Understanding Fitness Professionals' Weight Biases and Uptake of Weight-Inclusive Practices: Findings from a Mixed-Methods Survey

Abstract

Weight bias is highly prevalent in the fitness industry, posing significant challenges for fat people seeking to engage in health-promoting behaviours, such as physical activity. Despite small ideological shifts in the fitness industry towards more weight-inclusive practices, little is known about fitness professionals' engagement with such approaches. The aim of the current study was to explore weight bias attitudes among weight-normative and weight-inclusive fitness professionals and factors influencing adoption of inclusive approaches. A mixed-methods survey was conducted among 120 fitness professionals (M_{age}=34 years; weight-inclusive *n*=62 [51.7%], weight-normative *n*=58 [48.3%]) to gather quantitative data on weight bias and attitudes towards working with fat people, and qualitative data on motivations, facilitators, and barriers to adopting weight-inclusive approaches. Weight bias was positively associated with negative attitudes towards working with fat people. Weight-inclusive fitness professionals reported higher empathy (*d*=–.86), size acceptance (*d*=–.79), critical health attitudes (*d*=–.91), and attribution complexity (*d*=–.78) and less negative attitudes towards working with fat people (*d*=.81) than weight-normative fitness professionals. Thematic analysis of qualitative data resulted in four higher-order themes: (1) "It's what the science says"; (2) "It's what the client wants"; (3) "It's bad for business"; and (4) "I want to, but I don't know how". Fitness professionals who adopted weight-inclusive practices displayed less weight bias and less negative attitudes towards working with people in larger bodies. Qualitative findings highlighted multiple barriers that need to be addressed in order to encourage more fitness professionals to adopt weight-inclusive approaches.

Keywords: Gym Instructors; Personal Trainers; Physical Education Teachers; Sports Coaches; Weight Bias.

Clinical Impact Statement

Weight bias is highly prevalent within the fitness industry, particularly affecting individuals in larger bodies who seek to engage in physical activity. Despite recent efforts advocating for weight-inclusive practices, there remains little understanding regarding the extent to which fitness professionals embrace such approaches. This study shows that fitness professionals endorsing weight-inclusive practices exhibited lower levels of weight bias and less negative attitudes towards working with people in larger bodies. Qualitative insights underscored various barriers hindering broader adoption of weight-inclusive approaches within the fitness industry that need to be targeted in future interventions to reduce weight bias among fitness professionals.

Understanding Fitness Professionals' Weight Biases and Uptake of Weight-Inclusive Practices: Findings from a Mixed-Methods Survey

Introduction

In recent decades, there has been a growing awareness of the importance of health and fitness, with an emphasis on promoting well-being and weight management through physical activity (Breslow, 1999; Lundell et al., 2013; Raggatt et al., 2018). This stems, in part, from the weight-focused paradigm underpinning the current medical and public health approaches (Bombak, 2014; O'Hara & Taylor, 2018; Tylka et al., 2014), which falsely equates lower body weight with health (Shimazu et al., 2009; Stokes et al., 2018; Zheng et al., 2017). The arguably futile pursuit of weight loss as a means to attain a healthier lifestyle has inadvertently contributed to other health issues and disordered eating practices (McClelland et al., 2020; Stice & Burger, 2015), as well as weight bias and weight stigma. Weight bias encompasses negative attitudes, beliefs, and stereotypes directed towards individuals based on their body weight, and contributes to weight stigma (Alberga et al., 2016; Puhl & Brownell, 2013), a pervasive form of discrimination rooted in societal norms and stereotypes that equate thinness with beauty, success, and moral virtue (Nutter et al., 2016; Pearl, 2018; Tomiyama et al., 2018). Individuals who do not conform to these narrow standards of appearance often face judgement, prejudice, and marginalisation (Campos-Vazquez & Gonzalez, 2020; Fields et al., 2021; Gupta et al., 2020). The consequences of weight bias and stigma are far-reaching, extending beyond the realms of psychological distress to include detrimental effects on physical health, including stress-related physiological markers, such as cortisol and C-reactive protein (Schvey et al., 2014; Wu & Berry, 2018). Moreover, it has been linked to the exacerbation of unhealthy behaviours, such as disordered eating patterns and avoidance of physical activity, perpetuating a cycle that undermines efforts toward

holistic well-being (Hunger et al., 2020; Pearl et al., 2021) and posing challenges for those seeking to engage in health-promoting activities (Bevan et al., 2021; Thedinga et al., 2021).

Despite scientific evidence showing that weight is not an adequate or accurate proxy for health, weight-normative approaches have rapidly been adopted by a society with preconceived beliefs about fatness (Campos, 2006). Key sectors of society have created structures legitimising, enacting, and supporting this paradigm. Specifically, the fitness industry has traditionally acted as an opportunist, offering a commercial solution to profit from this weight-normative approach (Monaghan et al., 2010). The global health and fitness industry is worth an estimated $4 trillion, with $90 billion each year from health club memberships (Tiller, 2020), a number which continues to grow. Within the fitness industry, where the pursuit of health is often the central narrative, the prevalence of weight bias is a concerning reality (Rukavina, 2022; Walters & Ede, 2024). Fitness professionals, often regarded as advocates for health and wellness, may intentionally or inadvertently contribute to the perpetuation of weight stigma through biased attitudes and discriminatory practices towards people living in larger bodies. Numerous studies have found that individuals in larger bodies often avoid exercise settings (Harjunen, 2019; Meadows & Bombak, 2018; Thedinga et al., 2021), due to the fear of being bullied or shamed for their weight (Argüelles et al., 2022; Ashdown-Franks et al., 2021) or because fitness spaces do not provide equipment that can cater to diverse body sizes (Argüelles et al., 2022; Myre et al., 2021). Moreover, several systematic reviews have demonstrated high levels of implicit and explicit weight biases among fitness professionals (Panza et al., 2018; Schneider et al., under review; Zaroubi et al., 2021). Specifically, fitness professionals perceive fat people[1] to be lazy and unmotivated and

[1]The term “fat people” has been used intentionally instead of “individuals with overweight” or “individuals with obesity” as a way of reclaiming the terminology around fat bodies and reducing the stigmatising associations with medical terms, such as “obesity”. It should be acknowledged that people differ in how they choose to describe their own bodies and some individuals may prefer to use other terminology (e.g., “higher weight”, “plus-size”). For a further discussion and review about the preferred terminology around weight, see Puhl et al. (2020) and Brown and Flint (2021).

less suitable to work in the fitness industry, regardless of their qualifications, and endorse specific anti-fat stereotypes towards individuals living in larger bodies (Panza et al., 2018).

Small ideological shifts are emerging in the fitness industry, with some fitness professionals demonstrating greater awareness of weight bias and its associated health consequences (Pickett & Cunningham, 2017; Sikorski, 2021). One approach that has been proposed as a weight-inclusive alternative to traditional, weight-normative approaches to fitness instruction is Health at Every Size® (HAES®) (ASDAH, 2022). HAES® is a paradigm that challenges the conventional approach to health and wellness, emphasising a holistic and inclusive perspective. In the context of the fitness industry, HAES® encourages a shift away from traditional weight-centric measures towards promoting well-being and positive health behaviours for individuals of all body sizes. Despite the introduction of HAES® to a wide range of settings, including health promotion, adolescent nutrition, diabetes, and other chronic conditions (Begin et al., 2019; Dimitrov Ulian et al., 2022; Dugmore et al., 2020; Miller et al., 2012; Rauchwerk et al., 2020; Rice et al., 2020), its adoption within the fitness industry has been slow (Pickett & Cunningham, 2017). This is, in part, due to the continued medicalisation and pathologisation of higher weight as incompatible with health (Goldberg, 2014; Murray, 2008; Rathbone et al., 2022), an emphasis on weight loss and weight management as a key outcome of engaging in exercise, and the focus on maximising profit within the fitness and diet industries (Sassatelli, 2018; Wiest et al., 2015). Further, there are currently very few resources and interventions that support fitness professionals to explore and challenge their weight biases and adopt alternative approaches to fitness instruction (Schneider et al., under review). An initial step in developing such interventions and encouraging fitness professionals to adopt weight-inclusive approaches is understanding what barriers and facilitators fitness professionals experience when adopting such approaches, and what they require from a weight bias

intervention to ensure it is appropriate, relevant, and effective at changing weight bias attitudes.

Therefore, the objectives of the current study were threefold. First, we explored fitness professionals' weight biases and how they affect their attitudes towards working with fat people. For this study, we refer to the "weight-normative" approach as the set of practices of fitness professionals who subscribe to the weight-centric paradigm (i.e., focusing on weight loss or weight management to achieve health and well-being). A "weight-inclusive" approach, on the other hand, is adopted by fitness professionals who believe that health is not an outcome that is accomplished by a number on the scale but a resource or capacity that we can all pursue regardless of our weight. We hypothesised that: (H1) weight bias will be positively associated with negative attitudes towards working with fat people and (H2) fitness professionals who adopt a weight-inclusive approach to fitness will display lower levels of weight bias and less negative attitudes towards working with fat people than fitness professionals who adopt a weight-normative approach. Second, we explored fitness professionals' preferences for future weight bias resources. Third, utilising qualitative data, we identified the motivations, facilitators, and barriers that help or prevent fitness professionals from adopting weight-inclusive approaches.

Methods

Participants and Procedures

This study employed a mixed-methods cross-sectional design using an online survey to gather quantitative and qualitative data from fitness professionals, defined as any person who is teaching or instructing members of the public/general population (or specific target demographic, such as children or the elderly) to engage in movement for the purpose of well-being, leisure, or to promote an active lifestyle (e.g., gym and fitness instructors, personal trainers, physical education [PE] teachers, sports coaches). The study was open

internationally and participants were eligible to take part if they were ≥18 years old, currently coaching or instructing fitness, and able to read English. The sample size was calculated a priori using G*Power (v. 3.1.9.7). To examine H1, a one-tailed bivariate correlation was selected using criteria for a moderate correlation (r=.3), α=.05, and power=.80, resulting in a required sample size of N=67. To examine H2, an independent samples t-test was selected using criteria for a medium effect size (Cohen's d=.50), α=.05, and power=.80, resulting in a required sample size of N=102 (n=51 per group). Therefore, a sample size of 102 participants was deemed appropriate. The study was advertised via social media channels and groups, emails to fitness professionals, and physical posters at local gyms and fitness studios between December 2023 and February 2024. The recruitment materials communicated that the aim of the study was to gain insights from a wide range of fitness professionals about their coaching and the ways in which their thoughts, feelings, and attitudes influence their coaching style. Participants completed all self-report questionnaires anonymously through Qualtrics, after confirming their willingness to participate and providing informed consent, as well as passing the eligibility screening questions. The survey took 20–30 minutes to complete and participants received a £10/$12 Amazon e-gift voucher following survey completion. This study received ethical approval from the University of the West of England (ref no. CHSS.23.08.019).

Measures

Demographic Information

Participants provided their age, gender identity, ethnicity, country, education, current job role, years working in the fitness industry, qualifications, and whether they provide nutrition or weight management advice as part of their current role.

Weight Bias

Weight bias was measured via the Fat Attitudes Assessment Toolkit (FAAT; Cain et al., 2022). For the current study, the following subscales were selected: (1) empathy (seven items; e.g., "Fat people are treated badly because of the way society depicts fat bodies"); (2) size acceptance (six items; e.g., "Rather than fat people changing their bodies; society needs to change the way it respond to fat bodies"); (3) critical health (five items; e.g., "Body Mass Index [BMI] is a poor indicator of health"); (4) attribution complexity (nine items; e.g., "There are genetic factors that cause people to be fat" [general complexity], "There are economic factors that contribute to people being fat" [socioeconomic complexity]); and (5) body acceptance (four items; e.g., "I feel good about my body"). Items were rated on a seven-point Likert scale (1=*Strongly disagree*, 7=*Strongly agree*), with higher scores indicating lower weight bias. Each domain showed acceptable to good reliability (Cronbach's αs=.69–.83), apart from body acceptance (α=.54).

Sociocultural Influences on Attitudes towards Weight

Sociocultural influences on attitudes towards weight were measured via the Sociocultural Influences on Fear of Fat Scale (SI-FAT; Rodgers et al., 2021). The SI-FAT assesses four sociocultural domains across 16 items: parents (e.g., "How worried are your parents that you might become fat?"), friends (e.g., "How concerned are your friends that you might gain weight?"), romantic partners (e.g., "How often does your romantic partner encourage you to put effort into not becoming fat?"), and media (e.g., "How critical are the magazines, TV shows, websites and social media you read and watch of people who have become fat?"). For this study, only the friends, romantic partners, and media domain items were included and averaged for a total score. Items were rated on a five-point Likert scale (1=*Never*, 5=*Extremely/All the time*), with higher scores indicating a greater influence of sociocultural factors. The SI-FAT showed acceptable reliability (α=.64).

Attitudes Towards Working with Fat People

The Attitudes Towards Working with Fat People scale (AWFP) was created for the present study and initially comprised 12 items to assess fitness professionals' attitudes towards working with fat people (Table 1). The AWFP was developed in collaboration with the full authoring team, including the fourth author, who has expertise working as a fitness professional with clients of all body shapes and sizes. Items were drawn from her experience in the fitness industry working with fitness professionals who hold stereotypical attitudes towards working with larger clients, as well as prior literature in the field (e.g., Panza et al., 2018). Prior to dissemination, the measure was completed and evaluated by members of the research team for ease of comprehension and clarity. Following exploratory analyses, two items showed item-total correlations <.40 and were removed from the scale (Boateng et al., 2018; Vitoratou et al., 2023). Items were rated on a five-point Likert scale (1=*Strongly disagree*, 5=*Strongly agree*), with higher scores indicating more negative attitudes towards working with fat people. The 10-item AWFP showed good reliability (α=.81).

Intervention Preferences

Intervention preferences were assessed using items developed for the current study. With regards to content, participants were asked to rate 10 items on a five-point Likert scale (1=*Not important at all*, 5=*Very important*). With regards to delivery, participants were asked to indicate how much time they would be able and willing to allocate to learning about weight bias: (1) less than 1 hour; (2) 1 to 3 hours; (3) 4 to 7 hours; (4) 8 to 10 hours; and (5) more than 10 hours. Additionally, participants were asked to select their preferred format of intervention delivery between synchronous online learning, asynchronous online learning, in-person learning, and other on-demand/media-based learning.

Approach to Fitness Instruction

To classify fitness professionals into either the weight-normative or weight-inclusive paradigm, we created a purpose-built measure based on prior research (Calogero et al., 2018; Tylka et al., 2014) and asked participants to self-select their approach to fitness or movement instruction based on provided definitions: (1) ““Weight-normative”: This means I believe that weight is closely related to health and well-being. Therefore, I encourage my clients or students to lose weight or maintain what I consider a healthy weight through healthy lifestyle choices, such as diet and exercise.” or (2) ““Weight-inclusive”: This means I believe that health is not an outcome that is accomplished by a number on the scale but a resource or capacity that we can all pursue regardless of our weight. Therefore, I focus on my clients’ or students’ lifestyle behaviours, rather than weight management.”. Participants were asked to explain why they had selected that specific approach using an open-response format. Participants who selected “weight-normative” were subsequently presented with the following questions: (1) “Have you considered adopting a weight-inclusive approach with your clients or students?”; (2) “What has made you consider adopting a weight-inclusive approach to fitness with your clients or students?”; (3) “What is *stopping* you from adopting a weight-inclusive approach to fitness with your clients or students?”; and (4) “What would *help* you to adopt a weight-inclusive approach to fitness with your clients or students?”. Participants who selected “weight-inclusive” were presented with the following questions: (1) “Please explain *why* you have chosen to adopt a weight-inclusive approach to fitness with your clients or students” and (2) “What do you think would encourage *other* fitness professionals to adopt a weight-inclusive approach to fitness with their clients or students?”.

Data Analytic Plan

All statistical analyses were conducted using SPSS for Windows version 27.0 (SPSS, Inc., Chicago, IL). Initially, data were examined for outliers, skewness, and kurtosis; no

outliers were found, and the data were normally distributed across all measures (skewness and kurtosis ≤+/–2.58). To determine associations between variables, Pearson's correlations were conducted among all key variables (empathy, size acceptance, critical health, attribution complexity, body acceptance, sociocultural influences on fear of fat, and attitudes towards working with fat people). According to Cohen's guidelines for Pearson's correlation coefficient (Cohen, 1960), an r=.10–.30 represents a small effect, an r=.30–.50 represents a moderate effect, and an r≥.50 represents a strong effect. To assess differences on the key outcome measures between weight-normative and weight-inclusive fitness professionals, seven independent samples *t*-tests were conducted. Differences were considered significant when *p*-values were <.05. With regards to *t*-test effect sizes, Cohen's (1988) benchmarks were followed such that Cohen's d=.20 is a small effect, d=.50 is a medium effect, and d=.80 is a large effect. All tests were one-tailed. Qualitative data from open-ended responses were analysed using Braun and Clarke's reflexive thematic analysis framework (Braun & Clarke, 2006; Braun et al., 2016). Initially, the first author immersed herself in the data, conducting multiple readings to gain a comprehensive understanding of participants' responses. Subsequently, she generated initial codes to capture both explicit and implicit meanings within participants' responses. Organising these codes led to the identification of potential themes, where relationships between codes were carefully considered. The process involved refining and reviewing themes to ensure they accurately represented the dataset. Clear definitions and evocative names were assigned to each theme to solidify their identities. The first author consulted with the second author on two occasions to refine themes and discuss nuances in the data. Moreover, the whole research team was consulted on one occasion to discuss and finalise the themes derived from the data (Figure 1). The first author is a White European woman, who identifies as fat, with a research background in body image, weight bias, and weight stigma in sport and exercise settings. She also has experience of working as

a personal trainer and gym instructor in the United Kingdom (UK). The second author is a Hispanic Latina woman, a research associate with clinical experience in eating disorders and body image. The third author is a White English woman and is a psychology student in the UK. The fourth author, a White English woman who identifies as fat, is a personal trainer, exercise instructor, and sport and exercise psychology student in the UK. The fifth author, a White British woman, is an academic psychologist working for the past 13 years in fields aligned to body image, disordered eating, feeding practices, and gender. The sixth author is a White Australian woman with 10 years of research experience in body image and eating disorder prevention and sports. The last author is a White Australian/British woman who identifies as fat and has been working as a researcher in the fields of body image, eating disorder prevention, and weight bias for 20 years. Data analysis was approached from a constructivist epistemological standpoint, acknowledging the co-construction of knowledge between researchers and participants, shaped by their unique perspectives, experiences, and interactions within specific social and cultural contexts (Andrews, 2012). Ontologically, the authors embraced a relativist stance, recognising the diversity of subjective experiences and multiple realities represented within the dataset (Rassokha, 2021).

Results

Participants

One hundred and twenty fitness professionals (weight-inclusive *n*=62 [51.7%], weight-normative *n*=58 [48.3%]) provided complete data for analysis (Table 2). The sample comprised 43 personal trainers (35.8%), 40 gym/group fitness instructors (33.3%), 22 PE teachers (18.3%), 11 sports coaches (9.2%), and four other fitness professionals (3.3%). The average age of the sample was 34.16 years (*SD*=7.82, 21–71 years). The average time spent working in the fitness industry was 8.68 years (*SD*=5.66). The majority of participants identified as male (*n*=76; 63.3%), White (*n*=107; 89.2%), were based in the UK (*n*=110;

91.7%), had a university degree (*n*=77; 64.2%), and held some type of qualification or certification related to their current role (*n*=102; 85.0%; e.g., yoga teacher training, gym instructor certification, personal training diploma). Of the fitness professionals who endorsed a weight-normative approach, 37 (63.8%) reported that they had considered adopting a weight inclusive approach, while 21 (36.2%) reported that they had not considered it. Weight-normative fitness professionals were more likely to be men and provide nutrition, weight loss, or weight management advice as part of their role. A higher proportion of fitness professionals using the weight-inclusive approach identified as White.

Correlations Between Outcome Variables

The results of Pearson's correlations were significant and in the expected direction, with one exception (Table 3). We found no significant relationships between fitness professionals' body acceptance (i.e., acceptance of their own bodies) and critical health perceptions or attitudes towards working with fat people.

Differences Between Weight-Inclusive and Weight-Normative Fitness Professionals

Weight-inclusive fitness professionals reported higher empathy, $t(114.68)=-4.72$, $p<.001$, $d=-.86$, size acceptance, $t(105.86)=-4.36$, $p<.001$, $d=-.79$, critical health attitudes, $t(108.28)=-5.04$, $p<.001$, $d=-.91$, and attribution complexity, $t(105.84)=-4.30$, $p<.001$, $d=-.78$, and less negative attitudes towards working with fat people, $t(117.33)=4.43$, $p<.001$, $d=.81$, compared to weight-normative fitness professionals. No significant differences were found for body acceptance or sociocultural influences on fear of fat (Table 2).

Intervention Preferences

In terms of intervention components, the average ratings across all 10 items were between moderately and very important (*M*s=3.18–3.46; Table 4). Weight-normative fitness professionals assigned less importance than weight-inclusive fitness professionals to training on how to recognise weight bias in yourself and others ($p=.046$), guidance on appropriate and

inappropriate communication and behaviour (p<.001), information on how to apply weight-inclusive practices in fitness and movement spaces (p=.004), and guidance on how to challenge others' weight-normative attitudes and behaviours (p=.014). Both weight-inclusive and weight-normative fitness professionals reported that they would be willing to allocate 1–3 hours (n=33; 27.5%) or 4–7 hours (n=39; 32.5%) to learning about weight bias, followed by 8–10 hours (n=23; 19.2%), less than 1 hour (n=15; 12.5%), and more than 10 hours (n=10; 8.3%), χ^2=1.840, p=.765. Most participants preferred asynchronous online learning (n=73; 60.8%), followed by in-person learning (n=69; 57.5%) and synchronous online learning (n=62; 51.7%). Preferences were largely similar across weight-inclusive and weight-normative fitness professionals; however, a larger proportion of weight-normative fitness professionals preferred in-person learning (n=37; 63.8% vs. n=32; 51.6%), while a larger proportion of weight-inclusive fitness professionals preferred on-demand/media-based learning (n=26; 41.9% vs. n=11; 19.0%).

Factors Involved in Adopting a Weight-Inclusive Approach

As motivations, barriers, and facilitators often mirrored or directly opposed each other, they are presented within combined themes. Each theme is described briefly below and supporting quotes are presented to reinforce the narrative. To ensure confidentiality, participants have been anonymised. Instead, we provide information regarding gender, age, and current role, to offer contextual insights into the perspectives shared within this study.

Theme 1. "It's What the Science Says"

Thoughts about health and its relationship with weight came across as a key reason for why fitness professionals adopted either a weight-inclusive or a weight-normative approach to fitness. Fitness professionals who endorsed a weight-normative approach believed that weight was a critical indicator of health and spoke primarily about its impact on physical health: *"Weight norms can help fitness trainers assess overall health and wellness,*

as weight can be an indicator of various health conditions" (Female fitness instructor, 34); *"Weight management can positively impact joint health and reduce strain on the body"* (Male personal trainer, 31). On the other hand, fitness professionals who endorsed a weight-inclusive approach believed that *"weight is not necessarily the only criterion for measuring health"* (Male fitness instructor, 31). Further, they took a broader perspective of health that encompassed mental health, as well as physical fitness and performance.

> I do not train for weight loss and every single client of mine is aware and agrees to that […] There's no focus on "good" vs "bad" bodies—simply movement for the sake of moving and improving daily functioning. (Female personal trainer, 29)

Notably, both weight-inclusive and weight-normative fitness professionals cited *"latest scientific research and guidance from authoritative institutions"*, *"evidence-based research"*, and *"science"* to justify their chosen approach: *"My approach is rooted in evidence-based research that shows the correlation between weight and various health outcomes"* (Male PE teacher, 29); *"There is evidence to suggest that being overweight increases chance of diseases such as cancer"* (Female PE teacher, 21).

> The science has been clear for 30 years that focusing on weight loss does not lead to healthier individuals or a healthier population. In fact, focusing on weight loss has been detrimental to public health in many ways by increasing levels of body shame, body hatred, depression, anxiety, and eating disorders. Weight-centric (weight-normative) healthcare and fitness is a tool of White supremacist, patriarchal, colonialist-capitalism. (Female personal trainer, 50)
>
> I think the most important thing I can do to encourage other fitness professionals to adopt a weight-inclusive approach is to show them the evidence. The research shows that weight is not an accurate measure of health, and focusing on weight management will only discourage people from pursuing health goals. (Male coach, 28)

Theme 2. "It's What the Client Wants"

2.1. A Focus on Weight. Fitness professionals shared contrasting views regarding whether or not a weight-inclusive approach was helpful in how they worked with their clients or students. Although some fitness professionals suggested that weight *"can serve as a motivator for individuals to stay committed to their fitness journey"* (Male personal trainer, 40) and *"can be a measurable indicator of progress and fitness improvements"* (Male personal trainer, 38), others argued that *"weight isn't a great motivator for staying active*

because it doesn't change quickly, if at all" (Female personal trainer, 25). Weight-inclusive fitness professionals called for other methods of tracking clients' progress and health.

> When I started asking about [my clients'] goals and needs instead of just focusing on their numbers on the scale, they were able to make real progress toward those goals and start feeling better about themselves without having to worry about losing weight first. (Male personal trainer, 40)
>
> If someone tells me they want to lose weight because they want to feel better about themselves, I ask them what being healthier means for them. The answers might be things like "I want more energy" or "I want to live longer". If the answer is anything other than losing weight, that tells me my client just wants to be healthier and fitter—they don't necessarily care about having less fat on their body! (Male coach, 28)

2.2. Promoting Inclusivity. Weight-inclusive fitness professionals further argued that *"being a fitness professional is all about being inclusive"* (Male coach, 31) and adopting a weight-inclusive approach is *"beneficial for clients"* (Male personal trainer, 40), because it *"recognises that people of all sizes can engage in physical activity and focuses on improving overall health and well-being rather than solely focusing on weight loss"* (Male fitness instructor, 29) and *"makes space for all bodies, including those of people who experience weight stigma"* (Male personal trainer, 40).

> [The weight-inclusive approach] creates a safe and inclusive space for individuals who have experienced weight discrimination or have struggled with body image issues. It celebrates the diverse abilities and strengths of individuals, rather than solely focusing on weight or physical appearance. (Male fitness instructor, 39)

Theme 3. "It's Bad for Business"

Fitness professionals suggested that *"pressure from societal or industry standards that prioritise weight loss"* (Male personal trainer, 31) and pressures to adhere *"to traditional fitness industry standards and practices"* (Female fitness instructor, 34) has deterred them, or may deter others, from pursuing a weight-inclusive approach. This was also reflected in perceived pressures from clients seeking weight loss, as several fitness professionals cited *"fear of backlash or criticism from clients who may have weight loss goals"* (Female fitness instructor, 28) or *"who may not agree with a weight-inclusive approach"* (Male coach, 30) as a potential barrier. These pressures manifested in fitness professionals' fears related to *"legal or liability issues if clients do not achieve desired results"* (Female personal trainer, 36), *"the*

[perceived lack of] effectiveness of weight-inclusive approaches in achieving fitness goals" (Male PE teacher, 29), *"[perceptions] that weight-inclusive approaches may be less accepted or respected in the fitness industry"* (Male personal trainer, 27), and *"the potential impact on business or revenue"* (Female fitness instructor, 30) and *"financial viability, as weight loss-focused programmes often have a larger customer base"* (Male personal trainer, 44). On the other hand, several fitness professionals noted that adopting an inclusive approach that is not focused on weight management has potential benefits, such as an expanded client base, better client adherence and retention, and increased client satisfaction: *"[The weight-inclusive approach] focuses more on enjoyment and if the students enjoy it, they are more inclined to participate more, which is beneficial"* (Female PE teacher, 22); *"Demonstrating how a weight-inclusive approach can lead to higher client satisfaction and retention rates can motivate fitness professionals to adopt this approach"* (Male personal trainer, 37).

Theme 4. "I Want To, but I Don't Know How"

4.1. Learning from Other Professionals. Fitness professionals highlighted education and awareness as both a potential facilitator and a barrier to adopting a weight-inclusive approach. Many fitness professionals who wanted to adopt a weight-inclusive approach cited a *"lack of education or understanding about weight-inclusive approaches"* (Male personal trainer, 36) and felt insecure about their ability to implement such approaches successfully.

> Some fitness professionals may not be familiar with the concepts of weight-inclusivity or Health at Every Size® (HAES®) and the associated research. They may not be aware of the potential harm caused by weight stigma or the importance of creating inclusive and non-judgemental environments. (Male fitness instructor, 36)

On the other hand, weight-inclusive fitness professionals expressed more awareness of societal biases and the negative effects of a weight-centric approach: *"I am educated on weight stigma, and health at every size. I also know how detrimental weight stigma and bias can be on mental and physical health and want to best support my athletes"* (Female coach, 27). To tackle these issues, fitness professionals called for increased education efforts focused

on weight-inclusive approaches. Participants highlighted the need for this education to include practical skills and knowledge, to ensure they could implement weight-inclusive approaches successfully in their own practice (*"more information on what it is and how a course of sessions would look"* [Male PE teacher, 36]), and called for a wide range of modalities (*"attending workshops or conferences that focus on weight-inclusive fitness and body positivity"* [Male personal trainer, 36]). Participants also highlighted significant limitations of the existing education available to fitness professionals.

> From day one, fitness professionals are fed a lie that weight is manageable, and that fatness is some kind of lifestyle choice that you can 'educate' out of your customers. This is nonsense. The qualifications are dated and encourage fat bias. (Female fitness instructor/fitness studio owner, 39)

4.2. Learning from Role Models. Additionally, fitness professionals cited a *"lack of role models or examples of successful weight-inclusive fitness instructors in the industry"* (Female PE teacher, 31) as a barrier, and shared the importance of learning from others who have adopted such approaches successfully as a facilitator to encourage other fitness professionals to be more weight inclusive. Participants also believed that getting clients' perspectives was beneficial, such as *"seeking feedback from clients or students who may have experienced negative impacts of weight-centric approaches"* (Male PE teacher, 29).

> The key to encouraging other fitness professionals to adopt a weight-inclusive approach is to show them that it can be done and can be done well. [...] If more fitness professionals were able to demonstrate their own successes with weight-inclusive approaches, others would likely follow suit. (Male PE teacher, 38)

4.3. Learning through Lived Experience. With regards to fitness professionals who had adopted a weight-inclusive approach to fitness, many cited lived experience of body image concerns, weight bias and weight stigma, and eating disorders as a key motivator.

> As someone who has suffered from anorexia, I have experienced firsthand how gruelling and damaging to your health it is to try and be a weight that's drastically different to your body's natural 'set-point'. I cannot see weight loss as a good outcome because it wasn't for me, therefore it's not something I encourage for my clients. (Female fitness instructor/fitness studio owner, 39)

Discussion

The findings of the current study demonstrate a positive correlation between weight bias and negative attitudes towards working with fat people. Fitness professionals endorsing weight-inclusive practices demonstrated higher levels of empathy, size acceptance, critical health attitudes, and attribution complexity, alongside lower negative attitudes towards working with fat people, compared to weight-normative peers. No significant differences emerged regarding body acceptance or sociocultural influences on fear of fat. With regards to intervention preferences, fitness professionals rated intervention components as moderately to very important and were willing to invest 1–7 hours in learning about weight bias, with a preference for asynchronous online learning or a blended approach including an in-person training component delivered by a fitness expert. Qualitative analysis delineated four overarching themes and five subthemes, shedding light on the motivations and challenges surrounding the adoption of weight-inclusive approaches within the fitness industry. Our findings build on previous literature showing that higher levels of weight bias are associated with higher sociocultural influences on fear of fat and more negative attitudes towards working with fat people (Argüelles et al., 2022; Flint & Reale, 2016; Schvey et al., 2017; Zaroubi et al., 2021). With the caveat of the poor reliability shown in the body acceptance subscale, we found no significant relationships between fitness professionals' body acceptance and critical health perceptions or attitudes towards working with fat people. However, there is some evidence suggesting that fitness professionals are under similar pressures to maintain a thin and toned body (Fernández-Balboa & González-Calvo, 2018; Hutson, 2013), and these pressures may be exacerbated among fitness professionals whose bodies do not align with the thin or muscular appearance ideals (Setchel et al., 2009).

Our findings further extend previous literature by categorising fitness professionals into a weight-normative or weight-inclusive approach. As expected, fitness professionals who

identified as weight-inclusive reported lower weight bias and less negative attitudes towards working with fat people, compared to weight-normative fitness professionals. However, weight-inclusivity is still only adopted by a minority of professionals working in the fitness industry. Previous research on health and fitness professionals identified important barriers to the adoption of such approaches, including weight-centric training, workplaces, and insurance systems (Gomez, 2024). Overcoming these barriers demands a substantial number of resources and is an important consideration when developing interventions to reduce weight bias and encourage fitness professionals to adopt a weight-inclusive approach. Notably, both weight-inclusive and weight-normative fitness professionals cited "latest scientific research and guidance from authoritative institutions", "evidence-based research", and "science" to justify their chosen approach. Given the highly variable pathways from education to qualifications and recruitment of fitness professionals (Lloyd, 2008; Lloyd & Payne, 2013), the understanding of health—even within the prevailing weight-centric paradigm—is superficial at best, and misguided in many cases (De Lyon et al., 2016; Melton et al., 2021; Mitchell et al., 2021). We can see from the qualitative data some flexibility and openness to consider other indicators of health and to adjust to client demand, suggesting that fitness professionals would be willing to adapt if they had the knowledge and, importantly, if it made commercial sense. Reference was also made to the substantial customer engagement of weight loss programmes, due to the prevalent thin-idealisation and body-centric nature of our society (Dignard & Jarry, 2021; Robinson et al., 2017). Although some fitness professionals suggested that weight can be a motivator and an indicator of progress, others argued the opposite from their experiences attempting to support clients with their weight loss goals. Indeed, this could be a key consideration to help fitness professionals link what they are seeing in practice with the evidence on the low success rates of weight management (Epton et al., 2021; Fildes et al., 2015; Mann et al., 2007; McEvedy et al., 2017).

Most fitness professionals who subscribed to the weight-inclusive approach were well-aware of the impact of weight-based discrimination. Evidence on the harmful outcomes of weight stigma is well-documented and includes negative attitudes towards the gym and poorer self-reported physical and emotional health (Argüelles et al., 2022; Schvey et al., 2017). Participants subscribing to a weight-inclusive approach argued for inclusivity as a way to expand their client base, make space for all bodies, and combat weight stigma. Despite significant barriers (Gomez, 2024), efforts towards inclusive spaces have the potential to increase client participation and retention. Evidence suggests that while weight loss promises might work to increase participation in the short term, long-term retention may decrease, likely due to differences between appearance-based reasons as extrinsic motivations for exercise, compared to functional reasons as intrinsic motivations (Maltby & Day, 2001; O'Hara et al., 2014), as well as the low likelihood of maintaining weight loss over time.

Practical Implications for Intervention Development

The current study presents several practical implications for the development of novel weight bias interventions for fitness professionals. First, throughout this study, education (or lack thereof) was highlighted as a key determinant for the uptake of both weight-normative and weight-inclusive approaches to fitness instruction. Fitness professionals who had an awareness of weight stigma and bias, alongside knowledge on the complexity of body weight and its determinants, were the most well-equipped to operate under, and support, the weight-inclusive paradigm. This aligns with previous research implying the significance of education from an early stage when working to reduce weight stigma and encourage the uptake of inclusive methods (Talumaa et al., 2022). Access to resources on weight-inclusive fitness practices and language should be widely accessible, particularly on social media, as this is a low-cost and effective way to access a wide audience and messaging and dissemination can be tailored to reach fitness professionals specifically (Puhl, 2022). This can also coincide

with educating fitness professionals about the negative implications of weight stigma and how individuals' own biases can manifest unconsciously. In order to have a meaningful impact, however, education on these topics should be encouraged in schools, universities, and healthcare and fitness training qualifications (Ramos Salas et al., 2017), to counteract weight biases embedded in existing education and certification curricula. It should also be noted that weight-normative fitness professionals rated some intervention components as less important than weight-inclusive fitness professionals, including training on how to recognise weight bias in yourself and others, guidance on appropriate and inappropriate communication and behaviour, information on how to apply weight-inclusive practices, and guidance on how to challenge others' weight-normative attitudes and behaviours. Relatedly, a larger proportion of weight-normative fitness professionals preferred in-person learning, while more weight-inclusive fitness professionals preferred on-demand/media-based learning. Combined, these findings suggest that weight-normative fitness professionals might require more intensive and in-person training, to raise their awareness around the importance of weight-inclusive practices and to provide additional guidance on how to adopt weight-inclusive approaches. Second, although the questionnaire provided the definitions of both terms at the beginning of the survey, a significant finding from the very first stage of analysis was the clear confusion of some participants when identifying a weight-normative versus a weight-inclusive approach. For example, several fitness professionals who selected that they adopted a weight-inclusive approach still cited the importance of weight as a health indicator. This is also reflected in some studies adopting HAES®-based interventions with the aim to manage weight (e.g., Dimitrov Ulian et al., 2018). Approaches that claim to be weight-inclusive are still often presented within a weight-centric paradigm that equates health and weight. Interventions aiming to tackle weight bias among fitness professionals therefore need to take into account the terminology used to teach about weight bias and weight stigma in the fitness

industry, and practices that are inherent to a weight-inclusive paradigm. This is particularly important when attempting to decouple beliefs about weight and health, which are currently widely accepted in the fitness industry. Third, although fitness professionals in the current study expressed concerns that adopting a weight-inclusive approach may result in loss of business and revenue, weight-inclusive fitness professionals argued that promoting size inclusivity can encourage more people to join fitness spaces and stick to their exercise programme in the long term. Although they did not explicitly link this to potential increases in revenue (e.g., through expanding one's client base), this is an important aspect to explore in future interventions. This could also be key in convincing fitness professionals to adopt weight-inclusive approaches. Relatedly, interventions should include guidance supporting fitness professionals in integrating a weight-inclusive approach for the variety of clients they encounter, including those seeking to change their weight or appearance. Finally, the current study adds to the existing literature by presenting a novel scale that assesses fitness professionals' attitudes towards working with fat people. Although this measure needs to undergo thorough validation before definitive conclusions can be made about its reliability and validity, our findings shed light on the potential attitudes fitness professionals hold. Specifically, weight-normative fitness professionals held more negative attitudes towards working with fat clients on every item of the AWFP, with particularly high scores observed on items five ("I think thinner people are more motivated to train") and four ("I think fat people don't enjoy exercising that much"). These findings suggest the need for future interventions to address specific misconceptions about fat people's attitudes towards, and engagement in, exercise. Additionally, following rigorous validation, the AWFP can be used to evaluate future interventions that aim to decrease weight bias among fitness professionals.

Limitations and Future Directions

The findings of the current study need to be interpreted in light of several limitations. First, the cross-sectional design and self-selected participant sample preclude causal inferences, and the possibility of sampling bias may affect the generalisability of our findings to the broader population of fitness professionals. Most participants in the current sample identified as White and resided in the UK, which precludes us from drawing conclusions about the applicability of our findings to other social and cultural contexts. Diversifying our samples to include a broader range of professionals and regions could enhance the depth of our understanding. This should include a deeper exploration of the differences between and within job roles, for example views from PE teachers working in school settings with young people, compared to fitness professionals working in gyms or as personal trainers with adult populations. Additionally, it would be useful to explore how long participants have been utilising a weight-inclusive approach and the impact it has had on themselves and their clients. Future research could further develop this field by addressing intersectional variables such as how gender, social class, race, and fitness professionals' own body size or body size perceptions interact to influence the uptake of weight-inclusive or weight-normative fitness approaches. Indeed, research has been conducted on how these variables independently affect weight and weight beliefs (Nolan et al., 2013; Sattler et al., 2018; Stewart & Ogden, 2021), but little is still known about their influences. Such data can be utilised to develop interventions that target intersectional factors related to weight bias and weight stigma, to ensure more optimal outcomes in addressing weight bias in the fitness industry. Second, we acknowledge potential limitations inherent in self-report measures, which may be susceptible to biases such as social desirability. This can be particularly pertinent when utilising measures that assess sensitive constructs, such as stigma. In the context of the current study, respondents may underreport negative attitudes towards individuals in larger bodies, fearing

judgement or repercussions associated with expressing stigmatising views. Conversely, they may overstate their acceptance and inclusivity, aligning their responses with perceived societal expectations, rather than reflecting their true attitudes. This discrepancy between reported attitudes and genuine beliefs can compromise the validity and reliability of study findings, potentially skewing the portrayal of weight bias within the fitness industry. Relatedly, this can partially explain the incongruence between how some participants identified (i.e., weight-inclusive versus weight-normative) and how they described their chosen approach. Future research may therefore benefit from using tests that address these inaccessible biases, such as the Implicit Association Test (Greenwald et al., 1998), to gain a deeper understanding of implicit biases that may influence fitness professionals' attitudes towards working with fat people. Relatedly, given the AWFP was developed for the purposes of the current research, future tests of its reliability and validity are required to replicate and confirm our findings. Finally, the body acceptance subscale of the FAAT showed lower reliability in the current research, limiting conclusions that can be drawn about this measure and how fitness professionals' acceptance of their own bodies relates to their attitudes towards working with fat people. Given that fitness professionals' attitudes towards, and acceptance of, their own bodies may influence how they interact with others, this relationship should be explored further in future research using robust body image measures.

Conclusions

This mixed-methods study sheds light on the pervasive issue of weight bias within the fitness industry and underscores the importance of addressing weight bias among fitness professionals and promoting the adoption of weight-inclusive practices. Although weight-inclusive approaches to fitness instruction were associated with lower weight bias and less negative attitudes towards working with fat people, significant barriers to adopting such approaches remain. Moving forward, tailored interventions are needed to educate fitness

professionals about the benefits of weight-inclusive approaches and to address misconceptions associated with weight and health and implications for business and revenue. By fostering comprehensive education and dispelling stereotypes, significant strides can be made towards promoting inclusivity and improving the experiences of individuals of all body sizes within the fitness industry.

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Figure Captions

Figure 1. Thematic Map of Core Themes and Subthemes.

Note. Solid lines with arrows represent subthemes. Dashed lines represent relationships between themes.