been shown to increase WS, and medical students exhibit high rates of both implicit and explicit WS (Phelan et al., 2014). Research indicates that WS among healthcare providers is not limited to medical students (Palad et al., 2019). Importantly, providers who specialize in weight reduc-

tion also display anti-fat bias (Puhl & Brownell, 2003; Tylka et al., 2014). Research conducted from 2001–2012 indicates that explicit WS increased among “obesity” specialists during that period (Tomiya et al., 2015).

WS occurs at individual, interpersonal, and institutional levels. Individually, internalized WS refers to the process of higher-weight individuals applying stereotypes and negative attitudes about weight to themselves (Pearl & Puhl, 2018). At the interpersonal level, most people in Western society (including healthcare providers) hold biases about higher-weight individuals, which impacts how providers relate to such individuals (Puhl & Heuer, 2009). Research indicates that of those who report experiencing WS, up to two-thirds also report experiencing WS from physicians (Puhl et al., 2021). WS also occurs at the structural or institutional level, which may involve health insurance financial incentives for individuals with a lower body mass index (BMI; Cawley, 2014); denial of medical care (e.g., knee replacements) until a patient meets an arbitrary BMI threshold (Godziuk et al., 2021); inappropriately blaming all health concerns on BMI (Alberga et al., 2019); exclusionary-sized seating in public spaces (e.g., airplane; Pearl, Groshon, et al., 2022); and lack of appropriately sized clothing.

We understand that most weight loss researchers and practitioners very much want to help individuals living in higher-weight bodies. Some also, in fact, are aware of and want to reduce WS. Yet, we propose that it is likely impossible to design and run a weight-loss program and avoid colluding with the societal WS messaging that certain people can and must reduce the size of their bodies. By definition, if a provider offers an individual treatment for weight loss, they are agreeing to a weight-normative paradigm that (a) focuses on weight as a significant determinant of health/well-being and (b) identifies weight as something that is under a person's control (as opposed to recognizing that biology and environment play a far greater role in weight status; see Tylka et al., 2014, for discussion of a weight-normative paradigm). Moreover, the existence of programs developed and run by medical and mental health experts also conveys to the general public that we believe weight loss is both important and viable. Further, the emphasis on proper mindset and behavioral changes as key factors of successful weight loss perpetuates negative beliefs and stereotypes about higher-weight people that are endemic in

our society (e.g., the thought that higher-weight individuals lazy, lack self-control, simply need to try harder or better; Puhl & Brownell, 2003). Further, weight loss as the primary goal of CBT-WM reinforces the false notion that high weight should be avoided and is inherently “bad” and “unhealthy.”

WS and intersectionality. People simultaneously inhabit multiple identities (e.g., weight status, race, gender, etc.). WS does not affect all individuals in the same way, as weight is just one identity a person holds. For instance, White women experience WS more often and at lower weights compared to White men and Black men and women (Dutton et al., 2014). Higher-weight LGBTQ+ individuals are also at heightened risk of WS (Paine, 2021; Puhl et al., 2019). Higher-weight transgender and nonbinary individuals have identified WS as contributing to ED development, including pressures to reduce BMI in order to access gender-affirming surgeries (Harrop, Hecht, et al., 2023). Younger individuals, compared to older individuals, have also reported higher rates of WS (Puhl et al., 2008). Research further supports elevated WS in those living with more severe food insecurity (Becker et al., 2021). In addition to WS experiences potentially differing by demographic groups, some studies suggest that WS internalization and coping may differ by groups, such that some groups (e.g., Hispanic women, White women, Black men) may be at increased risk for negative consequences of WS (Himmelstein et al., 2017). Though this research suggests that some groups may face less risk (e.g., Black populations), we caution against such broad conclusions, as this line of inquiry is relatively nascent. Further, some researchers have argued that WS can be a proxy for other forms of prejudice that are less socially acceptable. For example, some racial groups are more likely to have higher BMIs (Heymsfield, et al., 2016); in this case, at times it may be more socially acceptable to comment on body size than race, thus obscuring these other forms of societal discrimination (Strings, 2019).

WS Contributes to Harm in CBT-WM

WS contributes to harm via several pathways. WS is a form of chronic stress (Tomiya, 2014), resulting in substantial physical harm for higher-weight individuals. Medical consequences include increased cortisol levels, chronic inflammation (Tomiya), diabetes (Wu & Berry, 2018), and increased rates of physiological dysregulation (i.e., a composite

index of system functioning, including blood pressure, cholesterol, triglyceride levels, and others; Daly et al., 2019). In two longitudinal studies ($N > 18,000$), WS increased risk of mortality by almost 60% (Sutin et al., 2015). Importantly, many of these health consequences are outcomes that CBT-WM seeks to minimize. Ironically, WS is also associated with weight gain (Tomiyama et al., 2018). Further, recent research with 13,996 adults participating in weight management found that internalized WS was associated with greater weight gain in the past year, poorer mental and physical health-related quality of life, decreased eating and physical activity self-efficacy, worsened body image, greater avoidance of going to the gym, and greater stress (Pearl et al., 2021). Finally, given the substantial evidence that WS contributes to the medical conditions used to justify CBT-WM, it is very problematic that WS can increase healthcare avoidance (Palad et al., 2019). Substantial mental health consequences occur among adults and youth who experience WS. Individuals who experience WS report higher levels of depression, anxiety, and substance use, lower levels of self-esteem, and increased rates of suicidality (Alberga et al., 2016; Brochu, 2020; Papadopoulos & Brennan, 2015; Puhl & Lessard, 2020).

WS and EDs. Experiences of WS are correlated with ED behaviors (Pearl & Puhl, 2018; Vartanian & Porter, 2016). One study indicated that 18% of patients receiving a high level of ED care attributed the onset of their ED to anti-obesity messaging. The majority of participants reported that this messaging came from educational settings and the media, though over 10% identified such messaging as coming from healthcare providers (Mensing et al., 2021). WS can lead to WS internalization (Romano et al., 2021), which is associated with body dissatisfaction, a primary ED risk factor. WS has a compounding effect on ED prevalence, in that WS among healthcare providers leads to an underdiagnosis of and delayed treatment for higher-weight individuals with EDs, specifically A-AN (Hughes et al., 2019). Early intervention for EDs is critical, as delayed treatment is associated with poorer outcomes (Austin et al., 2021). Recent research also has identified WS-related healthcare avoidance as a form of maladaptive vigilant coping that is associated with increased ED behaviors (Wetzel & Himmelstein, 2023).

Additional harms. Table 1 lists additional potential concerns with CBT-WM that should be considered by the field

broadly and the corresponding CBT-WM strategy. Overall, we contend that the focus on weight in CBT-WM perpetuates and maintains WS.

Lack of Evidence Is Not Evidence of Lack of Harm: A Request for Research Change

Above we identified significant limitations in the existing CBT-WM literature that constrain the data-based conclusions that can be drawn about the degree to which CBT-WM increases risk for EDs. When researchers fail to collect important quantitative data regarding harm, they must turn to reports of lived experience. Before addressing lived experience, we highlight a few additional problems with the existing CBT-WM research literature from a harm perspective, along with specific requests for change in how this research is conducted.

First, weight regain is a very common sequela of initial weight loss; yet most people will try repeatedly to lose weight—likely because transitory weight loss is highly reinforcing (to patients and providers). This sets the stage for weight cycling, which correlates with problematic outcomes, including mortality (Oh et al., 2019; Quinn et al., 2020; Rzehak et al., 2007), though notably more research and a better definition of weight cycling is needed (Rhee, 2017). Second, CBT-WM trials typically do not evaluate how internalized and externalized WS affect weight outcomes, health outcomes, and mental health outcomes (including ED) and how weight regain impacts WS. Research should also assess for experiences of WS within the trial (i.e., the degree to which participants feel stigmatized by study staff or procedures). Given that WS is associated with a host of negative outcomes (Daly et al., 2019)—including the very medical outcomes that are used to justify CBT-WM in the face of very mediocre results—WS should, at the very least, be rigorously assessed and included as a necessary covariate in all analyses.

In addition, we strongly encourage CBT-WM researchers to include psychometrically strong measurements of the full ED pathology. Even recent guidelines from the American Academy of Pediatrics recommend additional assessment of EDs when implementing CBT-WM (Hampl et al., 2023). This includes overvaluation of weight and shape, dietary restraint, restriction, compensatory behaviors, and A-AN. Researchers should also carefully assess for

medical indicators of EDs (see Academy for Eating Disorders Medical Guidelines for full list of indicators) throughout the trial, with a particular focus on early indicators. Some suggestions for assessments include the SCOFF (Morgan et al., 2000), Eating Disorder Examination Questionnaire (Fairburn & Beglin, 2008) and the Screen for Disordered Eating (Maguen et al., 2018). Such findings should also be reported in the literature, not just collected.

If such trials continue to occur (with our overall opinion that researchers conducting these trials should pivot to a weight-inclusive approach; see below and Tylka et al., 2014, for discussion), we encourage careful consideration of correlation/causation mistakes that may be influenced by WS. This issue is critical, given that we are all at least as subject to WS as other forms of bias, such as homophobia and anti-Muslim bias (Latner et al., 2008), and given that WS can intersect with other forms of bias. Weight change does not occur in CBT-WM unless behaviors change first. Despite this process, CBT-WM focuses on weight even though weight is not a behavior (rather it is a dependent variable sometimes attributed to behaviors but largely based on environment and genetics with estimates of heritability up to 80%; Bouchard, 2021). In other words, our opinion is that CBT-WM targets the wrong mechanism (weight is not a changeable mechanism, health behaviors are). Instead of trials focused on weight loss, trials should be focused on health behaviors, regardless of a person's size. We support and extend a previous call by Tylka et al. for researchers to pivot to a weight-inclusive approach that deemphasizes weight and instead focuses on behaviors (e.g., eating food variety, joyful movement) that impact health metrics such as blood pressure, HbA1c, etc. Importantly, the weight-inclusive approach also historically has better acknowledged the importance of environment and social determinants of health, which is critical given the association of income and race with higher-weight stigmatized bodies. We wish to amplify Tylka et al.'s argument that a weight-inclusive approach is not radical; instead, it is conservative because (a) it does not promote a treatment with documented harms; (b) concedes the fact that weight is far more determined by involuntary genetic and environmental factors (e.g., lack of resources to obtain nutrient-rich foods; lack of time to prepare meals) than individual behaviors; and (c) accepts the unpopular fact that despite millions (maybe bil-

lions) of dollars being invested in weight loss trials, long-term results remain poor (see Tylka et al. for further discussion).

Individuals With Lived Experience With AN and CBT-WM

Harms have been repeatedly voiced by those with lived experience. Unfortunately, such lived experiences and concerns are frequently dismissed as unscientific. Yet, early evidence of harms in other areas (e.g., so-called “conversion therapy”) first came from lived experience, not research. It is imperative that researchers listen to these voices to not replicate past mistakes.

We now briefly examine qualitative data from ED patients, reflecting on the role that dieting played in the development and maintenance of ED (published prior in Harrop, Hecht, et al., 2023; Harrop, Hutcherson, et al., 2023; Harrop, 2020). We selected only a few excerpts to illustrate how recommendations for weight loss and dieting approaches, such as those recommended in CBT-WM, can contribute to EDs. Another particularly compelling story (submitted for this commentary—not part of the qualitative study) of how CBT-WM specifically contributed to the development and maintenance of an ED is included in Figure 1.

When asked how their EDs developed, 77% ($n = 30$) of participants directly referenced dieting as a contributing factor. While this study did not explicitly focus only on CBT-WM, every participant who discussed dieting (including commercial diet programs, medically supervised dieting, and CBT-WM) viewed dieting as foundationally connected to their ED. No participants viewed dieting as neutral or helpful; however, several participants mentioned some benefits of dieting, including Ashley,¹ who highlighted that dieting helped her cope with trauma in the short term by increasing body disconnection, and Carrie-Ann, who highlighted the benefits of peer social supports in diet programs. Multiple participants reported starting their dieting journeys as children. Carly stated that she had been on a diet since she was an infant and referenced 12 separate diet programs, resulting in her losing over 100 pounds three times. Molly and Marie began dieting at age 9, Josephine at 11, and Carter in junior high. Many participants highlighted that well-meaning

“It is likely that a trained ED clinician would have diagnosed me with an ED at a very young age, but because I was a “heavy” child, I was sent to CBT-WM which effectively taught me how to better engage in restriction, which was a part of my ED.

I participated in three separate CBT-WM programs over the span of 20 years. I lost and regained the same 50-70 pounds repeatedly (weight cycling). After regaining the weight lost through CBT-WM a third time, I was depressed and in the throes of my ED. I chose what I believed was my last possible option: bariatric surgery. I went through an extensive CBT program in preparation for this surgery and was told my history of binge eating and restriction was not a problem since I had done so well with therapy. I chose lap band as I was terrified of permanently altering my body. After 8 years I had the band removed. At that time, my labs were indistinguishable from someone with severe AN and my primary care doctor was very concerned for my health. With the lap band in place, I experienced daily “manualized bulimia.” Any food that was not extremely soft and easily chewed led to vomiting, at times 3-4 times per day against my will. I was hungry and my overall health suffered. During this time, the therapist and dietitian at the bariatric program I attended reviewed CBT strategies that mimicked restriction with me and blamed the vomiting on not chewing the food enough despite my reporting extensive chewing.

The types of weight loss strategies I encountered in CBT-WM were exactly like those I used in my ED but were called CBT. I was always hungry and utilizing distraction, avoidance of any type of snacks and ate very small meals in order to keep to the number of calories I was assigned daily. I went through my day not able to concentrate and simultaneously working incredibly hard to keep my food diary, exercise and think about how great life will be when I finally lost my “excess” weight for good. I was a compliant patient because I wanted to please the healthcare providers in the programs I attended and, in the end, my restriction skills were improved. The only problem was the hunger that drove binge eating and ultimately more restriction, creating real issues for my physical and mental health.”

Figure 1. Lived experience of the harm of CBT-WM. *Note.* This is a verbatim story from a woman with lived experience; this person is not a participant in the qualitative study mentioned in text.

parents and medical professionals facilitated their first diets.

Participants reported that more ED behaviors and physical symptoms emerged after the initiation of restriction and dieting. Josephine described increased anxiety and negative self-talk. Grace discussed becoming increasingly obsessed with dieting, fearing even eating vegetables due to the carbohydrate content. In addition to physical symptoms due to food restriction (e.g., amenorrhea, weight loss, fatigue, dizziness), participants also mentioned engaging in other ED behaviors such as binge eating, purging, eating in secret, compulsive exercise, and obsessive food rules. However, the dieting also functioned to hide their EDs: “It wasn’t recognized as an ED! I was just a very good dieter” (Ashley). Dieting often triggered relapses for those who received treatment. Riley shared that receiving diet recommendations from her healthcare providers while

also recovering from her ED made her feel as if she had no “safe place” in healthcare “because I’m going to constantly be told to do the very behaviors [food restriction] that have hurt me.” The stories these ED patients told highlight a common narrative of (1) dieting and body dissatisfaction from young ages, (2) initiating dieting (often at the impetus of parents or providers, such as those who prescribe CBT-WM), (3) dieting developing into clinical EDs, (4) dieting masking the recognition of the ED, and (5) dieting serving as a risk factor for relapse.

Time for Change: Recommendations for Weight-Inclusive Clinical Practices

These recommendations come from the authors, who carry perspectives from ED, weight stigma, and former weight-management researchers, clinicians, and those with lived experience. CBT-WM is clini-

¹All names reported are pseudonyms.

cally used with many more patients than included in research trials. Given the potential harms of CBT-WM, we encourage all clinicians working in weight management settings to pivot to weight-inclusive practices that serve to increase health behaviors among individuals across the weight spectrum without adding to weight stigma and EDs (see Tylka et al., 2014). It is possible to increase health behaviors (e.g., joyful movement; regular/balanced eating) without focusing on weight (Bessey & Lordly, 2019). Weight-inclusive practices involve the clinician, the practice environment, and systemic changes (Mauldin et al., 2022).

The Clinician

It is important to examine internalized WS and body image concerns, as these will influence client interactions. If a clinician lives in a smaller body, they must be aware of thin privilege—social, financial, and practical benefits received if existing in a relatively smaller body—that can distort perceptions. Assessing explicit and implicit WS is also essential. One tool for learning more about implicit bias is to take the Harvard Weight Implicit Association Test on Project Implicit: <https://implicit.harvard.edu/implicit/Study?tid=-1>.

Check Flawed Weight-Related Assumptions

Examples of assumptions about those in larger bodies include: (a) assuming presenting issues are due to their weight and weight loss would help, (b) assuming fatness is always indicative of trauma and that a resolution or healing of that trauma will result in weight loss (Kinavey & Cool, 2019), (c) assuming all fat clients want to lose weight, and (d) assuming clients are not engaging in physical activity or are eating “too much” because of the size of their body. Participating in weight-control activities may be an expression of internalized WS, shame, and the desire to escape the stigma and oppression that clients face in their daily lives (Mauldin et al., 2022). Despite the futile weight cycling many people have experienced, clients may request support in ongoing weight loss efforts. Validate the desire to lose weight as understandable in a culture that idealizes thinness and demonizes fatness. However, given the ineffectiveness and potential harm, weight loss is not an appropriate therapeutic goal. As Kinavey and Cool state, “The work of therapy is not to help people adjust to oppression.” Instead, consider supporting healing their relationship

with their bodies by identifying weight-inclusive, health-enhancing goals as desired. This work may include addressing internalized WS, disengaging from diet culture and unrealistic cultural ideals, supporting body autonomy, finding communities and support systems accepting of fat bodies, and healing from the trauma of weight stigma and body-based oppression. For clients who are concerned about the health implications of their weight, providing information about the flawed assumptions surrounding weight/health may promote empowerment to identify weight-inclusive goals independent of weight changes (see <https://haeshealthsheets.com/resources/>).

The Practice Environment

A weight-inclusive practice strives to eliminate microaggressions: intentional or unintentional verbal, behavioral, or environmental indignities that communicate hostility or negativity toward people who hold less power in society. Proactive steps include providing safe, comfortable furniture and physical space that accommodate people of all sizes and abilities. Clarify that stereotypes about weight or weight/diet-related comments are not appropriate and adversely impact people. Demonstrate that your practice values diversity (e.g., via a Mission Statement, nonstereotypical images in magazines, pamphlets, and artwork).

Avoid Using Stigmatizing Language

“Ideal weight,” “normal weight,” and “overweight” imply that there is a “correct” weight everyone should be, ignoring natural human diversity. “Healthy weight” presumes that people are automatically healthy or unhealthy at a certain weight. “Obesity” and “morbid obesity” are medical terms that pathologize body size (Mauldin et al., 2022). When a descriptor is necessary, consider terms like “higher weight.” Some people may feel comfortable reclaiming the word “fat” as a form of liberation from weight stigma (Meadows & Danielsdóttir, 2016). If weighing clients is necessary for care, share decision-making with clients about whether, when, where, and how they will be weighed to minimize additional weight-based trauma. Scales should be in a private space, and personnel should refrain from commenting on someone’s weight, even “positively.” Clinicians who serve children and adolescents should be aware of the necessity of weight gain throughout puberty and into young adult-

hood and should avoid speaking casually about diet and weight in their presence.

Systemic Issues

It is our ethical duty to unpack and address prejudice (Kinavey & Cool, 2019). Where possible, work to increase health access, autonomy, and social justice for all individuals along the entire weight spectrum. Be aware of intersectionality; patients with multiple stigmatized identities may experience mutually reinforcing sources of oppression that negatively impact their well-being. Weight loss does not stop weight stigma. Stigma is a social justice issue. People deserve to live free of stigma and prejudice no matter what they weigh.

Summary and Overall Recommendations

This commentary reviewed the literature on CBT-WM, including the outcomes and limitations of the data. We showcased how strategies included in CBT-WM can lead to the development/return of EDs and can lead to additional harms, such as medical complications, anxiety, depression, body dissatisfaction, weight stigma, weight cycling, and suicide. While limited data exist that quantifies harms within CBT-WM trials, we provided many excerpts from lived experience that demonstrate these harms are occurring. More research is needed to quantify these harms carefully. Finally, we provided a call to action to researchers and clinicians who currently offer CBT-WM by offering alternative concrete strategies that shift individualized weight-centric interventions to those that promote weight inclusivity and the dismantling of systemic issues. The authors highly encourage those who provide CBT-WM interventions to consider modifying their practices to reduce harm.

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Correspondence to Cheri Levinson, Ph.D., Life Sciences Rm. 312, University of Louisville, Louisville, KY 40292; cheri.levinson@louisville.edu

Resisting the Misuse of Theories Foundational to Cognitive Behavioral Therapy in Anti-Trans Legislation

Ash M. Smith, *The Graduate Center of the City University of New York and Hunter College*

Jamie L. Taber, *The Graduate Center of the City University of New York and Baruch College*

Danielle S. Berke, *The Graduate Center of the City University of New York and Hunter College*

AS OF JULY 28 2023, there are 533 anti-trans bills active in the United States (U.S.; Chapman et al., 2023), marking an unprecedented onslaught of legislation targeting the human rights of trans communities. We use the term trans to describe anyone who is not cisgender (i.e., identifies with the gender/sex they were assigned at birth). The rise in anti-trans legislation is likely to widen health disparities faced by trans populations (e.g., Horne et al., 2022; Pharr et al., 2022), through the impact of increased exposure to minority stress (Bränström & Pachankis, 2021; Flentje et al., 2020; Gleason et al., 2016; Puckett et al., 2022; Tebbe & Budge, 2022; Valentine & Shipherd, 2018) and increased burden of gender dysphoria (e.g., Brokjøb & Cornelissen, 2022; Chen et al., 2023). The rise in anti-trans legislation represents increasing efforts to regulate, surveil, and subjugate gender nonconformity and transness. In the context of sociopolitical power structures, these efforts necessitate differentiation of the trans and nonbinary “out-group” whose lives and existence are disadvantaged and disallowed for the benefit and livelihood of the general population, or the cisgender “in-group” (Foucault, 1998; Foucault et al., 2006; Neumann, 1999; Tajfel, 1974). By disallowing gender nonconformity, anti-trans legislation may be considered structural-level sexual orientation and gender identity change efforts (SOGICES).

SOGICES represent a group of scientifically discredited practices that seek to change or suppress transness and queerness (Kinitz et al., 2021). Formal, interpersonal-level SOGICES may operate under the guise of legitimate “therapy” (e.g., “conversion,” “reparative,” or “reorientation” therapies). SOGICES also include informal practices (e.g., providing

medication to suppress sex drive, sexual violence against queer and trans people, delaying gender affirming health care for trans people; Hipp et al., 2019; Kinitz et al., 2021; Przeworski et al., 2021). SOGICES also often occur at the community level in religious contexts through organizational condemnation of transness/queerness as sinful and immoral (Hipp et al., 2019; Plante, 2022). There is overwhelming evidence that interpersonal- and community-level SOGICES result in psychological harm (American Psychological Association, 2009, 2021; Campbell & Rodgers, 2023; Goodyear et al., 2022; Green et al., 2020; James et al., 2016; Jowett et al., 2021; Przeworski et al., 2021; Serovich et al., 2008; Turban et al., 2020a; Wang et al., 2023). Evidence of harm associated with structural-level SOGICES has also been documented. For example, in a recent study, greater psychological distress and suicidality were identified among trans adults in U.S. states with more anti-trans laws and attitudes (Price et al., 2023).

Operant conditioning (Skinner, 1963), social learning (Bandura, 1969), and cognitive (Beck, 1964) theories are foundational to and guide cognitive-behavioral therapy (CBT), and have been misused by SOGICES. When they misappropriate CBT’s guiding principles, SOGICES incorrectly assume that queer and trans identities can and should be altered because they are “maladaptive” behaviors based on “distorted” cognitions that develop in response to pathological, relational, or environmental childhood experiences (Last & Wuest, 2022; Przeworski et al., 2021). Misguided practitioners may directly use CBT techniques as SOGICES, like cognitive restructuring to challenge cognitive “barriers” to cisheteronormativity, or behavioral conditioning to associate aversive stimuli with sexual attraction,