



# Weighing Down My Career? An Exploration of the Mechanisms for Body Fat's Impact on Long-Term Career Success and the Moderating Role of Employee Sex and Industry

Michael A. Johnson <sup>a</sup>, Manuela Priesemuth <sup>b</sup>, and Francisco Moreno <sup>a</sup>



<sup>a</sup>Louisiana State University; <sup>b</sup>Villanova University

## ABSTRACT

Much of the worldwide population is obese or overweight. However, the effects of body fat on a person's workplace success, especially in the long term, are not well known. Further, we have little insight on the dominant mechanisms by which body fat influences career outcomes. Aiming to understand if, how, and when employee body fat impacts career success over time, we challenge prior theory (i.e. stigma theory) and employ a novel medical perspective to suggest that an employee's health – in the form of illnesses like cardiovascular disease and diabetes – determines the relationship between employee body fat levels and long-term work success. Furthermore, we integrate research from evolutionary biology to consider the moderating role of employee sex in the health process and probe effects by industry. Longitudinal results from a nationally representative, multi-wave sample (across 20 years) show that employee health – but not stigmatization or other explanations – mediates the negative relationship between employee body fat levels and career success. Moreover, findings reveal that employee sex does not moderate this indirect effect, indicating that high body fat men and women equally experience adverse career effects due to the serious medical impairments they incur. Industry further qualifies these effects.

Issues of diversity are of interest to both practitioners and academics. For instance, Fortune 1000 companies spend approximately \$5.1 billion each year on diversity initiatives (Buss, 2022). Yet, the scholarly interest in diversity has taken a limited focus on gender and race (Roberson, 2019; Roberson et al., 2017), leaving unexplored areas of diversity like body fat (Johnson & Schminke, 2020). One-third of the worldwide population and as much as two-thirds of people in the United States struggle with obesity issues, defined as excess levels of body fat<sup>1</sup> (Vardaman et al., 2021; World Health Organization, 2022). Despite many cultures historically viewing high body fat levels as a sign of power, success, and health (Haslam & James, 2005), evidence suggests that one's level of body fat is a source of harmful effects at nearly every stage of employment (e.g., Roehling, 1999; Roehling et al., 2013; Vanhove & Gordo, 2014).

In trying to understand the effects of body fat on work outcomes, organizational-behavior (OB) scholars have treated body fat as another source of discrimination, conceptually similar to constructs like ethnicity or sexual orientation (Johnson & Schminke, 2024; Roehling, 1999; Ruggs et al., 2015). While this “discrimination approach” uses sound theoretical tenets, it may be creating a faulty and overly simplistic picture of *how* and *why* one's level of body fat is tied to employment outcomes due to

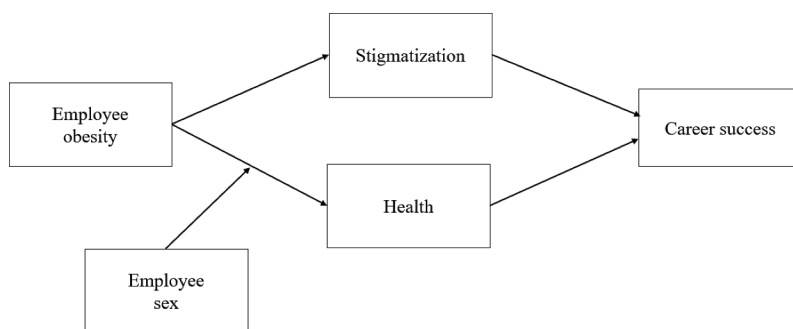
**CONTACT** Michael A. Johnson  [michaeljohnson@lsu.edu](mailto:michaeljohnson@lsu.edu)  Rucks Department of Management, Louisiana State University, 2712 Business Education Complex North 501 South Quad Drive, Baton Rouge 70803, LA

<sup>1</sup>Although this paper explores body fat issues, it is important to think about one's level of body fat as a broader continuum than simply “non-obese or obese.” Health and stigmatization effects do not just appear at a threshold level. Thus, we theorize about and empirically test body fat level as a continuous variable, as recommended by the current literature (Johnson & Schminke, 2020).

its theoretical and methodological limitations. More specifically, this research has adopted (a) an (over) reliance on stigma perspectives and (b) predominantly tested body fat effects in laboratory, applicant, and customer-service settings rather than “on the job” contexts (e.g., Agerström & Rooth, 2011; Vanhove & Gordo, 2014). As a result, management research has eschewed other plausible explanations for body fat effects as well as the fact that stigmatization may be less impactful outside the short-term contexts in which it has been studied (Calle & Thun, 2004; Tosi & Einbender, 1985). Thus, organizational-behavior scholars may be missing the full impacts of one’s body fat by treating it as another discriminatory individual-difference concept like race or gender.

Considering the state of the literature and the number of workers struggling with their body fat levels, this paper aims to advance research and practice on this important topic by building an overarching conceptual model that tests the, thus far, dominant theoretical perspective against a compelling viewpoint not adequately considered in the human performance literature. To do so, we competitively test the established stigma perspective of this literature alongside a novel health approach (Johnson & Schminke, 2020), which suggests that an employee’s sustained success might be driven by body fat-related health impairments rather than negative stigmatization that occurs (Figure 1). We aim to extend this realm of work by understanding the effects of one’s body fat level on an important long-term outcome for employees, namely objective career success over time. Extant work has failed to explore the mechanisms that may explain this relationship. Accordingly, we test if distinct health conditions such as diabetes, high cholesterol, or heart disease may be the silent (yet prominent) driver of an employee’s long-term trajectory or if established, but untested, theorizing explains these effects.

Beyond introducing health conditions as factors that may influence body fat effects in the workplace (tested alongside explanations like stigmatization), we further posit that the influence of body fat on one’s long-term success varies depending on the employee’s sex.<sup>2</sup> Integrating a medical perspective of body fat with evolutionary biology, we postulate that the negative impact of body fat might be stronger for men than it is for women, an effect counter to what has been proposed in prior research (e.g., Roehling et al., 2013). According to evolutionary research, men carry body fat differently than women (Power & Schulkin, 2008), which may amplify men’s health risks and, therefore, lower career success through health impacts. In turn, women may not be as strongly affected as previous research



**Figure 1.** A visual representation of the relationship between employee body fat level, health, stigmatization, success, and sex. We note that we operationalize health impairment as a composite variable of the five most associated health impairments tied to one’s body fat (Johnson & Schminke, 2020). Additionally, like prior literature, we operationalize stigmatization with a workplace discrimination measure and an interpersonal mistreatment measure.

<sup>2</sup>We follow the APA’s guidelines in using the term *sex* as opposed to *gender*. However, we note that the terms are often conflated in everyday usage (Muehlenhard & Peterson, 2011). Additionally, we acknowledge the potential bias, challenges, and limitations in considering sex as a binary consideration (Hyde et al., 2019).

suggests. We also test this sex effect across industries to determine whether men (or women) are more disadvantaged in some industries.

In sum, our research incorporates theory on health, evolutionary biology, and sex to present a moderated-mediation model of workplace body fat and long-term career success. In this way, we advance research on body fat and workplace diversity on multiple fronts. First, we employ and test new theoretical underpinnings to understand the mechanisms by which body fat influences workers' long-term success against more commonly used but untested explanations (e.g., Judge & Cable, 2011). To date, body fat work in management has been reticent to consider these health explanations, view them as mechanisms for important work outcomes, and test them alongside established mechanisms (Johnson & Schminke, 2020). Second, we extend theory by exploring how employee sex might influence the long-term job success of high body fat individuals. Sex is one of the most common boundary conditions considered for body fat (Roehling et al., 2013), but its effects are generally believed to be harmful for women but not for men. We integrate an evolutionary biology perspective to examine whether this established perspective is indeed true or whether the impact of body fat on women may not be as harmful as initially thought. Also, we test this effect across industries to see if women or men are more impacted in certain industries. Finally, our work extends research on sex and diversity, which has focused on *interpersonal* explanations over potential *intrapersonal* explanations (Colella et al., 2017). We join this conversation with our research by building a conceptual model that examines both interpersonal discriminatory mechanisms and intrapersonal mechanisms.

To thoughtfully unfold the full influence of body fat, we first describe the traditional stigma perspective that the OB literature has embraced before explaining how an employee's health might represent an equally relevant mechanism that explains why and how extra body fat can impact objective, long-term career success for employees.

### **The impact of body fat at work: the traditional stigma view of management research**

As noted, scholars have generally conceptualized one's level of body fat as a source of stigmatization (Johnson & Schminke, 2020), where it triggers a stigmatization process in others around something like body fat (Goffman, 1963; Jones et al., 1984). In particular, people develop a devalued view of the stigma-bearer and direct harmful attitudes and behaviors toward the stigmatized person (Cahnman, 1968; Shapiro et al., 2007; Weiner et al., 1988). People direct these actions toward the stigma bearer to reinforce the devalued judgment. Considering that the stigmatization process involves a stigma-bearer and another party's thoughts and actions toward that stigmatized individual, the stigmatization process is inherently interpersonal.

In this interpersonal stigmatization process, much of the literature has focused on two types of harmful behaviors directed toward a person, namely interpersonal mistreatment and discrimination.<sup>3</sup> First, work suggests that actions toward a stigma bearer often entail interpersonal mistreatment (e.g., Goffman, 1963; Sliter et al., 2012), where the observer will socially exclude or interpersonally hurt the stigma bearer. As theory suggests, others want to maintain a clear boundary between themselves and the stigma bearer and will, thus, use these harmful interpersonal behaviors as a way of reinforcing this boundary and creating psychological and physical distance (Jones et al., 1984). Second, research also indicates that negative actions toward a stigmatized individual entail components of discriminative behavior toward the individual (Johnson & Schminke, 2020; Jones et al., 1984). For example, Goffman suggested "by definition . . . we exercise varieties of discrimination" (p. 5), and hiring, promotional, and termination discrimination are theorized as a process of reinforcing devalued views of body fat (Johnson & Schminke, 2020). The core of this argument also revolves around individuals wanting to avoid and maintain physical and psychological distance from the person with the stigma (Goffman, 1963; Jones et al., 1984). These discriminatory behaviors are ways for observers to avoid and keep these

<sup>3</sup>We investigate workplace discrimination due to its relationship with our outcome of interest. Workplace discrimination is but one form of discrimination to which stigma bearers may be exposed.

individuals distant in organizations. In all, recent reviews of the stigma literature confirm that stigmatization generates these behavioral responses of interpersonal harm and discrimination (Zhang et al., 2021, p. 194).

Empirical work supports the role of interpersonal mistreatment and discrimination in the stigmatization process and shows these behaviors can have career implications for the stigma bearer. First, interpersonal mistreatment has been theorized, and empirically shown, to be a stigmatized mechanism that links a person's body fat and their ability to do their job (Johnson et al., 2024; Sliter et al., 2012). Long term, this effect will have important impacts on employees' ability to succeed in their career and earn increased levels of income (Judge & Cable, 2011). Moreover, work has demonstrated that one's level of body fat creates disadvantages in hiring (Agerström & Rooth, 2011) and that one's body fat level is related to promotion and firing decisions (Bellizzi & Hasty, 2001; Klassen et al., 1993). All of these are career-relevant, and in the long run, will limit one's success and ability to attain an income. Indeed, if an employee is consistently faced with inferior jobs, promotional opportunities, and interpersonal mistreatment, it will have a snowballing effect on long-term viability in their career success (i.e., income).

Hence, applying the traditional stigmatization perspective to the context of long-term career success, we argue that the devalued view of, and the desire to direct adverse behaviors (e.g., discrimination and interpersonal mistreatment) toward the stigma-bearer will negatively relate to career-relevant outcomes (Jones et al., 1984). In other words, we contend that, over time, the stigmatization and interpersonal mistreatment that these employees face will lead to poorer objective career success. As follows, we propose that stigmatization will act as the mediating mechanism that links body fat levels to long-term career success. Because this reasoning is rooted in the dominant view of body fat, we treat the concept of stigmatization as the baseline mediator. Formally, we propose:

**Hypothesis 1:** Stigmatization will mediate the negative relationship between an employee's body fat level and objective career success.

Although the stigma perspective offers valuable insights about when and why obese people might face harmful outcomes at work, conceptual work has started to question this view for its over-reliance on implicit biases and short-term interaction between individuals (e.g., Johnson & Schminke, 2020). For example, Johnson and Schminke (2020) argued that stigma effects should be less prominent in long-term, information-rich contexts where individuals have more opportunities to adequately assess a high body fat person for who they truly are, rather than make judgments based on their stigma alone. In a similar vein, classical stigma theorizing acknowledges that people may often become more accepting of a stigma when they know a stigmatized person on a more personal level (Goffman, 1963). Based on these views, Johnson and Schminke pointed to alternative explanations, such as potential health concerns, as more suitable in deciphering long-term effects of one's body fat in a work setting. Here, we follow this lead and consider an alternative medical perspective. In particular, we propose that certain health impairments associated with body fat are likely responsible for negative implications on career success.

### **The impact of body fat at work: the medical perspective**

Grounded in medical research, we suggest that excessive levels of body fat lead to underlying health conditions that will determine how successful employees might be at work. High levels of body fat influence long-lasting health conditions such as cardiovascular disease, diabetes, breathing issues, cancer, and joint problems (Calle & Thun, 2004; Kulkarni et al., 2016; Liu et al., 2015; Mokdad et al., 2003; Stepan et al., 2001), all of which can influence a person's capabilities to properly execute job duties and remain successful over long periods of time. Of important note, medical research has typically explored these issues separately, with some work showing a link between body fat level and health impacts and a separate set of work showing a link between these health impacts and work

(Johnson & Schminke, 2020). Workplace research has yet to explore health impacts as a mechanism for body fat's impact.

To elaborate further, medical research has emphasized a causal relationship between body fat and health impact (Centers for Disease Control & Prevention, 2022; Lementowski & Zelicof, 2008). For example, it has been shown that excess body fat causes debilitating physiological changes, including mechanical stress on joints like the knees, shoulders, and elbows (Anderson & Felson, 1988; Kulkarni et al., 2016). Beyond joint and bone problems, body fat levels trigger hypertension, heart disease, and strokes due to fatty tissue (Aggoun et al., 2008), and are known to cause breathing issues like chronic obstructive pulmonary disease (COPD) (Bazurro et al., 2018; Hanson et al., 2014) and diabetes (Steppan et al., 2001).

All these physiological changes can trigger cognitive and physical impairments that directly relate to employee success. With respect to resulting physical challenges, medical research contends that body fat-related respiratory issues and joint problems cause individuals to be less productive in physically demanding jobs (e.g., manufacturing, health care, childcare; Blanc et al., 2001; Lerner et al., 2002). Joint diseases are also a leading cause of workplace disability, rendering long-term career advances for a high body fat person elusive (Beaton et al., 2010). Additionally, high blood pressure related to body fat, and excess body fat itself, leads individuals to have worse sleep, higher morning fatigue, and lower levels of energy throughout the day (Chobanian et al., 2003; Fletcher et al., 2011). This fatigue generates self-regulatory issues that influence one's ability to perform and succeed at work (e.g., Barnes & Wagner, 2009; Wagner et al., 2012). Lastly, medical research shows that diabetes, cancer, and cardiovascular disease have generally been related to absenteeism, temporary leaves of absence, and work gaps for individuals (Kragholm et al., 2015; Lerner et al., 2000; Spelten et al., 2002). Naturally, as people spend less time at work, it influences their accomplishments on the job and prospects to rise in the company (e.g., Schneer & Reitman, 1997).

In sum, the specific health concerns associated with body fat leave employees with declining mental and physical capabilities, lower energy levels, and other impairments that inhibit one's ability to execute daily job functions and maintain a strong presence at the organization long-term. Thus, we posit that those various medical conditions (and not necessarily stigma effects) present the reason why employees might experience negative consequences in the long run, including stalled career success (i.e., income levels). As follows, we formally suggest:

**Hypothesis 2:** An employee's body fat level will be positively related to his or her medical impairment.

**Hypothesis 3:** An employee's medical impairment will mediate the negative relationship between one's body fat level and objective career success.

### The medical perspective of body fat and the influence of an employee's sex

Beyond proposing different explanations for why body fat levels might be tied to an employee's objective career success, we further argue that the sex of the employee will act as a moderator to these indirect effects. Typically, the body fat literature has suggested that women are the target of stronger negative body fat effects (because of stigmatization) and that men are relatively immune because of more tolerant views of their body fat (Roehling et al., 2013). By integrating the medical perspective with evolutionary tenets on sex, we posit that high body fat men might actually experience less long-term success because they suffer more serious health concerns than women do. The "strengthening effect" for high body fat men rests in evolutionary research that suggests that men carry extra body fat differently than women and that this difference might have important implications for their health. Although women tend to have a larger percentage of their body mass as fat, this fat is more "economically stored" from a health perspective and therefore easier to metabolize (Lovejoy et al.,

2009; Power & Schulkin, 2008). To be exact, women's body fat tends to be stored *subcutaneously*, or primarily under the skin, as opposed to *viscerally*, or deep stored around vital organs (as it is more the case for men). From an evolutionary perspective, women carry fat subcutaneously because it is more easily accessible to one's metabolism (e.g., Lovejoy et al., 2009). Women bear a higher nutrient cost during reproduction and need the easily accessible source of metabolic energy for fetus development and nurturing of newborn babies. In contrast, men do not have this metabolic need during reproduction. Thus, an evolutionary perspective would explain why men tend to store extra body fat viscerally because they would not need to have a readily available source of metabolic energy for procreation (Lovejoy et al., 2009).

The distinction between subcutaneous and visceral fat is quite important because visceral body fat poses a greater threat to important organs and body fat-related diseases than subcutaneous body fat (Power & Schulkin, 2008). One of the biggest concerns is that visceral fat is directly linked to stronger experiences of body fat-related health complications like heart disease or diabetes. In particular, visceral fat is related to a higher degree of adipokine production than subcutaneous fat, which is a key factor in body fat-related diseases (Presle et al., 2007). In addition, visceral fat is related to more non-esterified fatty acid production than subcutaneous fat; this fatty acid production is related to adverse metabolic effects like insulin resistance and diabetes (Karpe et al., 2011). Lastly, visceral fat in men is associated with the dysregulation of cortisol production and metabolism in the body (Power & Schulkin, 2008) as well as higher levels of fatty acid release and uptake than in the visceral fat of women (Power & Schulkin, 2008). In essence, what all this means is that men are more susceptible to excess visceral fat, and their body fat may also be more harmful to them than it is for women. With greater harm to the body and more body fat-related health complications, men with high body fat's long-term contributions in the workplace might also be more limited.

Based on this integration of medical and evolutionary perspectives, we expect men with high levels of body fat to be more prone to experience diabetes, heart disease, joint, and breathing problems (as well as other body fat-related health effects), which would prompt greater physical and cognitive shortcomings (i.e., feeling even more fatigued, lower in energy, and being more absent) that will influence how well they can execute daily work activities and remain successful overall. As such, we argue that an employee's sex should moderate the indirect effect of employee body fat levels on career success via medical impairments, such that it is stronger for male employees compared to female employees.

**Hypothesis 4:** An employee's sex will moderate the negative indirect relationship of an employee's body fat level and career success through the employee's medical impairment such that negative effects will be stronger for men than for women.

## The impact of industry – an exploratory inquiry

Above, we put forth a theory driven explanation for the role of an interpersonal stigmatization process and a health process between body fat and career success. However, there is also reason to believe that these relationships (and the moderating role of sex) might be conditional upon other factors such as an individual's industry, indicating a potential three-way interaction. Indeed, some preliminary work on stigmatization has suggested that it is influenced by one's context (Avery et al., 2016; Zhang et al., 2021) and, likewise, research has demonstrated that perceptions of and within industries can impact marginalized identities. As one example, the construction industry has been shown to be male dominated (Styhre, 2011), causing stronger negative reactions to, and outcomes for women who work in this industry. Following this tenet, the impact of body fat on our mechanisms of stigmatization and health may also be stronger in some industries (e.g., construction). Additionally, some industries have different physical demands. Unfortunately, the body fat literature lacks sound theoretical and empirical backing for these assertions (Johnson & Schminke, 2020). While it is an intriguing and



meaningful question, we acknowledge the limited theorizing and treat this as an exploratory inquiry in our paper. In doing so, we follow journal guidelines of past published manuscripts and offer a final set of research questions (Blair et al., 2008) rather than directional hypotheses (Klehe et al., 2008). Thus, we propose a conditional two-way and three-way exploration for the role of industry.

**Research Question 1:** Industry will moderate the relationship between one's body fat level and (a) stigmatization and (b) health.

**Research Question 2:** Industry will moderate the conditional effect of sex on the relationship between one's body fat level and (a) stigmatization and (b) health.

## Methods

To examine the impact of employee body fat levels on career success over time, we tested our model across a 20-year, multi-wave sample of employees. This time span allowed an appropriate amount of time to test the effects of our model. That is, the effect of body fat on within-person changes in health, and health on within-person changes in success, is something that takes place over years rather than weeks. As one example, people's body fat tends to increase less than 1% across years (Meeuwesen et al., 2010). Similarly, we expect any impact of discrimination on an individual's career success to be something that unfolds over years.

Respondents in this study were people who participated in the Midlife in the United States (MIDUS) Longitudinal Study.<sup>4</sup> This study was initiated by the MacArthur Midlife Research network in 1995 as a nationally representative sample of the United States. The data was acquired via random dial sampling and oversampling in five metropolitan areas. This panel consists of three waves of data collection (Time 1, Time 2, Time 3) each about ten years apart.

Of those in the sample at Time 1, 52% identified as female, 74% identified as white, and individuals had a mean age of 46 years ( $SD = 13$ ). Individuals worked on average 41 hours a week ( $SD = 12.05$ ) and were most represented in the industries of professional services, construction, insurance, health services, and education. The final sample was 1,439 workers.

## Measures

To present some evidence of temporal separation and causal precedence between the variables (e.g., Brewer, 2000) we measured the predictor at time 1, the mediating variables at time 2, and the dependent variable at time 3. Additionally, we controlled for the level of our mediating and dependent variables at the previous time period using a longitudinal cross-lagged panel approach (Figure 2). With the exception of sex (2 = *Female*, 1 = *Male*), all variables were available at all time periods.

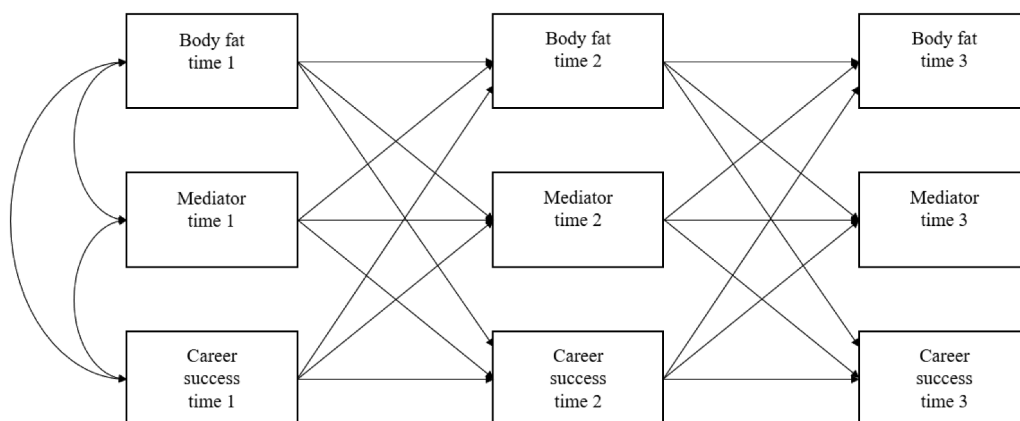
### Body Fat (time 1)

To measure a person's body fat level, we utilized a weight-to-height measure (Body Mass Index [BMI]). This measure is the most commonly used measure in medical and management work to assess body fat levels (Gregory et al., 2008; Sliter et al., 2012). To create the BMI score, we used the common imperial English formula of  $\text{weight}/(\text{height})^2 \times 703$  as recommended by the CDC. In line with current recommendations in the literature (Johnson & Schminke, 2020), we treated this measure as continuous.

### Health (time 2)

To adequately assess an employee's health, we considered medical impairment. Conceptual work in the body fat space suggests that body fat is related to five specific medical conditions (Johnson & Schminke, 2020), namely (a) cardiovascular disease, (b) diabetes, (c) breathing

<sup>4</sup>The data that support the findings of this study are available from the corresponding author, upon reasonable request.



**Figure 2.** A visual representation of a longitudinal, cross-lagged panel model. For parsimony and to improve visualization, we only list one mediator. However, we tested models with all three mediators in the same model (see table 2). Following best practice, all variables at time 1 were correlated, and the disturbance variables at time 2 were correlated and those at time 3 were correlated (Finkel, 1995; Lian et al., 2014; Takeuchi et al., 2021). Following scholarly recommendations (Finkel), we also constrained coefficients to be equal across time.

issues, (d) joint problems, and (e) cancer. Accordingly, we built a composite variable consisting of the respondents rating whether they have had (1) heart issues (heart trouble, heart attack, high blood pressure), (2) diabetes, (3) joint disease, (4) cancer, and (5) various breathing impairments (becoming short of breath in several normal activities, diagnosis of breathing trouble not related to asthma). Respondents rated a 2 on each if it pertained to them and a 1 if it did not pertain to them. We summed the score of this medical impairment variable to indicate how many health detriments a person was experiencing, where high scores indicate a higher level of impairment.

### **Stigmatization (time 2)**

For stigmatization, we used two different operationalizations (interpersonal mistreatment & discrimination). First, we employed a body fat interpersonal mistreatment scale (Williams et al., 1997) to assess participants' experiences of mistreatment specifically due to body fat. The scale comprised nine questions, each probing different aspects of interpersonal mistreatment, such as receiving less respect than others, people acting as if the obese person is dishonest, and instances of name-calling, insults, and harassment attributed to their body fat. Example items read: *"You are treated with less respect than other people."* or *"You are called names or insulted."* Participants responded to each question in reference to their body fat on a four-point scale, indicating the frequency of occurrence, ranging from *"Often"* to *"Never."* To construct the scale score, the values of the items were averaged, with reverse-coding applied to ensure that higher scores denote greater levels of interpersonal mistreatment. Reliability analysis yielded a high internal consistency coefficient ( $\alpha = .93$ ), indicating strong reliability of the scale in measuring interpersonal mistreatment among participants.

In addition to this interpersonal mistreatment measure, we created a body-fat specific discrimination measure. Respondents indicated the number of times that they had experienced workplace discrimination (i.e., hiring, promotion, and termination) because of their body fat.

### **Objective Career Success (time 3)**

Based on prior research, one way to measure career success over time has been to look to a person's income (e.g., Gattiker & Larwood, 1988; Judge & Cable, 2004; Kotter, 1982). Here, we follow past work and used the employee's reported income as an indicator of success, where participants indicated their



taxable income in the prior year. To be exact, respondents indicated their income in earning bands (e.g., 1 = less than \$0/loss, 2 = \$0, 3 = \$1–\$1,999).

### Controls

Considering that many other factors can influence a person's health and career success, we controlled for key indicators identified by previous work, including employee race, socio-economic status, prior risky behaviors (smoking tobacco and drinking alcohol), and mental health (depression and anxiety). Additionally, we controlled for additional alternative explanations for a lack of career success with the frequency a respondent was exposed to accident risks at their job, the extent to which home duties reduce job effort, the level that a respondent has decision authority at their job, and the level of demands at a respondent's job. We acknowledge that the results in this study remain virtually identical *with or without controls*. Due to rules of parsimony and best practice recommendations (e.g., Becker, 2005; Bernerth & Aguinis, 2016), we report results without these control variables.

### Study results

Bivariate correlations for all variables appear in Table 1. We used two analyses to test our hypotheses. To better assess the longitudinal nature of our model, we utilized a longitudinal cross-lagged panel analysis to test our mediation hypotheses. When it comes our moderation (and moderated mediation) explorations, we utilized a longitudinal, lagged regression approach (Finkel, 1995; Newsom et al., 2012) relying upon OLS regression and the package Process macro in SPSS (Hayes, 2015). In both of our analyses, we used 1,000 bootstrap samples to calculate bias-corrected confidence intervals. Furthermore, we compared the difference in the indirect effects at the different values of the moderator (Female, Male) (Hayes, 2015) and centered body fat in the creation of our interaction terms.

To further explain our cross-lagged panel model, we specified the lagged effects of body fat on stigmatization and health, of stigmatization and health on career success, of career success on stigmatization and health, and of stigmatization and health on body fat (see Figure 2). Also, we controlled for the temporal stability in each variable represented by the impact of each variable at Time  $t-1$  on the variable at Time  $t$  (Finkel). For example, body fat at Time 1 predicted body fat level at Time 2. Thus, this analysis tests within-person change of our mediating variables and dependent variable. We developed a model with the mechanisms of stigmatization (body fat mistreatment and discrimination) and medical impairment (see Table 2) and tested it using maximum likelihood estimation in Mplus version 8. This model ( $\chi^2 = 527.04$ ,  $df = 56$ ,  $CFI = .93$ ,  $RMSEA = .045$  [.042049],  $SRMR = .060$ ) demonstrated an appropriate fit to the data.

In line with the stigma perspective and our baseline hypothesis, we first tested the influence of body fat mistreatment as a mechanism for body fat's influence on career success, Hypothesis 1. As shown in Table 2, body fat was not related to the employee experiencing body fat related interpersonal mistreatment ( $b = .01$ ,  $p = n.s.$ ). Additionally, Table 2 shows that this form of mistreatment was not related to an employee's career success, and the indirect effect was not significant ( $ab = .000$ ,  $CI_{95} [-.002, .003]$ ) because zero was in the bootstrapped confidence intervals. Thus, Hypothesis 1 was not

**Table 1.** Study means, standard deviations, and correlations among study variables.

	Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1	Career success	16.83	13.32	–					
2	Body fat discrimination	0.18	1.27	–.02	–				
3	Medical impairment	6.16	1.36	–.32***	.08**	–			
4	Body fat interpersonal mistreatment	1.09	0.30	–.01	.41***	.15***	–		
5	Employee body fat level	26.47	5.02	–.11***	.22***	.34***	.25***	–	
6	Employee sex	1.52	0.50	–.19***	.07*	.11***	.07*	–.07*	–

Note.  $N = 1439$ , Sex, 2 = Female, 1 = Male. \*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ .

**Table 2.** Longitudinal cross-lagged regression results.

	Time 1→Time 2		Time 2→Time 3	
	Coefficient	SE	Coefficient	SE
<i>Temporal Stability Paths</i>				
Body fat→ Body fat	.94***	.010	.94***	.010
Fat discrim.→ Fat discrim.	.13***	.008	.13***	.008
Med. Impair. → Med. Impair.	.35***	.017	.35***	.017
Int. Mistr. → Int. Mistr.	.37***	.015	.37***	.015
Career Succ→ Career Succ.	.09***	.017	.09***	.017
<i>Cross-Lagged Effects</i>				
Body fat→ Fat Discrim.	.02***	.002	.02***	.002
Body fat→ Med. Impair.	.08***	.014	.08***	.014
Body fat → Int. Mistr.	.01	.015	.01	.015
Fat Discrim.→ Career Succ.	−.16	.181	−.16	.181
Int. Mistr. → Career Success	.04	.065	.04	.065
Med. Impair. → Career Succ.	−.64***	.089	−.64***	.089
<i>Mediation effects</i>				
		Coefficient	SE	LLCI 95% ULCI 95%
Career success through interpersonal mistreatment		.000	.001	−.002 .003
Career success through medical impairment		−.048***	.010	−.069 −.023
Career success through body fat discrimination		−.003	.003	−.009 .003

*N* = 4116. Bias corrected confidence intervals were created with 1,000 bootstrap samples. Only hypothesized paths are shown.

supported. Secondly, we explored the other route of the stigma perspective and tested the influence of body fat discrimination as a mechanism for body fat’s influence on career success, Hypothesis 1. As shown in Table 2 and consistent with past research, body fat was positively related to the employee experiencing body fat-related workplace discrimination ( $b = .02, p < .001$ ). However, Table 2 shows that this form of discrimination was not a significant mechanism. It was not related to an employee’s career success, and the indirect effect was not significant ( $ab = -.003, CI_{95} [-.009, .003]$ ). Thus, Hypothesis 1 was not supported.

Hypothesis 2 presented the health perspective of body fat, which suggested that an employee’s body fat level would be positively related to medical impairment. As shown in Table 2, body fat is related to medical impairment ( $b = .08, p < .001$ ), with this variable assessing specific health conditions including cancer and cardiovascular disease. Notably, these results are significant even when *controlling for the previous level* of medical impairment and cross-lagged paths. Overall, these results support Hypothesis 2.

We next proceeded to test the mediating effect of an employee’s health as stated in Hypothesis 3. Table 2 shows that medical impairment ( $b = -.64, p < .001$ ) was related to employee success even when controlling for *previous levels of employee success* and cross-lagged paths. Further, Table 2 shows that employee body fat levels were negatively related to career success through medical impairment ( $ab = -.048, CI_{95} [-.069, -.023]$ ) because zero did not appear in the bias corrected confidence interval. Thus, Hypothesis 3 was supported. We again note that results do not change when controlling for alternative explanations like race, socio-economic status, and risky health behaviors.

Considering the influence of an employee’s sex, we suggested in Hypothesis 4 that an employee’s sex would moderate the indirect relationship between an employee’s body fat level and his/her success through health, such that this negative relationship would be stronger for men than for women. Table 3 shows that neither the conditional direct effect ( $b = .025, p = n.s.$ ) nor the conditional indirect effect through health was significant, rendering no support for Hypothesis 4<sup>5</sup> This suggests that both men and women are equally likely to experience career success impacts because of their body fat levels through health.

<sup>5</sup>Although not formally hypothesized, our model also accounted for the moderating effect of sex on the stigma perspective. Table 3 shows that sex did impact both body fat interpersonal mistreatment ( $b = .007, p < .05$ ) and discrimination ( $b = .031, p < .05$ ). These results were stronger for women compared to men..

**Table 3.** Path analysis and moderated-mediation results.

	Model 1 Interpersonal mistreatment	Model 2 Medical impairment	Model 3 Body fat discrimination	Model 4 Career Success
<b>Controls</b>				
Career Success ( $t_{-1}$ )	.00 (.001)	-.03 (.003)***	-.00 (.003)	.61 (.028)***
Interpersonal mistreatment ( $t_{-1}$ )	.01 (.002)***	-.01 (.007)	.04 (.01)***	.06 (.061)
Medical impairment ( $t_{-1}$ )	.01 (.006)	.09 (.027)***	-.03 (.028)	-.08 (.247)
Body fat discrimination ( $t_{-1}$ )	-.00 (.003)	.04 (.011)***	.02 (.012)	.02 (.101)
Employee Sex (A)	-.14 (.087)	-.48 (.373)	-.66 (.388)	
<b>Path A</b>				
Employee body fat level (B)	-.00 (.006)	.04 (.024)	-.01 (.025)	
A x B	.01(.003)*	.03 (.003)	.03 (.015)*	
<b>Path B</b>				
Interpersonal mistreatment				1.11 (1.148)
Medical impairment				-1.82 (.252)***
Body fat discrimination				.05 (.257)
<b>Path C'</b>				
Employee body fat level				-.10 (.067)
R2	0.13	0.19	0.09	0.34
F	28.55	44.93	17.58	116.92
<b>Index of moderated mediation based on sex</b>				
		<i>index</i>	<i>SE</i>	<i>LLCI 95%</i> <i>ULCI 95%</i>
Career Success through Interpersonal mistreatment		.008	.010	-.002    .045
Career Success through medical impairment		-.045	.028	-.101    .005
Career Success through body fat discrimination		.002	.007	-.007    .024

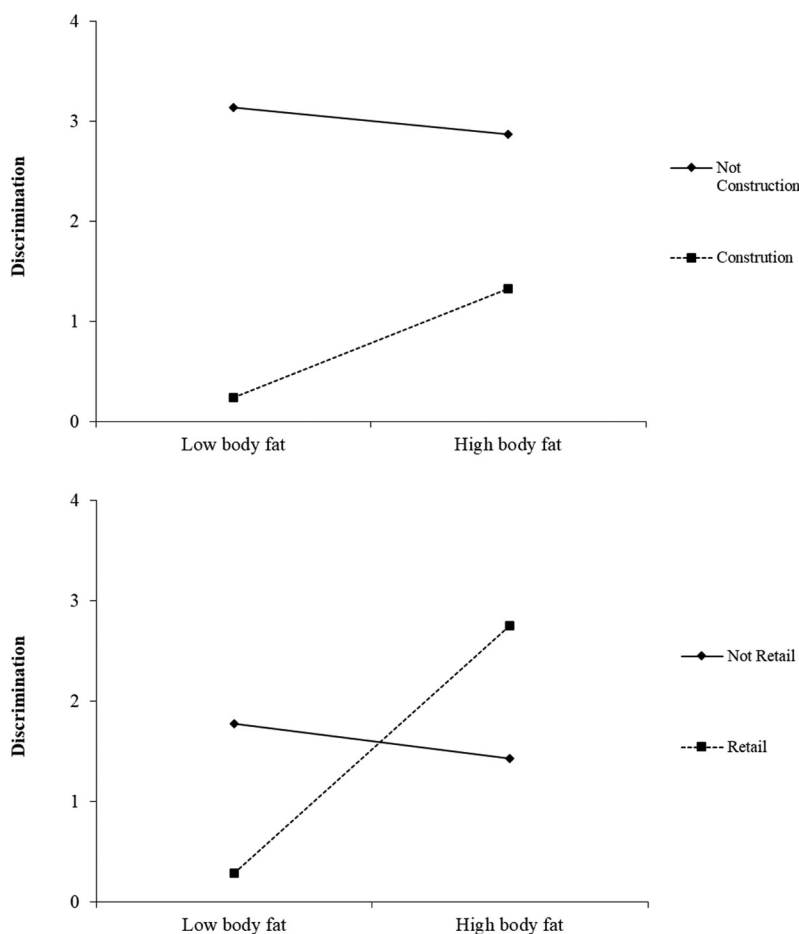
$a$  = first stage effect;  $b$  = second stage effect;  $index$  = conditional indirect effects (Hayes, 2015),  $c'$  = direct effects. LLCI = confidence interval lower limit. ULCI = confidence interval upper limit. \* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

### Robustness check - exploration of alternative measures

To add further robustness to our results and triangulate findings across multiple operationalizations of our variables (Cortina & Folger, 1998; Köhler & Cortina, 2021; Lykken, 1968), we also ran analyses with alternative measures of body fat, stigmatization, and health. These results are available from the authors, and they replicate the results above in showing full support for the medical but not stigmatization perspective. Also, in contrast to the results above, the alternative measure of body fat was not significantly related to interpersonal mistreatment or body fat discrimination.

### Exploratory analysis: comparison of body fat and sex effects by industry

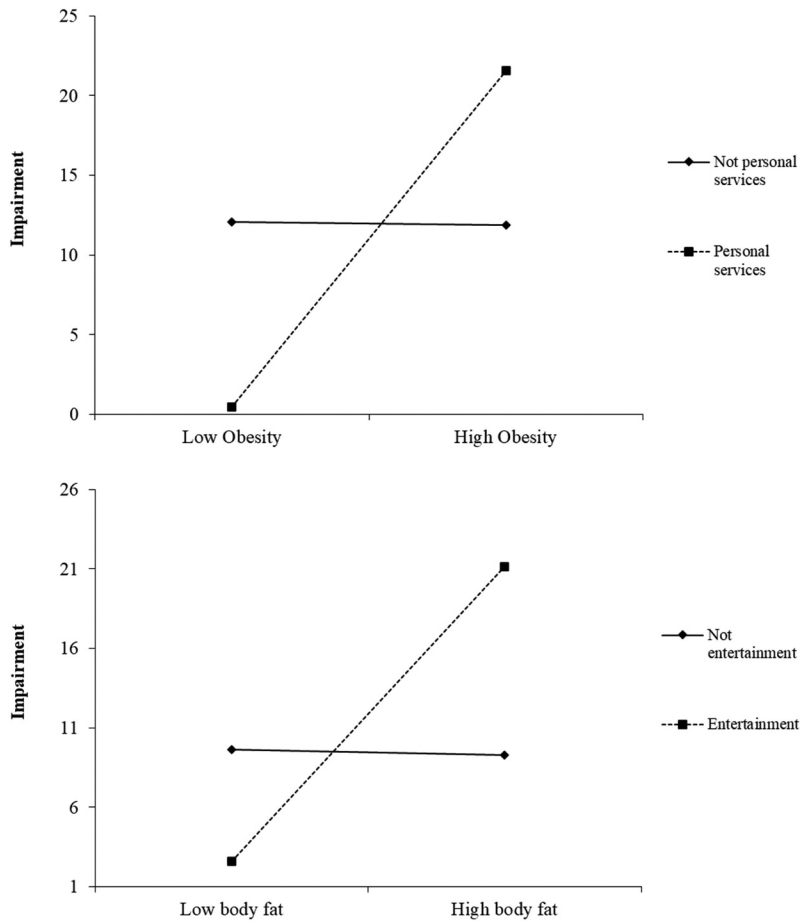
Our analyses offer some initial insights into the impact of sex on stigmatization and medical impairment. We add to these efforts by conducting an exploratory probe; we consider our research questions to see (a) if the influence of body fat on our mechanisms is conditional upon industry and (b) if the moderating effect of sex on the relationship between body fat and our mechanisms is also conditional on industry. To probe these interactions, we relied upon industry information that participants provided in the MIDUS database according to the 1980 Census Bureau industry codes. This classification was the official industry category code used by the US Census at the time of the collection of this information. To allow our testing of industry, we dummy coded industry ( $N-1$ ) and created interaction terms according to recommendations by Dawson and Richter (2006). As a comparison category, we chose the industry *professional and related services* (e.g., libraries, educational services, museum & zoos, and architectural services) because this was the highest proportion industry in the sample (20%) and was neutrally valanced in terms of body fat.



**Figure 3.** A visual plot of the two-way interactions of body fat and industry on discrimination.

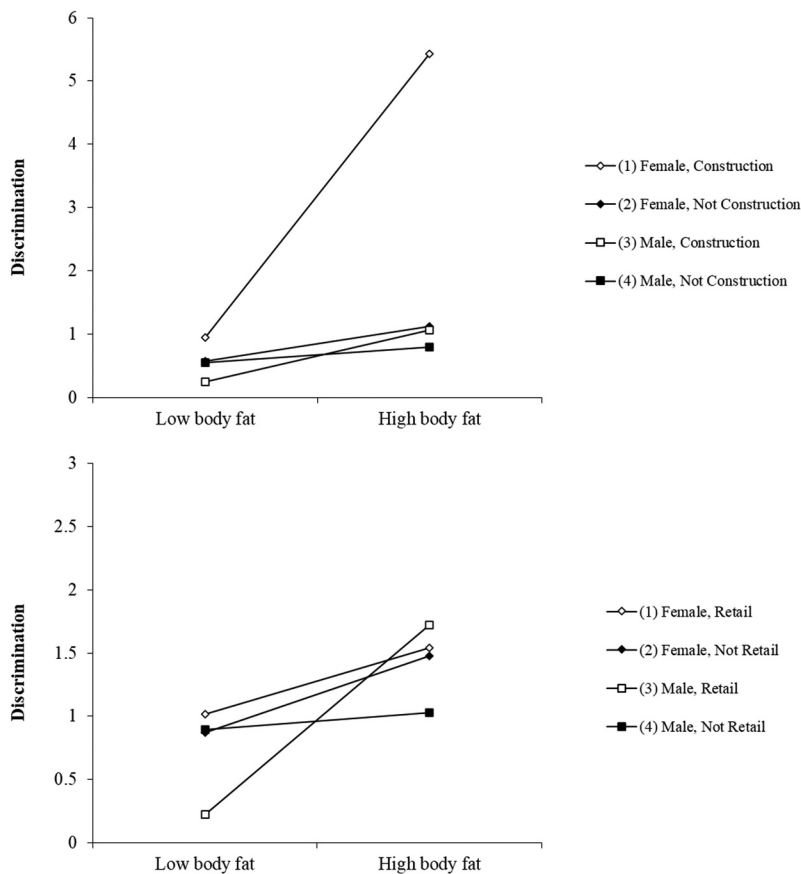
To conserve space, the two-way and three-way regression results appear in online appendix [Tables 1–7](https://osf.io/y86uv/?view_only=8b7f619112124e0a9f02df3a9ffa9788) ([https://osf.io/y86uv/?view\\_only=8b7f619112124e0a9f02df3a9ffa9788](https://osf.io/y86uv/?view_only=8b7f619112124e0a9f02df3a9ffa9788)). We first explored the potential 2-way interaction of industry and body fat on our mechanisms (i.e., stigmatization & medical impairment). Considering discrimination, results show that we found a significant moderating effect for the construction industry ( $b = .14, p < .001$ ) and the retail trade industry ( $b = .28, p < .001$ ). [Figure 3](#) shows the plot of these interactions and indicates that the relationship between body fat and discrimination is *stronger* for those in the construction industry and in the retail trade industry compared to those who are in our comparison industry (professional & related services). Considering interpersonal mistreatment as our outcome, we found no significant moderating effects for industry. Considering medical impairment as our outcome, we found a significant moderating effect for the personal services industry (e.g., hotels, beauty shops, laundering [ $b = 2.08, p < .05$ ]) and the entertainment and recreational services industry ( $b = 1.85, p < .01$ ). As shown in the graphical plots ([Figure 4](#)), the relationship between body fat and medical impairment is *stronger* for those in the personal services industry and those in the entertainment and recreational services industry compared to those in our comparison industry.

We next explored any potential three-way interactions of industry's conditional impact on the moderating effect of sex on the relationship between body fat and stigmatization (i.e., discrimination and interpersonal mistreatment). With discrimination as our outcome, we again found a significant moderating effect for the construction industry ( $b = .33, p < .001$ ) and the retail trade industry ( $b = -.14,$



**Figure 4.** A visual plot of the two-way interactions of body fat and industry on medical impairment.

$p < .001$ ). Figure 5 shows the plot of these interactions and indicates that the relationship between body fat and discrimination is significantly *stronger* for *women* than men in the construction industry and that this relationship is stronger than both men and women in our comparison category (see Table 4). Figure 5 also shows that, in the retail trade industry, the relationship between body fat and discrimination is significantly *stronger* for *men* than for women and this relationship is significantly stronger than for both men and women in our comparison category (see Table 4). Modeling interpersonal mistreatment as our outcome, we found a significant moderating effect for the construction industry ( $b = .03$ ,  $p < .05$ ). Figure 6 shows that, in the construction industry, the relationship between body fat and interpersonal mistreatment was *stronger* for *women* than for men and this relationship is significantly stronger than for all other groups (Table 4). Considering medical impairment as our outcome, we again found a significant moderating effect but this time for the personal services ( $b = -1.08$ ,  $p < .05$ ) and entertainment and recreational services ( $b = -1.34$ ,  $p < .01$ ) industries. Figure 7 shows that, in the personal services industry, the positive relationship between body fat and medical impairment is significantly *stronger* for *men* than for women, and this relationship is significantly stronger than for both men and women that are in our comparison industry (see Table 4). Figure 7 also shows that, in the entertainment and recreational services industry, the positive relationship between body fat and medical impairment is significantly *stronger* for *men* than for women, and this relationship is significantly stronger than both men and women in our comparison industry (see Table 4).



**Figure 5.** A visual plot of the three-way interaction of body fat, sex, and industry on discrimination.

**General discussion**

With a growing interest in health policy and creating diverse and inclusive organizations, workplace scholars have become increasingly interested in understanding how obese workers are impacted by their excess levels of body fat. While prior management work has taken on a stigma approach (Roehling, 1999), the purpose of this paper was to introduce and test a novel medical perspective of body fat to gain valuable insights on any long-term effects of one’s body fat in organizations (Johnson & Schminke, 2020). In particular, we suggested that underlying health conditions related to body fat levels might impair people’s careers in the long run, above and beyond stigma effects. Moreover, we incorporated research on evolutionary biology and sex to propose that high body fat men (all else considered) would be more likely to have their careers stalled than high body fat women.

Because the effect of body fat on health (and health on success) is something that takes place over years rather than months, we used a multi-wave study that traced employees across 20 years of their careers. Our longitudinal, cross-lagged panel results showed that body fat levels are indeed related to employee health (replicated with multiple forms of health and body fat). Furthermore, our findings showed that body fat negatively influences career success through health impairments. Even more so, we found that health conditions acted as the dominant driver of long-term career success, as they mediated the indirect effect of body fat levels, but employee stigmatization did not.

In light of widespread interest in the role of sex as a boundary condition for the effect of body fat (Roehling et al., 2013), our findings showed that sex did not moderate the indirect effect of body fat on career success, meaning that high body fat men and women *equally*

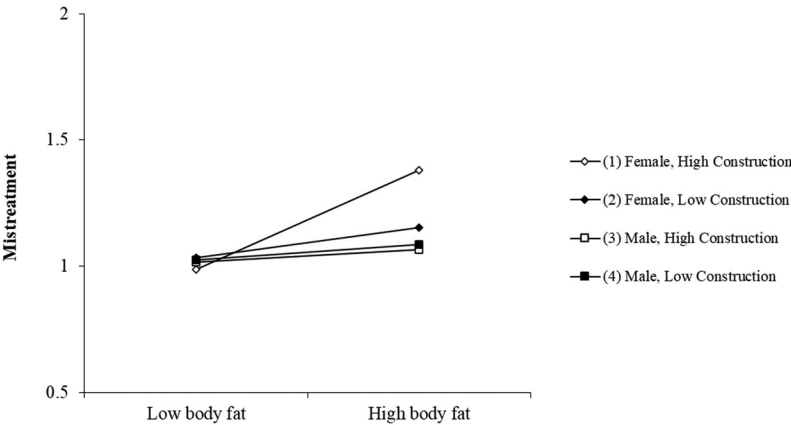


**Table 4.** 3-way interaction simple slopes and slope difference tests.

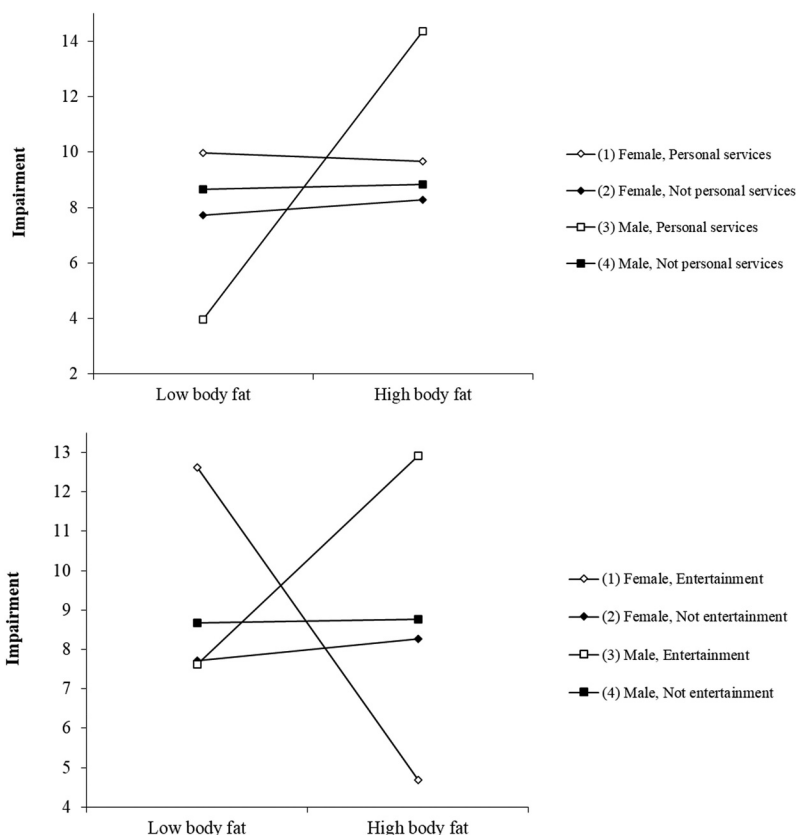
	Outcome Discrimination				Outcome Mistreatment	
	Construction (Ind. 2)		Retail Trade (Ind. 6)		Construction (Ind. 2)	
	Slope	<i>t</i>	Slope	<i>t</i>	Slope	<i>t</i>
1 (Female, In Industry)	0.45	7.89***	0.05	2.96**	0.04	3.20**
2 (Female, Not in Industry)	0.06	8.06***	0.06	8.02***	0.01	8.45***
3 (Male, In Industry)	0.08	2.72**	0.15	4.95***	0.01	0.78
4 (Male, Not in Industry)	0.02	2.39*	0.01	1.27	0.01	2.98**
<i>Slope Differences</i>						
1 and 2	0.39	6.86***	−0.01	−0.42	0.03	2.20*
1 and 3	0.36	5.71***	−0.10	−2.77**	0.03	2.47*
1 and 4	0.42	7.35***	0.04	1.92	0.03	2.67**
2 and 3	−0.03	−0.85	−0.09	−2.86**	0.01	1.07
2 and 4	0.03	2.56*	0.05	3.72***	0.01	2.47*
3 and 4	0.06	1.81	0.14	4.27***	0.00	0.15

Outcome Health					
	Personal Services (Ind. 9)		Entertainment and Recreational Services (Ind. 10)		
	Slope	<i>t</i>	Slope	<i>t</i>	
1 (Female, In Industry)	−0.03	−0.20	−0.78	−2.10*	
2 (Female, Not in Industry)	0.05	1.99*	0.05	2.06*	
3 (Male, In Industry)	1.02	2.12*	0.52	2.28*	
4 (Male, Not in Industry)	0.02	0.49	0.01	0.29	
<i>Slope Differences</i>					
1 and 2	−0.08	−0.56	−0.83	−2.24*	
1 and 3	−1.05	−2.08*	−1.29	−2.99**	
1 and 4	−0.04	−0.31	−0.79	−2.12*	
2 and 3	−0.97	−2.00*	−0.46	−2.03*	
2 and 4	0.04	0.83	0.04	1.02	
3 and 4	1.00	2.08*	0.51	2.21*	

Slope difference tests were calculated per Dawson and Richter (2006) recommendations. Slopes are unstandardized.  
\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



**Figure 6.** A visual plot of the three-way interaction between body fat, sex, and industry on interpersonal mistreatment.



**Figure 7.** A visual plot of the three-way interaction between body fat, sex, and industry on medical impairment.

experience medical impairments, and thus poorer workplace success in the long run. That is, these results show that body fat issues are not solely a problem for women as much of the literature has suggested (e.g., Roehling et al., 2013). Additionally, we found that these effects may be more nuanced when considering the role of industry. In considering these effects on medical impairment, we found that the relationship between body fat and medical impairment was stronger for *men* than women in the personal services (e.g., hotels, beauty shops, laundering) and entertainment industries (e.g., industries related to motion pictures). These effects are in line with our theorizing on the moderating role of sex for medical impairment.

Lastly, we considered the role of industry as a moderator to the relationship between body fat and our mechanisms (i.e., stigmatization and health) and as a moderator to sex's impact on the relationship between body fat and our mechanisms. Considering these relationships, we found that discrimination due to body fat is significantly stronger in the construction and retail trade industries and that the impact of body fat on employee health is significantly stronger in the personal services and entertainment industries. In exploring the moderating role of both sex and industry, we found differential effects for stigmatization. The relationship between body fat and discrimination was stronger for women in the construction industry and stronger for men in the retail trade industry. This last effect is contrary to the current view of sex, and these results add nuance to the field's previous understanding of the role of sex (Roehling et al., 2013). Overall, we found the relationship between body fat, sex, and our mechanisms was qualified by industry, but we note that these results were exploratory and should be interpreted with some caution.

## Theoretical contributions

Considering these findings, our paper makes several contributions to the extant literature. First, this research adds a new understanding and theoretical perspective to research on body fat. As mentioned, body fat work has universally embraced a stigma view (e.g., Ruggs et al., 2015), indicating that high body fat employees are largely discriminated against and mistreated by others at work. This view would suggest that stigmatization (e.g., in hiring and promotion discrimination) then inhibits prospects of long-term career success. However, our research provides evidence that stigma explanations may not always be applicable, especially in long-term settings. In these instances, it appears that other mechanisms (i.e., health mechanisms) may drive adverse effects of body fat (even above and beyond alternative explanations such as stigmatization, race, socio-economic status, risky health behaviors, and so forth). Hence, our work significantly extends the realm of workplace body fat research by introducing and testing a new health perspective that offers important theoretical mechanisms of body fat. In particular, we show that conditions such as cardiovascular disease, joint problems, and diabetes can explain how body fat influences workers' success over decades.

In a similar way, these results contribute to the diversity and individual difference literature more broadly. The literature on constructs like race and sex has suggested that there is a lack of clarity on the strength of observer-driven mechanisms (like discrimination and mistreatment) compared with factors that lie internal to the individual (Colella et al., 2017). Further, this work has largely rested on explanations that originate from other people and their perceptions of the stigma-carrier. In contrast, our results show that – for the case of body fat – individual factors like employee health are a more pronounced driver of effects across an employee's career. Thus, research on related literatures (e.g., disability, race, sex) should similarly embrace an exploration of mechanisms within the individual and consider testing observer-driven perspectives alongside within-person mechanisms.

In addition to establishing new theorizing and evidence of novel processes for workplace body fat, our research also adds clarity about the role of sex in these relationships. As mentioned, sex has been the preeminent moderator in the literature (e.g., Johnson & Schminke, 2020; Roehling et al., 2013; Ruggs et al., 2015). On the one hand, our primary analysis noted that women and men were equally likely to experience health conditions and subsequent career disadvantages. Thus, it seems that both sexes are similarly impacted by their body fat levels in terms of health. On the other hand, our exploratory analysis of industry showed that men were more impacted by body fat (in terms of health) than women when they were in the personal services or entertainment and recreational services industry. Together, this research provides one piece of evidence about the interaction effect of employee sex and body fat over decades, showing that the relationship of one's sex on body fat impacts is nuanced.

Also, we show a consistent lack of support for the stigma perspective more generally. Results revealed no stigma effect on long-term career impacts. As mentioned above, this perspective, although never tested, has been invoked in past research as a mechanism for body fat's influence on career success (Judge & Cable, 2011). According to research, a consistent lack of findings can be informative (Wenzel, 2016), and it is recommended that the field overall engages in regular systematic "theory pruning" to reevaluate theories that do not hold up (Leavitt et al., 2010). The lack of support for a pathway (like the stigma effect in our paper) is important when presented alongside significant effects (like health) (Cortina & Folger, 1998).

Given our focus on the long-term effects of one's body fat levels, this research also contributes to the realm of workplace body fat and diversity by providing much needed answers about the long-term implications of high body fat levels on people's careers. As noted, prior research has largely investigated body fat in short-term settings such as selection and hiring decisions, leaving little knowledge about the long-term effects and their underlying mechanisms. Following high body fat individuals for over 20 years, we can now provide insights about how body fat influences individuals' entire careers, incomes, and advancements. Our study

demonstrates that, over time, employees are not really impacted by negative stigma judgments as previously assumed. Instead, their careers and incomes seem to be cut short by underlying health conditions.

## Practical contributions

Considering the novel approach to body fat and understanding its long-term effects, our work presents multiple contributions to practice. Today's organizations are concerned with encouraging a more diverse employee pool in their ranks and at the same time face significant talent shortfalls. For example, a study of human resource leaders has shown that 86% of businesses are facing a leadership talent shortage in their organization (Canwell et al., 2015). In line with these talent shortages, it is important to address the notion of body fat, as nearly two-thirds of people in the United States and one-third globally are overweight or obese (World Health Organization, 2022). Thus, it is important for organizations and employees alike to equip these individuals to be successful long-term. Hence, if companies want effective employees and, by extension, successful business operations, potential health initiatives might present options to mitigate negative impacts of body fat and thereby provide access to a larger pool of potential organizational leaders. These initiatives could include both a wellness and a health focus (Erfurt et al., 1992; Harrison & Liska, 1994). As an example, some organizations offer health insurance deductions for partaking in health classes (Nifadkar & Bhagavatula, 2021). Other companies organize weekly walking groups after work hours.

Our results also provide some insight on where companies should direct their resources. Interestingly, past research has generally recommended to solve body fat issues by including it in employee sensitivity training (e.g., Agerström & Rooth, 2011). Although this may be helpful, organizations should not focus on this area at the expense of health and wellness initiatives (e.g., Erfurt et al., 1992). In particular, being that the effects of one's body fat level seem to flow through distinct medical conditions like cancer and cardiovascular disease, companies should embrace preemptive care, early detection of disease, and preventative treatment within their wellness programs.

Lastly, these results have implications for individual employees. In a similar way, employees should realize that body fat is tied to serious health conditions and should prioritize regular wellness visits as well as preventative care to focus on early detection and treatment of these health issues. Additionally, employees should realize that body fat levels are tied to a complex interaction of biological and environmental factors (e.g., Fairburn & Brownell, 2005). Thus, one's body fat levels may not be solely due to lifestyle choices on the part of the employee. Moreover, employees should also realize that there is more to health than body size or pounds on the scale (Tischner & Malson, 2012). For example, extreme diets can cause mental health effects and depletion, which might influence how a person can execute their jobs. Thus, employees would be better served with focusing on health and wellness rather than a "thin" ideal.

## Limitations and future research

Despite the strengths of our research report, we urge caution when interpreting our findings due to some limitations of this paper. First, we cannot fully claim causality with our results. We tried to address this by relying upon strong theory to inform our model, controlling for prior levels of variables in our analyses, and utilizing a cross-lagged panel analysis that better controls for alternative explanations and models temporal ordering more appropriately (Finkel, 1995). Still, we encourage future work to consider causality more fully.

Second, our aim with this paper was to expand the focus of short-term interaction contexts like hiring (Agerström & Rooth, 2011). We chose to do so by focusing on the career success of employees due to the relatively long-term tenure for the average worker (e.g., more than five years, Copeland, 2019). However, the conceptual work we relied upon would inform other contexts in the workplace as well (Johnson & Schminke, 2020). For example, future work may be well served in exploring the extent to which stigmatization and health effects serve as a mechanism for body fat in employee performance appraisals.

Third, the interpersonal mistreatment scale that we used in our analysis was not specifically focused on behaviors at work. Because of the importance of work to peoples' lives and the high percentage of time that people spend at work, we felt it an appropriate scale to use. Also, we probed this issue further by testing a workplace support scale as an alternative to this interpersonal mistreatment scale, and the results are identical to what is reported above. Still, we urge some caution regarding the interpretation of our results.

Lastly, we did not fully account for job effects, and there may be differences in salary growth or attainment that is based on industry or jobs. We tried to address this issue by relying upon a lagged regression and a cross-lagged panel model which tests for within-person changes in income. However, we cannot fully account for this issue.

## Conclusion

Given the effects of body fat worldwide, this research provides much needed answers about the impact of body fat on long-term career success. Looking to medical research, we showed that underlying health impairments represent the dominant mechanism by which one's body fat-level impacts an employee's career success, above and beyond other explanations. We also integrate evolutionary research to shed light on the influence of employee sex in this process. Interestingly, men and women are equally impacted by their body fat levels, indicating that sex is not a strengthening or weakening factor for body fat health risks and career. However, these effects were qualified by the industry within which an employee works. In all, these findings provide valuable insights into research on workplace body fat, sex, and diversity.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

Michael A. Johnson  <http://orcid.org/0000-0002-4856-2489>

Manuela Priesemuth  <http://orcid.org/0000-0002-6383-7356>

Francisco Moreno  <http://orcid.org/0009-0005-8296-0957>

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