BLACK FEMINISM AND WOMANISM: A NARRATIVE REVIEW OF THE WEIGHT LOSS LITERATURE

Loneke T. Blackman Carr, PhD, RD¹; Jameta Nicole Barlow, PhD, MPH²

Objective: Black Feminism and Womanism offers an interdisciplinary lens and practice to center Black women's health, engage relevant health, and create Black women—informed solutions to address obesity. The purpose of this review article is to employ Black Feminism and Womanism to examine approaches and results of Black women—centered behavioral weight loss interventions.

Methods: A narrative review of Black women–centered behavioral weight loss interventions was conducted. To be included, articles met the following criteria: published between 2012 and 2022, standard behavioral treatment for weight loss, randomized design, weight loss outcomes stratified by race and gender, sample size of at least 75 individuals, adults at least 18 years of age, and at least 51% Black women in the sample.

Results: Eight studies met the inclusion criteria for a Black women–centered behavioral weight loss intervention and were evaluated. Findings indicate that weight loss among Black women was mostly low, below the clinical target of 5 to 10% weight loss. Intervention designs ranged widely in their approach to respond to the context of Black women's lives, with little consistency between designs.

Conclusions: To make meaningful improvement in the effectiveness of behavioral weight loss interventions for Black women, new approaches are critical. Approaches grounded in Black Feminism and Womanism can provide the essential foundation to generate new knowledge, novel hypotheses, and intervention designs that fully attend to the lived context of Black women, including consideration of the potential health effects of gendered racism. *Ethn Dis.* 2023;33(4):170–179; doi:10.18865/ed.33.4.170

Keywords: weight loss; intervention; obesity; Black women

Health Policy & Management, Global Women's Institute, Africana Studies, Jacobs Institute of Women's Health, Columbian College of Arts and Sciences and Milken Institute School of Public Health, George Washington University, Washington, DC

Address correspondence to Loneke T. Blackman Carr, PhD, RD; Department of Nutritional Sciences, University of Connecticut, Storrs, CT. loneke. blackman_carr@uconn.edu

Introduction

Obesity remains a significant public health challenge for the United States. Current and projected statistics indicate that Black women consistently bear the greatest burden; nearly 60% live with obesity, a figure that is expected to increase by 2030, with severe obesity becoming the most common obesity status among Black adults and women.² Obesity is related to chronic disease development, including the onset of type 2 diabetes, cardiovascular disease, and some cancers.3-5 Standard behavioral interventions for weight loss have demonstrated efficacy for treating obesity through lifestyle change⁶⁻⁸ and include standard components of goal setting, self-monitoring, and stimulus control often delivered through at least 14 group sessions over 4 to 6 months to achieve recommended calorie goals (reduction of 500 kcal/d) and physical activity goals $(\geq 150 \text{ min/wk})$. These treatments, though efficacious, have consistently yielded disparities in weight loss outcomes by race, where significantly less weight loss is obtained by Black women

than by their white female counterparts, who often represent the majority of participants. 7,8,10,11 Notably, behavioral interventions typically produce small weight losses among Black women (2 to 3% of baseline weight), which is below the clinical target of 5 to 10% weight reduction known to confer health benefits. 11–13

Weight Loss and Gendered Racism

The difficulty of producing clinically significant weight loss in Black women may be related to experiences with gendered racism. Despite Black women's success in education and civic participation, they remain socially vulnerable, experiencing increased risks of violence and poor health outcomes across all income levels. Stressors, such as perceived gendered racism and the role of gendered racial socialization in daily life, may be contributors to Black women's barriers to weight loss. Social exposures such as gendered racism may contribute to increased levels of acute and chronic stress and anxiety, 14 weathering,14 and normalization of chaotic and traumatic experiences, 15 which may increase the risk of overweight and obesity in Black women.

In addition to the potential role of stress and the weathering process, the small weight losses observed among Black women in behavioral interventions may also be related to factors of dietary and physical activity behavior change. Black women's identification as "superwomen" has been associated with physical inactivity and maladaptive

¹ Department of Nutritional Sciences, University of Connecticut, Storrs, CT

² University Writing Program, Women's Leadership Program, Women's, Gender, and Sexuality Studies Program and Department of

eating behaviors (e.g., binge eating).¹⁶ Although some evidence indicates that fewer dietary and physical activity changes may occur in Black than in white women during weight loss interventions, 16-19 contextual factors also influence behavior change. For example, session attendance during weight loss interventions, which is positively associated with weight loss,^{7,17} is reduced among Black women who identify as a multiple caregiver, a concept similar to the superwoman in the prioritization of family and family-like networks and provision of constant support (e.g., financial, emotional, or tangible).¹⁸ This caregiver role can also have a negative impact, as evidenced by association with lower fruit and vegetable intake and a trend towards weight gain. 18 Conceptualizations of the superwoman are rooted in self-preservation and familial preservation in oppressive racialized and gendered contexts, possessing positive and negative attributes that impact self-care, including efforts to control weight through behavior change. 18,19

Both racial and gendered contexts that Black women are exposed to are represented across frameworks that depict influences on behavior change in health disparity populations. Specific to obesity research in Black populations, the Expanded Obesity Research Paradigm depicts the influence of specific contextual domains, including historical and social processes, culture, and psychosocial, physical, and economic environments that may operate as liabilities or assets.20 Biological, behavioral, cultural, built environment, and health care systems have also been cited as influential for minority health from the individual to the societal levels.²¹ The intersection of gender and race exists within these modern frameworks, adding a level of complexity to our understanding of obesity and its treatment among Black women. Interdisciplinary scholarship at the intersection of race and gender, operationalized at the personal, interpersonal, and institutional

levels, may also advance our understanding of the degree to which behavioral weight loss interventions address the lived contexts of Black women. To fully conceptualize the small weight losses achieved by Black women, it is necessary to consider the context surrounding targeted behaviors and outcomes and to interrogate the philosophical and methassumptions, odological theoretical approaches, and research design. An examination of interdisciplinary literature centered on Black women's experiences and intersectional identities and their influence on weight loss interventions may lead to improvement in approaches to obesity treatment. Black Feminism and Womanism (BFW) offers such an interdisciplinary lens through which we can examine the centrality of Black women's lives in behavioral weight loss interventions.

Relevance of BFW

Black women live at the intersection of multiple marginalized identities, at minimum race and gender. BFW is a rich area of scholarship and practice that has sustained Black women in spite of the violent history they have and continue to experience in the United States. Black Feminism is a personal, social, and political movement rooted in understandings of community, activism, and the intersectional lived experiences of Black girls and women constructed in direct resistance to oppressive structural systems that at their inception did not view Black women as human,²² ethically include them in research, 23 or consider their intersectionality. Black Feminist Thought is grounded in Black women's collective identity and standpoint, offers practices for collective survival, and incorporates spiritual, emotional, mental, and physical health. Similar to Black Feminism, Black Womanism is also grounded in Black and women of color's daily context and survival.²⁴ Founded in interdisciplinary literature,

Black Womanism²⁵ is an approach to creating ways of doing that reflect the diverse lived experiences of Black women. Three foundational methods of Womanism are self-care, which includes health, healing, and wellness practices; spiritual practices and activities; and harmonizing and coordinating. Womanism is a strengths-based perspective of daily living oriented toward health and represents not only an act of social change to dismantle social structures contributing to health inequities but also harmonizes women, families, and communities worldwide. BFW is both generative and applicable to reimagining the approach to Black women's weight-related health, informed by and centering their lived experiences.

Application of BFW

BFW prompts scholars to consider all the ways standard practice has not fully represented deviation from norms established in cis-gendered heterowhite able-bodied individuals. Behavioral weight loss interventions are one such example as the standard for obesity treatment. These interventions were established and replicated with samples that often did not include a majority of Black women and consistently yields small weight losses.^{6–8} The application of standardized approaches that are not adequately tested and validated with samples of Black women but are widely applied to their healthcare contributes to the pathology of poor health, diagnosis, treatment, and adherence. Intersectionality²⁶ occurs when widely practiced instruments are deemed the standard yet fail to consider the unique needs of any group that deviates from what is considered standard or when multiple systems of oppression reinforce the oppression, which affects Black women's health. BFW helps us tease out the entry points where Black women's healthcare can be improved. Self-evaluative perceptions of Black women found in BFW may serve as a place of resistance and liberation²⁷ as well as a source of extrinsic motivation for behavior change. Moreover, this BFW approach facilitates an examination of phenomena such as the protective factor of curves for Black women's mortality and heart disease risk and why Black women enter lifestyle interventions at a higher weight. The BFW approach supports tenets of Indigenous, ^{28,29} African, ^{30,31} and Chinese³² medicines, which focus on the balance of energy, environment, and emotions in physical health—a holistic focus for weight loss intervention desired by Black women.³³

The purpose of this narrative review is to provide a critical analysis of the approach to weight control utilized in behavioral weight loss interventions and of how Black women's lives are centered in current practice. Per Kumanyika et al.,20 the "lived experience" of Black individuals is different from the lives of those who commonly populate behavioral weight loss studies (white women). We examined whether and how the lived experience of Black women has been incorporated into the design of behavioral interventions for obesity treatment. We employed experimental and nonexperimental scholarship, utilizing a narrative review, to understand weight loss outcomes in Black women. BFW offers a lens to examine behavioral treatment for a population experiencing the highest burden of obesity. This lens expands our academic inquiry as it prompts various questions: "What do Black women need to succeed at behavior change?" "What do we really understand about Black women's health when we always compare it to that of white women?" "What is the diverse, lived experience of Black women?" Considering the small weight losses typically achieved by Black women, we argue that Black women's lives have not been centered in behavioral weight loss interventions.

METHODS

Search Strategy

This narrative review was conducted by selecting multiple scientific databases to search for relevant articles. PsychInfo, PubMed, and CINAHL were selected to obtain scholarly articles published between January 1, 2012 to June 21, 2022. The following terms were used to identify qualifying articles: ("Black" OR "African American" OR "African" OR "Caribbean") AND ("random*" OR "randomized trial" OR "randomized clinical trial") AND ("obes*" OR "overweight") AND ("lifestyle intervention" OR "intervention" OR "behavior*" OR "behavior modification" OR "diet*") AND ("weight loss" OR "weight management" OR "Obesity and control"[-MAJR] OR "weight loss intervention") NOT ("surgical" OR "surgery"). Studies that included a surgical element were not included in the search because the focus was on behavioral approaches to weight loss. The search was limited to articles in the aforementioned time frame published in the English language and including adults. Covidence software was used to import, screen, and review articles according to inclusion and exclusion criteria.

Inclusion Criteria

For inclusion in this review, studies had to meet the following criteria: standard behavioral treatment for weight loss, randomized design, weight loss outcomes stratified by race and gender, sample size of at least 75 individuals, adults at least 18 years of age, and centered on Black women. Standard behavioral treatment, or lifestyle intervention, achieves weight reduction through individual adherence to a reduced calorie diet, increased physical activity, and the use of behavioral strategies. This approach to weight loss is oriented around measurable goals, problem solving, and skill development.³⁴ We focused on randomized designs to include studies that were of a rigorous nature. Furthermore, included studies were required to have a sample that was at least half or fully composed of Black women (at least 50% of the sample).

Exclusion Criteria

Studies were excluded from the review when they were in a language other than English, were conducted outside of the United States, were focused on children (younger than 18 years), were not centered on Black women, did not report weight change outcomes by race and gender, did not use a randomized design, had a small sample size (<75 participants), the participants were not metabolically healthy (e.g., had metabolic syndrome, prediabetes, diabetes, or cancer), or had special health states (e.g., pregnancy, postpartum, disordered eating, or psychiatric conditions). Including studies with a sample size of at least 75 was important to ensure inclusion of scholarship with enough participants and is consistent with previous approaches. 13

RESULTS

Few Interventions Center Black Women

Following application of the inclusion criteria, 8 studies were included in this narrative review (see Table 1 and Figure 1). Most of these studies centered Black women, and on average 87.5% of the participants were Black women. In 4 of the 8 studies, 100% of the participants were Black women. The number of Black women participants ranged from 85 to 409. Duration of the weight loss interventions was 3 to 6 months, and the 6-month duration was the most common (50% of the included studies). 35,36,39,40

lable 1. Descriptions of C	omponents for trials	Table 1. Descriptions of components for trials centered on plack wolfier	
Study	No. (%) Black women	Weight outcomes	Black woman-centered elements
Ard et al. (2017), Journey to Better Health study	409 (100)	6-month outcomes: weight loss group $= -1.9\pm3.9$ kg; weight loss plus group $= -2.7\pm4.6$ kg; no betweengroup difference; weight loss across study groups: -2.4 (4.4) kg	Both groups: recipe modification, culturally appropriate forms of physical activity, printed materials modified with pictures and graphics of Black women and rural geography; weight loss plus group: community-directed strategies to support healthy eating and physical activity locally through a community garden, walking trail improvement, fresh produce purchase incentives from local farmers market, dance class
Yeary et al. (2020), The Wholeness, Oneness, Righteousness, Deliverance (WORD) trial	396 (93)	6-month outcomes: weight loss only group = -2.63 (CI: -3.62, -1.64) kg; weight loss plus maintenance = -2.45 (CI: -2.45, -1.46) kg; combined groups: -2.54 (CI: -3.24, -1.84) kg; no between-group differences	۵
Newton et al. (2018), Lifestyle Changes Through Exercise and Nutrition (LEAN) study	89 (92)	6-month outcomes: treatment group = -1.4 (0.4) kg; control = 0.2 (0.6) kg; significant difference in weight loss	None specified
Gerber et al. (2013), video telehealth	88 (100)	-0.8 (CI: -1.4, -0.2) kg	None specified
Risica et al. (2013), SisterTalk	363 (100)	(1) interactive TV, telephone support = -0.60 (2.6) kg, (2) interactive TV, no telephone support = -0.51 (2.9) kg, (3) passive TV, telephone support = -0.88 (0.32) kg, (4) passive TV, no telephone support = -0.60 (3.0) kg; wait-list comparison group = 0.46 (2.4) kg	Content allowed weight control to be defined by participant (weight loss or maintenance), "healthy at any size" approach; stress reduction in core content, all Black female TV cast delivering intervention (dietitian, exercise physiologist, social worker)
Samuel-Hodge et al. (2013), Weight Wise II	100 (53)	5-month outcomes: intervention = -3.7 (0.49) kg; delayed intervention = -0.4 (0.60) kg; significant difference in weight loss (P<.0001)	Considered low-income, social, and cultural needs; sessions offered twice weekly at different times of day, sessions limited to 16 for feasibility; only group-based rather than individual contacts; reduced reading level to match literacy needs, pretested recipes for food demonstrations; selected foods commonly available at local stores and at low cost; cost information included with suggested recipes; modified eating behaviors for Sundays to accommodate post-Church activities; incentive toolkit to promote attendance, self-monitoring, and goal attainment
Blackman Carr et al. (2020), Sisters in Health	85 (100)	6-month outcomes: standard intervention = -2.83 (3.82) kg; enhanced intervention = -2.08 (3.91) kg; outcomes not significantly different (P=.43)	Both study groups: surface-level cultural adaptation through photos selected for study materials to match participants' race and gender; enhanced group only (physical activity barrier reduction strategies): barrier tip sheet to introduce barriers and facilitators of physical activity specific to Black women for problem solving and goal setting, Facebook private group discussion on barriers and facilitators, 30 min of supervised group physical activity with Black woman instructor, Exercise Ambassadors (Black women who maintained weight loss and physical activity) from local community to model problem solving and goal setting around barrier and facilitator indicated on tip sheet, ambassadors also engaged in supervised physical activity and Facebook discussion, list of weekly options for physical activity engagement
Kinsey et al. (2021), Improving Weight Loss (ImWeL) trial	167 (62)	4-month outcome: -7.13 (Cl: -7.90, -6.35) kg	None specified

Downloaded from http://meridian.allenpress.com/ethnicity-disease/article-pdf/33/4/170/3374350/i1945-0826-33-4-170.pdf by guest on 29 May 2024

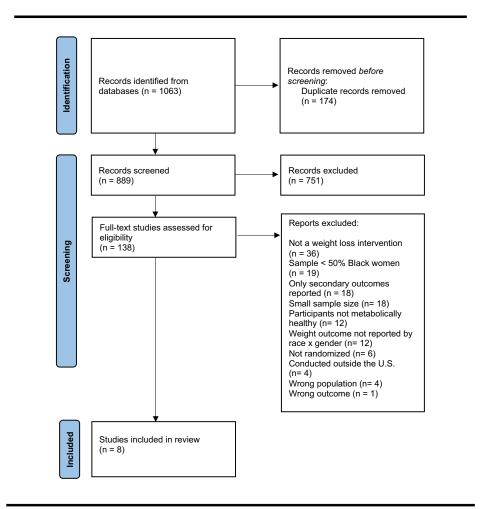


Figure 1. Flow diagram of narrative review process

Intervention Features

Randomization in Trials

Random assignment to a study group facilitates comparison of treatment effects between groups. Of the 8 studies included, 3 (38%) had a cluster randomized design. 36,39,40 In one study this design was used to allocate participants to the weight loss maintenance group that followed the weight loss intervention phase.³⁷ In 3 studies, randomization was conducted at the individual level.^{35,38,41} Of those 3 studies, one with a pilot randomized clinical trial (RCT) was included because it met the sample size requirement of at least 75 participants, 35 and another included a pragmatic RCT approach.⁴¹ In one study with individual-level randomization for the weight loss

maintenance phase, participants were not randomized for weight loss intervention; thus, all participants received the weight loss treatment. Interventions without randomization regarding weight loss treatment were retained because of their inclusion of Black women, but the absence of randomization does not allow for comparison of treatment effects. However, the amount of weight lost was evaluated.

Sample Size

Two of the 3 cluster randomized trials had the largest sample sizes of Black women. Ard et al.³⁶ included 409 Black women (100% of the sample) in their study, and Yeary et al.³⁹ included 396 Black women (93% of the sample). The third and smaller cluster randomized trial by Newton et al.⁴⁰ included 89 individuals, 92% of which

were Black women. The fourth trial had cluster randomization at the weight loss maintenance phase but not the initial weight loss treatment and was smaller, with 88 Black women (100% of the study sample).³⁷ Risica et al.³⁸ conducted the largest study with randomization at the individual level. In their study, 363 Black women (100% of the sample) were randomized. In their pragmatic RCT, Samuel-Hodge et al. 41 randomized 100 women, of whom 53% were Black. The pilot RCT by Blackman Carr et al. 17 included 85 Black women (100% of the sample). The lone study included that did not include randomization during the weight loss phase of a weight maintenance trial included 167 women, 62% of which self-identified as Black. 42

Intervention Duration, Frequency, and Modality

A short-term weight loss intervention has a duration of 6 months, which has been shown to be a sufficient period of time to produce the 5 to 10% weight reduction that can confer health benefits in the general population. The intensity of the interventions can be assessed by examining the frequency of the group sessions. It is noted in the extant literature that more frequent sessions can yield more weight loss. Fifty percent of the included studies (n=4) delivered a weight loss intervention lasting 6 months. 17,36,39,40 Of the studies with 6-month duration, 2 held group sessions weekly. 36,39 The session frequency of the other 6-month interventions tapered after an initial period of weekly group meetings. Newton et al. 40 conducted sessions weekly for the first month, then biweekly for 2 months, and finally monthly in months 4 through 6. In the study conducted by Blackman Carr et al., 17 group weight loss sessions were held, but the frequency over 6 months was not reported. Given the study duration and total number of sessions, the sessions

likely were not weekly throughout the study period. Two interventions had a duration of 4 months and delivered 16 group-based weekly weight loss treatment sessions. 41,42 The shortest interventions lasted 3 months, providing weekly sessions (12 sessions/intervention). 37,38 The mode of intervention delivery did not vary greatly across the included studies. Seven of the 8 interventions reviewed delivered behavioral weight loss content face to face; the SisterTalk study³⁸ was the sole intervention using a technological modality (television) as the main mode to deliver obesity treatment to Black women.

Integration of Black Women's Racialized and Gendered Context

Articles included in this review were required to have a behavioral intervention for weight loss with 3 main components: dietary modification, physical activity modification, and behavior change strategies.9 Central to this review is consideration of gender and racial contexts, which are nontraditional inclusions within behavioral weight loss interventions that can impact behavior change and energy balance. We suggest that these elements may be important and describe these components based on the reviewed publications. The majority of studies (n=5) reviewed included components relevant to Black women's racial and gender contexts. Two of the 3 cluster randomized trials were designed with elements responsive to Black women's contexts. In the Journey to Better Health study,³⁶ participants received an intensive weight loss intervention that included modified recipes, culturally relevant physical activity options, and updated study materials that reflected the participants' race, gender, and rural geography. In addition to these modifications, strategies informed by local stakeholders included development of a community garden, walking trail improvement, purchase incentives for produce at a local farmers' market,

and a dance class and were integrated into the weight loss plus group.³⁶ A faith-based and faith-placed approach was taken by Yeary et al.³⁹ in the WORD trial, where a modified diabetes prevention program curriculum was delivered in predominantly Black churches, drawing strength from faith and Bible study in group sessions. The SisterTalk study³⁸ incorporated a unique approach to weight control by allowing participants to determine whether their goal was weight loss or weight stability. The authors described this approach as the "healthy at any size" perspective. Stress reduction was a core component of this all-Black, woman-led intervention, which included a nutritionist, exercise physiologist, and social worker.³⁸ In the pragmatic RCT, Weight Wise II, for weight loss developed by Samuel-Hodge et al., 41 intervention strategies were designed to meet the needs of women with low income by offering group sessions twice a week at different times, limiting the total number of sessions, matching participants' literacy levels, conducting food demonstrations with low-cost foods easily available at stores local to the target audience, and eating behavior modifications for Sundays to accommodate typical post-Church traditions. In the comparative effectiveness trial by Blackman Carr et al., 17 women in both study sections received surface-level cultural adaptations through intervention materials. The deep structure cultural adaptation was unique to the enhanced section of this study, designed to address race- and gender-specific barriers and facilitators of physical activity. Multiple elements were included in the deep structural adaptation. Additional lesson content on race-gender physical activity barriers and facilitators was provided through a tip sheet that included problem solving or goal setting, a supplemental barrier-focused private Facebook group, a list of weekly between-session physical activity options, and supervised group physical activity with a Black female instructor. Local women with maintained weight loss and physical activity were exercise ambassadors who modeled problem solving and goal setting around barriers and facilitators.

Two of the 3 remaining studies did not include any race- or gender-based elements, ^{37,42} but both studies included standard components for behavioral weight loss treatment. ^{37,42} In the cluster randomized LEAN study, ⁴⁰ the intervention was faith placed.

Weight Loss Outcomes

Seven of the 8 studies produced small to modest weight loss in Black women, typical of behavioral weight loss interventions. The small to modest weight loss outcomes were observed in trials with intervention components centered on Black women's racial and gender social context. In the Journey to Better Health study,³⁶ at 6 months postbaseline the intervention produced a mean (SD) change of -1.9 (3.9) kg in the Weight Loss group and -2.7(4.6) kg in the Weight Loss Plus group. No between-group differences were produced, and weight loss across study groups was -2.4 (4.4) kg. In the WORD trial,³⁹ similar weight loss outcomes were seen 6 months after baseline, with Weight Loss Only group results of -2.63 (confidence interval [CI]: -3.62, -1.64) kg, and Weight Loss + Maintenance group results of -2.45 (CI: -2.45, -1.46) kg. No between-group differences emerged in this study, but significant weight loss of -2.54 (CI: -3.24, -1.84) kg was produced across all participants. In the church-placed LEAN study,⁴⁰ mean (SE) weight loss for Black women who received the intervention was -1.4(0.4) kg by 6 months postbaseline, which was significantly different from that of the delayed-intervention control group (weight change of 0.2[0.6] kg). The comparative effectiveness trial by Blackman Carr et al.¹⁷ did not produce significantly different weight loss between groups. Women in the standard

intervention group had a mean (SD) weight change of -2.83 (3.82) kg, whereas women in the enhanced intervention lost -2.08 (3.91) kg of their baseline weight by 6 months. Though of slightly shorter duration, the Weight-Wise II study⁴¹ yielded an average weight loss of -3.7 (0.49) kg among Black women who received the intervention and -0.4 (0.60) kg in women who received the delayed intervention, for a significant between-group difference from the 4-month treatment period. In Exercise Your Faith,³⁷ during the weight loss phase, Black women lost -0.8kg(95% CI: -1.4, -0.2) after 3 months of behavioral weight loss treatment. The SisterTalk study³⁸ produced similar results across intervention groups in the 2×2 factorial design study: (1) interactive TV, telephone support = -0.60 (2.6) kg, (2) interactive TV, no telephone support = -0.51 (2.9) kg, (3) passive TV, telephone support = -0.88 (0.32) kg, (4) passive TV, no telephone support = -0.60 (3.0) kg. Although no differences in weight loss emerged between the intervention groups, when weight loss was combined for all treatment groups, a significant difference emerged compared with outcomes for women in the comparison group: -0.40 (2.3) kg versus 0.32 (2.03) kg, respectively. The ImWeL trial⁴² produced larger than typical weight loss outcomes among Black women. The 4-month weight loss phase of this trial produced a mean change of -7.13 kg (95% CI: -7.90, -6.35) in Black women.

Discussion

This narrative review systematically gathers and reports on behavioral weight loss interventions (from 2012 to 2022) that center Black women who represent at least 50% of the study sample. Across the articles selected, the sample characteristics, intervention components, weight loss outcomes, and strategies or

components pertinent to Black women's lived experience were examined. Results indicated that 50% of the included studies exclusively targeted Black women. The majority of studies employed a randomized design and produced small to modest weight loss. Though a limited number of publications were eligible for this review, the majority of interventions were designed to respond to Black women's lived context in some way but were widely variable in the selection and approach. This discussion includes salient themes, incorporating BFW to expand current knowledge and practice.

Holistic Approach to Weight Loss Interventions for Black Women

Modifications made to standard behavioral weight loss interventions to be responsive to Black women's needs varied across studies. A few research groups responded to the centrality of faith and religion in Black life to various degrees. A small portion of studies were designed to respond to the economic context. A single study explicitly targeted stress reduction. Structural barriers to food and physical activity were addressed in only 1 study. Surface level modifications were identified throughout several interventions. The majority of studies centered on Black women were delivered face to face. Across the included studies, average weight losses were mostly modest for Black women (~2 to 3 kg), indicative of typical outcomes, 13,17 with a few exceptions where greater weight losses were achieved. A holistic view of the lived experience is central to BFW, because it allows space for the full humanity of the individual and the collective. Research by James et al.³³ corroborates Black women's desire for holistic treatment for improved quality of life, not just weight loss, to address topics like emotional eating, stress, and weight-related comorbidities. The Expanded Obesity Research paradigm

reiterates the importance of a holistic approach with Black communities in its depiction of the interacting contexts that surround energy balance and behavior change. ²⁰ Economics, the built environment, cultural norms, and social context are factors important to address with Black individuals. ²⁰ Thus, weight loss interventions that focus on obesity alone and do not consider the physical, emotional, mental, spiritual, and lived experiences of Black women may inadvertently diminish the centrality of their holistic health and weight outcomes.

Expansive Redesign of Weight Loss Interventions

A high level of variability in how studies were modified to respond to the context of Black women's lives was observed. Although several studies can be regarded as culturally relevant, variation occurred in the contextual areas of focus. The emotional and mental domains of Black women's lives were seldom present but are relevant where race and gender intersect. Stress reduction has become a novel area for behavioral weight loss interventions, 43 yet stress is not often addressed in relation to Black women's weight. Faith is a core element of Black life in the United States, given the high belief in God and high engagement in the Church,44 yet incorporation of faith only appears in a couple of studies reviewed. Environment was addressed inconsistently but remains a determinant of healthy food access in Black communities⁴⁵ and influences Black women's physical activity engagement⁴⁶ to meet weight loss goals. The BFW approach informs us that the relationship between emotional and mental states, spirit world, and environment are essential to Black women's health. In this review, the variation in intervention designs intended to respond to Black women's lived context presents a future challenge to understand which intervention modifications are most effective to modify behavior and maximize weight

Table 2. Recommendations for a Black Feminist and Womanist approach to weight loss

Recommendation

women

loss interventions

Strategies

Use various methods to expand our way of knowing (ontology) and doing (epistemology) about Black women

- Draw from Black Feminist and Womanist literature to understand Black women
- Apply theories from Black Feminism and Womanism
- Employ community-based participatory action research and qualitative methods as a means of knowing Black women
- Literature reviews should incorporate other ways of knowing and modalities of medicine (e.g., Indigenous, African, Chinese)
- Use archival and historical research to examine other approaches for effective lifestyle change
- Listen and do: build intervention components based on the barriers in the way of intended behavior changes
- Learn and incorporate the strengths that may support behavior change
- Beyond describing measures used, include how measures were validated and the population with which validation occurred
- Use measures validated in the target population
- Incorporate Black Feminist theory in the conceptualization, implementation, evaluation, and dissemination processes
- Examine role of racism on behavior and weight outcomes
- Examine the influence of gender roles and sexism on behavior, weight, and health outcomes
- Consider histories and herstories, policies, and other structural determinants of health creating the contextual lived experiences of Black women

Incorporate all relevant domains of Black women's lives

Expand use of theory typically absent in weight

Examine and address the intersectionality Black

women's experience due to racism and sexism

Use measures validated for use with Black

Spiritual

- Cater to faith foundations
- Acknowledge and create ritual for the role of the spirit world and ancestors Emotional
- Begin acknowledging and naming emotional behaviors for self-assessment and regulation
- Become aware of emotions, behavior, and emotional regulation
- Incorporate ritual into behavioral skills development

Menta

- Focus on the prevention of stress, anxiety, and depression by creating ritual in the daily experience Physical
- Elevate and cater to the health concerns and desires of Black women through Black Women's Health Imperative

loss. Perhaps all domains are relevant and interacting. Methodologies such as the multiphase optimization strategy may be important to examine this quandary, especially when paired with BFW practices. How an intervention element is designed to respond effectively to Black women's marginalized identities is an area that requires attention. Reaffirming sentiments by Fitzgibbon et al.,¹² what is likely required to advance in this area is the creation of a taxonomy where culture- and identity-responsive intervention elements, techniques, and strategies are named and defined and then used consistently by investigators to build an evidence base of effective methods. Specifically, obesity researchers must recognize how dynamic Black women are as research participants instead of a prescriptive intervention approach focused on shared identity, a dynamic process could be used based on shared herstories, motivations, experiences, and supports of the participants. In tandem with the BFW approach, investigators may invoke a process guided by participants and facilitated by the researcher to enable the individual to create the change in their lives. This approach aligns with modern discourse on the value of cocreating public health interventions with participants, moving toward more participatory, communityengaged research. 47,48 Interventions designed with Black women for Black women will be important to generate holistic solutions for weight loss.

Design Decisions as Evidence-Based Activism

Shifting the margins of practice to center Black women necessarily shifts the philosophies, methodologies, and analytical frameworks in weight loss interventions. How and from where investigators conceptualize the topic of weight loss and generate new knowledge become the foundation of advancing Black women's health. The Diabetes Prevention Program and other seminal trials have demonstrated the efficacy of behavioral weight loss interventions as a treatment package among predominantly white and female participants, but maximum effectiveness has not been realized for Black women. However, these trials remain the standard for current practice. To make progress and increase effectiveness for Black women, investigators must fully understand and integrate Black women's lived experience into weight loss treatment, which means engaging in call-and-response methodological research approaches where researchers participate in an iterative process of listening and doing to address the root causes of overweight and obesity. Interventions must be redesigned to address multiple domains (Table 2) of Black women's health. Doing so may generate new hypotheses to examine if and how the current treatment package may be approached differently, redesigned, or reconstituted altogether to produce clinically and personally meaningful outcomes for Black women. In the design of weight loss interventions, use of broader sources of knowledge is important to produce maximum effectiveness for obesity treatment. We offer these and other recommendations for intervention design and execution rooted in BFW, which has served as a source of philosophy, resilience, and resistance for Black women. 15,24 Future weight loss interventions should build on the elements described in Table 1 but especially answer the call and address what has been largely missing from weight loss interventions targeting Black women: Black Feminist and Womanist Thought.

Strengths and Limitations

This narrative review summarizes of the literature concerning Black women and approaches for weight control through behavioral weight loss interventions. As a narrative review, this approach allows a summary and critique of selected articles applying an expanded perspective with a BFW lens to understand the challenge of how to produce optimal outcomes for Black women. Although this review is not a traditional systematic review, which may be seen as a limitation, a strength of this review is the use of clear criteria

for article selection to identify high quality weight loss interventions. The inclusion of only 8 articles is a limitation that reflects the paucity of weight loss interventions centered on Black women, indicating a need for more research including this demographic and shifting the research dynamic from comparative studies to within-group inquiry. The strength of this article is that it is the first review, to our knowledge, where weight loss intervention inclusion criteria specify at least 50% Black women participants, increasing the potential for within-group analysis and limiting the practice of comparison with white women as the "gold standard." Use of a systematic approach and software for article selection across multiple research databases enhanced the rigor of this review.

CONCLUSIONS

The goal of this review was to examine the impact of behavioral weight loss interventions on Black women and how the design of such interventions centered the intersectional context of their lives. We reviewed high quality studies that included Black women and found that weight losses remained typically modest. A wide variety of intervention designs were applied that incorporated either no or only some relation to Black women's lived experience. To facilitate increased effectiveness of behavioral weight loss interventions for Black women, a shift in philosophies and methodologies to understand and produce behavior change through novel design is necessary. The tenets of BFW provide a foundation from which to develop new knowledge and innovative hypotheses and to examine potentially more impactful, novel weight control approaches in the future. As distinct tools for reclaiming the health and well-being of Black women, BFW³⁷ and intersectionality can advance obesity treatment beyond cultural adaptations toward methods

and practice that resonate with Black women and capture their way of knowing health—spiritually, emotionally, mentally, and physically.⁴⁹

References

- Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018. National Center for Health Statistics; 2020. Data Brief 360.
- Ward ZJ, Bleich SN, Cradock AL, et al. Projected US state-level prevalence of adult obesity and severe obesity. N Engl J Med. 2019;381(25): 2440-2450.
- 3. Pi-Sunyer X, Blackburn G, Brancati FL, et al. Reduction in weight and cardiovascular disease risk factors in individuals with type 2 diabetes: one-year results of the Look AHEAD trial. *Diabetes Care*. 2007;30(6):1374-1383.
- Calle EE, Rodriguez C, Walker-Thurmond K, Thun MJ. Overweight, obesity, and mortality from cancer in a prospectively studied cohort of US adults. N Engl J Med. 2003;348(17):1625-1638
- Schmitz K, Jacobs D, Leon A, Schreiner P, Sternfeld B. Physical activity and body weight: associations over ten years in the CARDIA study. Int J Obes. 2000;24(11):1475-1487.
- Knowler WC, Barrett-Connor E, Fowler SE, et al. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. N Engl J Med. 2002;346(6):393-403.
- Wadden TA, West DS, Neiberg RH, et al. Oneyear weight losses in the Look AHEAD study: factors associated with success. *Obesity*. 2009; 17(4):713-722.
- Svetkey L, Erlinger T, Vollmer W, et al. Effect of lifestyle modifications on blood pressure by race, sex, hypertension status, and age. *J Hum Hyper*tens. 2005;19(1):21-31.
- Jensen MD, Ryan DH, Apovian CM, et al. 2013 AHA/ACC/TOS guideline for the management of overweight and obesity in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and The Obesity Society. J Am Coll Cardiol. 2014;63(25 Part B):2985-3023.
- West DS, Prewitt TE, Bursac Z, Felix HC. Weight loss of Black, white, and Hispanic men and women in the Diabetes Prevention Program. Obesity. 2008;16(6):1413-1420.
- Blackman Carr LT, Samuel-Hodge C, Ward DS, Evenson KR, Bangdiwala SI, Tate DF. Racial differences in weight loss mediated by engagement and behavior change. *Ethn Dis.* 2018;28(1):43.
- Fitzgibbon ML, Tussing-Humphreys LM, Porter JS, Martin IK, Odoms-Young A, Sharp LK. Weight loss and African-American women: a systematic review of the behavioural weight loss intervention literature. *Obes Rev.* 2012;13(3): 193-213.
- Goode RW, Styn MA, Mendez DD, Gary-Webb TL. African Americans in standard behavioral treatment for obesity, 2001-2015: what

- have we learned? West J Nurs Res. 2017;39(8): 1045-1069.
- 14. Geronimus AT, Hicken MT, Pearson JA, Seashols SJ, Brown KL, Cruz TD. Do US Black women experience stress-related accelerated biological aging? A novel theory and first population-based test of black-white differences in telomere length. *Hum Nat.* 2010;21:19-38.
- Ricks SA. Normalized chaos: Black feminism, womanism, and the (re)definition of trauma and healing. *Meridians*. 2018;16(2):343-350.
- 16. Woods-Giscombe CL, Allen AM, Black AR, Steed TC, Li Y, Lackey C. The Giscombe Superwoman Schema Questionnaire: psychometric properties and associations with mental health and health behaviors in African American women. *Issues Ment Health Nurs.* 2019;40(8): 672-681.
- 17. Blackman Carr LT, Samuel-Hodge CD, Ward DS, Evenson KR, Bangdiwala SI, Tate DF. Comparative effectiveness of a standard behavioral and physical activity enhanced behavioral weight loss intervention in Black women. Women Health. 2020;60(6):676-691.
- Blackman Carr LT, Samuel-Hodge CD, Tate DF. The multi-caregiver role and its relationship to behavioral adherence and weight among treatment engaged Black women. Am J Health Promot. 2022;08901171221092389.
- Woods-Giscombé CL. Superwoman schema: African American women's views on stress, strength, and health. *Qual Health Res.* 2010; 20(5):668-683.
- Kumanyika S, Whitt-Glover MC, Gary TL, et al. Expanding the obesity research paradigm to reach African American communities. *Prev Chronic Dis.* 2007;4(4).
- Alvidrez J, Castille D, Laude-Sharp M, Rosario A, Tabor D. The National Institute on Minority Health and Health Disparities research framework. *Am J Public Health*. 2019;109(S1):S16-S20.
- 22. Lindsey TB. A love letter to Black feminism. *Black Scholar*. 2015;45(4):1-6.
- Guishard MA, Heyward DA, Brown JT, Stoddard-Pennant M. What we not finna do: respectfully collaborating with skinfolk and kinfolk in Black Feminist Participatory Action research. Glob J Community Psychol Pract. 2021;12:1-36.
- Phillips L. The Womanist Reader: The First Quarter Century of Womanist Thought. Routledge; 2006.
- Barlow JN, Johnson BM. Listen to Black women: do Black Feminist and Womanist health policy analyses. Women's Health Issues. 2021; 31(2):91-95.
- Crenshaw K. Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stanford Law Rev.* 1991;43(6): 1241-1299.
- Barlow JN. #WhenIFellInLoveWithMyself: Disrupting the gaze and loving our Black Womanist self as an act of political warfare. *Meridians*. 2016;15(1):205-217.
- 28. Lavallée L. Physical activity and healing through the medicine wheel. *Pimatisiwin*. 2007;5(1):127-153.

- McCabe G. Mind, body, emotions and spirit: reaching to the ancestors for healing. *Couns Psychol Q.* 2008;21(2):143-152.
- Lee ME. Working the Roots: Over 400 Years of Traditional African American Healing. Wadastick Publishers; 2014.
- Okpako DT. Traditional African medicine: theory and pharmacology explored. Trends Pharmacol Sci. 1999;20(12):482-485.
- 32. Zhang Y. Transforming Emotions With Chinese Medicine: An Ethnographic Account From Contemporary China. SUNY Press; 2012.
- 33. James DCS, Harville C II, McQueen DS, Facey JA. "I want a program that looks at my whole life." A focus group study on the ideal components for an mHealth weight management program for African American women. *J Acad Nutr Diet.* 2022;122(1):139-148.
- Butryn ML, Webb V, Wadden TA. Behavioral treatment of obesity. *Psychiatr Clin North Am.* 2011;34(4):841-859.
- Black AE, Cole TJ. Biased over- or under-reporting is characteristic of individuals whether over time or by different assessment methods. *J Am Diet Assoc.* 2001;101(1):70-80.
- Ard JD, Carson TL, Shikany JM, et al. Weight loss and improved metabolic outcomes amongst rural African American women in the Deep South: six-month outcomes from a communitybased randomized trial. *J Intern Med.* 2017;282 (1):102-113.
- Gerber BS, Schiffer L, Brown AA, et al. Video telehealth for weight maintenance of African-American women. *J Telemed Telecare*. 2013; 19(5):266-272.
- Risica PM, Gans KM, Kumanyika S, Kirtania U, Lasater TM. SisterTalk: final results of a culturally tailored cable television delivered weight control program for Black women. *Int J Behav Nutr Phys Act.* 2013;10:141-5868-5810-5141.
- Yeary KHK, Cornell CE, Moore PC, Gauss CH, Prewitt TE, Turner J. The WORD: outcomes of a behavioral weight loss maintenance effectiveness trial in rural Black adults of faith. *Obesity*. 2020;28(3):510-520.
- Newton RL Jr, Carter LA, Johnson W, et al. A church-based weight loss intervention in African American adults using text messages (LEAN Study): cluster randomized controlled trial. *J* Med Internet Res. 2018;20(8):e256.
- Samuel-Hodge CD, Garcia BA, Johnston LF, et al. Translation of a behavioral weight loss intervention for mid-life, low-income women in local health departments. *Obesity*. 2013;21(9): 1764-1773.
- Kinsey AW, Gowey MA, Tan F, et al. Similar weight loss and maintenance in African American and white women in the Improving Weight Loss (ImWeL) trial. *Ethn Health*. 2021;26(2): 251-263.
- 43. Buro AW, Baskin M, Miller D, et al. Rationale and study protocol for a randomized controlled trial to determine the effectiveness of a culturally relevant, stress management enhanced behavioral weight loss intervention on weight loss outcomes of Black women. *BMC Public Health*. 2022; 22(1):193

- Mitchell T. Faith Among Black Americans. Pew Research Center. 2021. Last accessed July 5, 2023 from https://www.pewresearch.org/reli gion/2021/02/16/faith-among-black-americans/
- Cooksey-Stowers K, Schwartz MB, Brownell KD. Food swamps predict obesity rates better than food deserts in the United States. *Int J Envi*ron Res Public Health. 2017;14(11):1366.
- 46. Ray R. Black people don't exercise in my neighborhood: perceived racial composition and leisure-time physical activity among middle class Blacks and whites. Soc Sci Res. 2017;66:42-57.
- 47. Leask CF, Sandlund M, Skelton DA, et al. Framework, principles and recommendations for utilising participatory methodologies in the cocreation and evaluation of public health interventions. Res Involv Engagem. 2019;5(1):1-16.
- 48. Key KD, Furr-Holden D, Lewis EY, et al. The continuum of community engagement in research: a roadmap for understanding and assessing progress. *Prog Community Health Partners*. 2019;13(4):427-434.
- Barlow JN, Dill LJ. Speaking for ourselves: reclaiming, redesigning, and reimagining research on Black women's health. *Meridians*. 2018;16(2):219-229.