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# Understanding White-Collar Worker Experiences in Using Worksite Wellness Programs to Achieve Weight Loss

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Abstract

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MBA, University of Phoenix, 2004

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Dissertation Submitted in Partial Fulfillment

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## Abstract

Adult obesity rates have increased from approximately 15% in 1980 to more than 40% of adults in 2018, and the rates continue to increase. White-collar workers are disproportionately impacted as a result of the sedentary work performed in a white-collar work environment. Increased levels of obesity result in elevated levels of psychological stress, chronic health conditions, and increased organizational costs. The purpose of this basic qualitative study was to understand the lived experiences of the obese white-collar worker who has used a worksite wellness program to lose weight and to understand what additional support was needed to achieve weight loss. The social ecological model provided a conceptual framework to understand a person's experiences and the type of support they needed. Six virtual semi-structured interviews were conducted with participants between the ages of 25 and 67, working in a white-collar environment who had attempted weight loss using a worksite wellness program. Data collection was complete after six interviews and saturation was reached. A narrative analysis indicated three emergent themes. The data revealed the role of the worksite wellness program in supporting weight loss for the obese white-collar worker is supplementary. Workers require a personalized and multi-faceted approach that incorporates social connection as a key motivator and accountability source. Identifying how to customize support in a worksite wellness program for the obese white-collar worker to achieve weight loss could contribute to positive social change. With this understanding, the rising levels of obesity can be reduced, which would result in improved health outcomes for this population.

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# Dedication

I dedicate this dissertation to my husband Mike, of 25 years, the man who has been my rock and cheerleader. I am grateful for his love, support, and the patience he gives in being married to someone who has an insatiable thirst for knowledge and education. I dedicate this dissertation to my kids, Aria and Addison, who are my heart and soul. As I have learned from and been inspired by you, I hope you will also be inspired to pursue beyond what you think is possible. I dedicate this dissertation to all those who have been impacted by obesity. I hope this study sheds new light on how worksite wellness programs should be designed to better support you in achieving weight loss, and that meaningful change will result. Finally, I dedicate this dissertation to all of the strong women who have come before me, succeeded in their own ways and on their own terms. You have inspired me to use my strength and tenacity to blaze my own trail. Saying “thank you” will never be enough – I am eternally grateful.

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I thank Dr. Summer Parrott, my dissertation chair, for the endless encouragement, support, and patience as I wanted to pursue "just one more source." Dr. Parrott told me that many people write a dissertation to become a scholar, and I was already a scholar writing a dissertation. Her words strengthened my belief in myself and gave me the confidence to keep going. I also thank Dr. Amanda Gabarda, my second committee member, for her belief in me and her ongoing support. After my proposal defense, Dr. Gabarda said that she can not wait until we can do research together. In that moment, I started to see a new world of possibilities.  I can't wait either.

Finally, I thank the participants who willingly gave their time to participate in this study. I thank you for sharing your insights and perspectives and for giving me the opportunity to listen to your stories. I hope the results of this study will spark meaningful change that supports you in your health goals.

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# Chapter 1: Introduction to the Study

## Introduction

Obesity is a complex disease arising from environmental, behavioral, and genetic factors. Obesity is defined by increased levels of body fat (Centers for Disease Control and Prevention, 2024c; Dreher et al., 2019; National Heart, Lung, and Blood Institute, 2022b), and is commonly measured using the body mass index (BMI; Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; National Heart, Lung, and Blood Institute, 2022a; World Health Organization, 2022). An individual is considered overweight when their BMI is between 25-29.9 (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; National Heart, Lung, and Blood Institute, 2022a; Wang et al., 2020). An individual is considered obese when their BMI is higher than 30 (Centers for Disease Control and Prevention, 2022b, 2024b; Chu et al., 2019; Hales et al., 2020; National Heart, Lung, and Blood Institute, 2022a; Wang et al., 2020).

The prevalence of obesity has been on the rise for decades. (Centers for Disease Control and Prevention, 2022b; Hales et al., 2020; NCD Risk Factor Collaboration (NCD-RisC), 2019; Wang et al., 2020). Approximately 15% of adults were obese in 1980 (Temple, 2022). The prevalence grew between 1988-1994 to 23.3% and then again to 30.9% between 1999-2000, and yet again to 35.7% between 2009-2010 (Temple, 2022). Obesity was declared a disease in 2013 as its prevalence continued to increase (Obesity Medicine Association, 2023b). Approximately 40.3% of adults were considered obese between August 2021 and August 2023 (Emmerich et al., 2024) .

The costs and impacts associated with obesity are significant. For example, obesity is strongly correlated with several severe and chronic health conditions such as high blood pressure, Type II diabetes, heart disease, stroke, and several forms of cancer (Centers for Disease Control and Prevention, 2022a, 2024b; Chu et al., 2019; U.S. News, 2021). The risk for diseases such as Type II diabetes and cardiovascular disease increases exponentially with increased levels of obesity (Rezai et al., 2020). These conditions typically result in increased costs from medical care for treatment. For example, one estimate indicates that an obese individual spends nearly $2,000 more per year in medical costs than their normal-weight peers (U.S. News, 2021). Another estimate is higher, suggesting that an obese individual may spend as much as approximately $3,500 more (Ramasamy et al., 2019). Annual medical costs were estimated at $173 billion in 2019 (Centers for Disease Control and Prevention, 2022a). In addition to increased medical care costs to care for chronic conditions associated with obesity, the obese individual also experiences a reduced quality of life, often suffering from reduced levels of mobility and suffering from mental health-related challenges like anxiety and depression, poor body image, and low self-esteem (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; Haga et al., 2019; Stephenson et al., 2021).

An individual's employer is also often impacted by the individual's obesity. For example, those who are obese have higher rates of absenteeism (Abdul Manaf et al., 2021; Amenyah et al., 2022; Mohammad et al., 2019; Narisada & Suzuki, 2019; Stephenson et al., 2021). Additionally, obese workers often have physical limitations that prevent them from performing required work-related activities (Abdul Manaf et al., 2021;

Stephenson et al., 2021). Further, those who are obese have a higher prevalence of short- and long-term disability claims as well as workers' compensation claims (Ramasamy et al., 2019). One estimate from the Centers of Disease Control and Prevention estimates the cost organizations from employing obese workers between $3.38 billion to $6.38 billion annually although it is unclear whether those are direct or indirect costs (Centers for Disease Control and Prevention, 2022a).

The prevalence of obesity is higher in white-collar work environments where sedentary activity is more common (Aliouche, 2022). White-collar jobs are typically office-based roles whereas the converse blue-collar jobs typically have greater levels of physical activity (Fukushima et al., 2021; Narisada & Suzuki, 2019; U.S. Bureau of Labor Statistics, 2021). Research indicates that between 2/3 and 3/4 of work time in a white-collar role is done in a sedentary position, such as working behind a desk (Halling Ullberg et al., 2023; Van Nuys et al., 2014). Additionally, for every two hours of sitting, an individual has a 5% greater likelihood of becoming obese (Aliouche, 2022). Increased levels of sedentary behavior have been positively correlated with cardiovascular disease (CVD), cancer, Type II diabetes, and musculoskeletal pain (Aliouche, 2022; Fukushima et al., 2021; Johns Hopkins Medicine, 2021b; Pahn & Yang, 2021; van Kasteren et al., 2020).

Many employers have implemented a worksite wellness program to support employees in living healthier lives. Organizations began implementing worksite wellness programs in the 1950s to support alcohol cessation or to support an employee's mental health (Pal, 2022). These programs have increased in prevalence slowly since then with

approximately 84% of large organizations having some type of worksite wellness program (Pollitz & Rae, 2020). A worksite wellness program can support an employee's health in many different ways. For example, some worksite wellness programs focus on cessation of substance abuse (SHRM, 2022). Others focus on biometrics and other health-related screenings (Pollitz & Rae, 2020). Others offer education and resources for healthy eating or attaining increased levels of physical activity (Pollitz & Rae, 2020). There is no known research on worksite wellness programs that have focused on the obese population as they try to achieve significant weight loss. Given the impact that obesity has on the individual, the organization they work for, and our economy, there is a need for worksite wellness programs to specifically target those individuals in sedentary roles who want to achieve significant weight loss. The present study aims to identify the experiences of white-collar workers in using worksite wellness programs to try to lose weight and to understand what support they need to achieve significant weight loss. This study aims to make recommendations for future worksite wellness programs that incorporate learning and insights from this population.

## Background

Obesity is caused by a combination of environmental, behavioral, and genetic factors (Centers for Disease Control and Prevention, 2024c; Dreher et al., 2019; Stephenson et al., 2021; Wang et al., 2020). Eating behaviors, behaviors related to exercise, and behaviors related to sleep or stress management can impact an individual's obesity status (Dreher et al., 2019). An individual's physical surroundings, including their work or home environment, are examples of environmental factors that can impact an

individual's obesity status (Rural Health Information Hub, n.d.-b). Genes that impact how an individual metabolizes nutrients or stores body fat are examples of genetic factors that can impact obesity (Obesity Medicine Association, 2023b).

It is ideal if the obese individual can lose weight and sustain the weight loss. However, losing weight and achieving sustained weight loss is complicated and challenging. Even if someone can lose weight, the individual is not only likely to regain the weight, they will likely gain more weight than they initially lost (Spreckley et al., 2022). The body goes through physiological changes during the weight loss process such as changes in metabolic rate (Engber, 2020), changes in hormone levels, changes in the microbiome of the gut, or the make-up of fat tissue can impact the individual's ability to sustain weight loss (Busetto et al., 2021; Engber, 2020).

Obesity has impacted many organizations. Adults spend approximately 90,000 hours of their lives at work (Abdul Manaf et al., 2021; Cable, 2020). Many organizations have incurred and continue to incur the high costs associated with employees who are obese, either through higher health insurance premiums or increased absences, or lost productivity (Ramasamy et al., 2019). Therefore, organizations have encouraged employees to live healthier lives through the implementation of worksite wellness programs (Degnan, 2024).

Worksite wellness programs were developed to support employees who were experiencing the ill effects of work on their health (Pal, 2022). The concept of a worksite wellness program started in the 1950s and primarily focused on substance abuse, specifically alcohol or smoking cessation (Pal, 2022). Worksite wellness programs have

evolved throughout the years to include health screenings, health education programs, vaccination services, support for disease management, nutrition education, and support for employees who want to live healthier lives (U.S. Office of Personnel Management, n.d.).

Research suggests that worksite wellness programs are most effective when they target a single health outcome (Peñalvo et al., 2021). For example, Peñalvo et al. (2021) put forth a meta-analysis that looked at the effectiveness of worksite wellness programs to improve specific health outcomes using cardiometabolic risk facts and dietary habits. After reviewing results from more than 100 worksite wellness programs, it was clear that worksite wellness programs can positively impact health outcomes as long as the goal and measurement criteria are clear and measurable (Peñalvo et al., 2021). Downes et al. (2021) conducted a study to measure the effectiveness of nutrition education programming on health behaviors, efficacy, and biometrics. Participants had an increased consumption of fruits, vegetables, beans, and grains, a decline in the consumption of foods high in fat, and an increase in the levels of physical activity by participants (Downes et al., 2021). These research studies indicate that having a clear goal and purpose for a worksite wellness program will help its effectiveness.

## Problem Statement

The rates of obesity continue to increase. (Centers for Disease Control and Prevention, 2022b; Hales et al., 2020; NCD Risk Factor Collaboration (NCD-RisC), 2019; Wang et al., 2020). Approximately 15% of adults were obese in 1980 (Temple, 2022). Approximately 42.4% of adults were obese in 2017-2018 (Hales et al., 2020).

Obesity is prevalent in white-collar jobs that typically require sedentary activity like sitting at a desk for most of the workday (van Kasteren et al., 2020). Some estimates indicate that white-collar workers spend up to 77% of their workday in a sitting position (Halling Ullberg et al., 2023; Van Nuys et al., 2014). There is a 5% increase in the prevalence of obesity for every two hours an individual spends in a seated position (Aliouche, 2022). Approximately 5% of white-collar workers get less than 8 hours of sedentary time each day (Fukushima et al., 2021; Narisada & Suzuki, 2019). The obesity that results often impacts psychological stress, blood pressure, and autonomic nervous system functions that support individual wellbeing (Aliouche, 2022; Narisada & Suzuki, 2019).

Approximately 80% of workplaces have a worksite wellness program (Pollitz & Rae, 2020). However, not all employees elect to participate. For example, workplace culture can be a barrier to participating in a worksite wellness program. Leadership engagement and support are crucial for example (Saito et al., 2022). Research shows that employees will participate when they feel that leadership is committed to the program and that participation is expected (Jiménez-Mérida et al., 2023; Saito et al., 2022; Sonnentag et al., 2022). The most frequently cited elements of workplace culture that can influence participation in a worksite wellness program include flexibility in the workday to exercise, workload, and the expectation to work long hours (Amatori et al., 2023; Halling Ullberg et al., 2023; Mazzola et al., 2019; Safi et al., 2022; Sonnentag et al., 2022).

Despite most workplaces having a worksite wellness program (Pollitz & Rae, 2020), the prevalence of adult obesity continues to increase, and worksite wellness programs have not been consistently effective in supporting weight loss (Cheon et al., 2020; Reif et al., 2020), specifically in white-collar work environments (S. Park et al., 2014; Tigbe et al., 2017). As the prevalence of obesity continues to increase, there has not been extensive research that explores the experiences of individuals using worksite wellness programs to lose weight. This study could support future programming in worksite wellness programs. Additionally, it could support health educators in targeting awareness campaigns, creating support systems, and advocating for policies to support healthy workplace environments which could support the obese population in losing weight.

## Purpose of the Study

Despite the successes of worksite wellness programs to support workers in living healthier lives, the prevalence of obesity continues to increase. Healthcare costs, organizational costs related to presenteeism, absenteeism, disability, workers' compensation, and disease prevalence continue to grow as a result. The cost of obesity equates to billions of dollars annually and this disease continues to cost people their lives. This study is necessary to hear the perspectives of those white-collar workers who have tried to lose weight through worksite wellness programs and to understand what additional support they would need to achieve weight loss.

The purpose of this basic qualitative study is to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose weight. The

primary focus of this study is to understand how the white-collar worker experiences a worksite wellness program. Additionally, the present study aims to understand what support should be included in a worksite wellness program to support weight loss.

These insights could help create changes to worksite wellness programming to support the white-collar worker in achieving weight loss and thereby reducing the prevalence of obesity in the white-collar work environment. Through interviews with white-collar workers, this research seeks to understand what aspects of worksite wellness programming have been supportive in achieving weight loss, what aspects are not helpful, and how worksite wellness programming could be improved to support weight loss. The findings from this study could help organizations, healthcare providers, and public health professionals to develop more effective worksite wellness programming that supports obese professionals in achieving weight loss.

## Research Questions

RQ: How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?

Sub RQ: What additional support does the white-collar worker need to support weight loss?

## Theoretical Framework for the Study

A theoretical framework serves as a foundation for a research study. It provides a lens through which to analyze data, and a theoretical framework guides the researcher's approach to investigate the phenomenon in question (Indeed Editorial Team, 2023). The social-ecological model (SEM) will be the framework used in this dissertation. The SEM

was developed in the 1970s by Urie Bronfenbrenner as a model to support understanding of human behavior (Kilanowski, 2017). It recognizes that several factors influence health behavior, and this model acknowledges the interplay between these factors. The constructs that were used in this dissertation include intrapersonal factors, interpersonal factors, organizational factors, and public policy factors. Examples of intrapersonal factors that influence behavior include an individual's knowledge, attitudes, and beliefs (Rural Health Information Hub, n.d.-a). Examples of interpersonal factors include interactions an individual has with others that can support or hinder healthy behavior (Rural Health Information Hub, n.d.-a). Organizational factors include rules, policies, culture, or structure within the business environment that promote or hinder healthy behavior (Rural Health Information Hub, n.d.-a). Finally, public policy factors include laws or other regulatory policies that support or act as a barrier to healthy behavior or disease prevention (Rural Health Information Hub, n.d.-a). Chapter 2 will discuss in more detail the SEM and applicable constructs.

The SEM provides a useful framework for understanding how an individual can leverage a worksite wellness program to lose weight. An example of intrapersonal factors include the education provided through a worksite wellness program which can influence an individual's knowledge, beliefs, or attitudes about their weight and their overall health (van Kasteren et al., 2020). Examples of interpersonal factors can include the degree to which participants were encouraged to build social networks within the workplace to support healthy living (van Kasteren et al., 2020). Examples of organizational factors can include the workplace culture and organizational policies and practices that influence an

individual's decision to participate in a worksite wellness program and any support the organization provides for an employee to participate in a worksite wellness program (van Kasteren et al., 2020). Finally, examples of public policy factors include legislation that impacts worksite wellness programming as well as how involved an organization can be in an employee's health, and what incentives can be provided for employee participation (van Kasteren et al., 2020).

All questions in the interview guide are underpinned by the SEM. Question numbers two and three in the interview guide solicit feedback on intrapersonal factors and ask participants about the tools, resources, and educational materials provided by a worksite wellness program that they participated in as well as their attitudes towards participation in the worksite wellness program. Questions numbers four, five, eight, and nine ask the participants about interpersonal factors that they experienced such as the type of support, including social support, that they received while participating in the worksite wellness program. These questions also ask them for any recommendations they have to enhance social support while participating in a worksite wellness program. Question number six pertains to the organizational factors that may include rules, policies, culture, or structure within the business environment that promote or hinder healthy behavior (Rural Health Information Hub, n.d.-a). This question solicits how workplace culture impacted a participant's decision to participate in a worksite wellness program and what support was provided by the organization. Finally, question number seven pertains to public policy factors that may include laws or other regulatory policies that support or act as an incentive to participate in or barrier to hinder healthy behavior or

disease prevention. This question solicits recommendations from the participants on how they could be further encouraged to participate in a worksite wellness program to achieve weight loss. Chapter 2 will discuss in more detail the SEM and applicable constructs.

## Nature of the Study

This study used a basic qualitative design. A qualitative study serves to understand human perspectives, experiences, and behaviors. The researcher collects data through mechanisms such as individual interviews or focus groups and focuses on the "why" or "how" of a phenomenon. A qualitative study uses the words of participants to describe their experiences, not statistical data. Numerous researchers have used qualitative studies to understand the lived experiences of the obese population, specifically in recent research studies conducted by Gillespie et al. (2024), Horn et al. (2022), Jessen-Winge et al. (2021), Safi et al. (2022), Timmermans et al. (2020), and Torres et al. (2023).

This study used convenience sampling. Convenience sampling is a method of non-probability sampling in which participants are selected based on their availability and willingness to participate in the study, provided they are included in the inclusion criteria. Recruiting participants in this way helps to ensure that participants are interested in participating in the study.

Recruitment occurred through social media and publicly available obesity support groups. Qualified participants were those individuals who work in a white-collar work environment or have worked in a white-collar work environment in the last 12 months. Additionally, they used a worksite wellness program to lose weight, or they had

participated in a worksite wellness program for this purpose in the last 12 months. Participants were either currently obese using BMI as the measurement, or they had been obese in the last 12 months. Qualification was based on the participant's self-reporting. For example, I did not verify a participant's work history, participation in a worksite wellness program, or obesity status. I conducted semi-structured interviews with participants similar to the approach taken in a study conducted by Jessen-Winge et al. (2021) in which interviews were conducted with 34 participants who were solicited for feedback on what they wanted in a weight loss program to support weight loss. This study did not involve a worksite wellness program. Interviews were conducted over web-conferencing software, specifically Zoom, and were recorded using audio recording only. The interviews were transcribed through transcription services through Zoom. Participants had an opportunity to review their transcript for accuracy. Conducting interviews is a preferred method of data collection over data collection through focus groups, as talking about challenges with weight loss can be sensitive for some individuals.

Data were analyzed using Narrative Analysis which is a type of qualitative analysis that focuses on the interpretation of core narratives or stories from research participants. Narrative analysis has also been useful in surfacing expectations, facilitators, and barriers to behavior change and weight loss (Gillespie et al., 2024). Narrative analysis was used in a study conducted by Gillespie et al (Gillespie et al., 2024). This study, which included 20 participants, aimed to understand the lived experiences of those with obesity to understand the causes of their weight gain and their potential engagement

with a weight management clinic to support them in losing weight. Treatment for obesity should be people-centered and focus on a multi-dimensional approach that considers an individual's lived experiences and perspectives (Gillespie et al., 2024)

## Definitions

It is beneficial for individuals, public health professionals, and health care providers to be aligned on the definitions used in this dissertation. The terms used in this qualitative study are defined below.

*Body mass index (BMI)*: A measurement of an individual's height relative to their weight (Centers for Disease Control, 2021b). It does not directly measure body fat, but it does have strong correlations to other measures that indicate the amount, location, and distribution of body fat (Centers for Disease Control, 2021b). Some categories of BMI are associated with health concerns and some chronic health conditions (Centers for Disease Control, 2021b).

*Narrative analysis*: A qualitative research method that involves examining and interpreting the stories people tell to make sense of their experiences and the world around them (McLeod, 2024a).

*Obesity*: A complicated chronic disease characterized by excessive fat deposits that can negatively impact an individual's health (World Health Organization, 2022). The BMI is one marker of an individual's obesity status (World Health Organization, 2022).

*Qualitative research/qualitative study*: A method of inquiry that aims to understand human behavior, experiences, and human phenomena from the perspective of the participant (Creswell & Guetterman, 2019). Key aspects of this type of research

include understanding the subjective experiences and perspectives of those who are researched using interviews, focus groups, observations, or the analysis of documents and understanding the context in which the experiences occur (Creswell & Guetterman, 2019). Qualitative research supports an enhanced understanding of those issues that can not be easily quantified, and this method of inquiry provides a deeper understanding of the subject being studied (Creswell & Guetterman, 2019).

*Social ecological model (SEM)*: A theoretical model that recognizes the layers of influence and interplay of those layers on health behaviors (Rural Health Information Hub, n.d.-a). The SEM has five constructs that include intrapersonal/individual factors, interpersonal factors, organizational factors, community factors, and public policy factors (Rural Health Information Hub, n.d.-a)

*White-collar jobs/work*: these are office-based jobs (U.S. Bureau of Labor Statistics, 2021). Roles included in the white-collar work environment typically include professional, technical, executive, administrative or managerial, sales, and administrative support (U.S. Bureau of Labor Statistics, 2021). These types of roles are different from blue-collar jobs that are typically defined as roles involved in handling, operating, or inspecting heavy machines or equipment, repair operations, vocational/crafts workers, transportation or moving occupations, or laborers (U.S. Bureau of Labor Statistics, 2021). White-collar jobs are often more sedentary whereas blue-collar jobs typically require movement (Fukushima et al., 2021; Narisada & Suzuki, 2019).

*Worksite wellness program*: A worksite wellness program that is organized and sponsored by an employer designed to support employees as they implement and sustain

positive health behaviors reduce health risks and improve quality of life (Cai, 2021). Examples of these programs can include screenings, health education, nutrition services, vaccination services, mental health support, resources and support for getting physical activity, support for disease management, and education relating to occupational safety and health (U.S. Office of Personnel Management, n.d.).

## Assumptions

I assumed that the information provided by participants was accurate. For example, the participant's eligibility to participate was self-reported by the participant; I did not verify the participant's BMI, weight, or obesity status or whether they had participated in a worksite wellness program to achieve weight loss. Additionally, I assumed that participants shared their stories from their perspectives with honest accounts of their experiences. As a result, all narratives were explored honestly and thoroughly. When using convenience sampling, there are assumptions that each individual is qualified to participate and has a desire to participate. I assumed that the interview guide and responses to the interview questions would provide sufficient data to accurately collect the necessary information to answer the research questions. It was assumed that during the interview process, participants would provide honest and complete perspectives of their experiences related to the interview questions.

## Scope and Delimitations

The purpose of this study was to explore the lived experience of individuals working in white-collar work environments who have used worksite wellness programs to try to lose weight. This population included both men and women working in white-

collar roles between the ages of 25 and 67. The study aimed to understand whether obese individuals were successful in losing weight, what support they had while participating in the worksite wellness program, and what additional support they would have needed to lose weight. This study was dependent on participants sharing their experiences honestly. This research could be used to inform worksite wellness programming and support from medical and public health professionals to aid the obese population in weight loss.

## Limitations

Obesity can be a sensitive topic to discuss. Individuals living with obesity may have a reduced quality of life or may not be living their lives to the fullest which can be mentally challenging for them to discuss (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; Haga et al., 2019; Stephenson et al., 2021). How these individuals articulate their experiences may not fully capture their experiences. Efforts were made to ensure participants were comfortable during the interview process. Each interview started with rapport building. All participants were given the option of whether they wanted to be on camera during the interview. Participants were allowed to review the transcript from the interview to ensure it was accurate.

I did not verify eligibility to participate in the study. Participants self-disclosed their obesity status, their work history in a white-collar role, and their participation in a worksite wellness program. Additionally, the experiences they shared were assumed to be authentic and accurate as they were described.

## Significance

The results of this research study will help fill a gap in the literature about how worksite wellness programs support obese white-collar worker in losing weight. This study aims to raise awareness about the lived experiences of obese white-collar workers who have used worksite wellness programs to help them lose weight. The results will highlight what type of support is currently offered in these programs, the effectiveness of that support and it will offer insights to health educators on what additional support might be needed to support weight loss. Approximately 42.4% of adults were obese in 2017-2018 (Hales et al., 2020). Annual obesity related medical costs were estimated to total $173 billion in 2019 (Centers for Disease Control and Prevention, 2022a), translating to more than $1,900 per year per person more than a person of normal weight (U.S. News, 2021). Additionally, obese individuals on average have lower productivity at work and higher rates of absenteeism than their normal weight peers which is costly for organizations (Centers for Disease Control and Prevention, 2022a; Mohammad et al., 2019; Narisada & Suzuki, 2019; Stephenson et al., 2021). Estimates indicate that organizations pay more than six billion dollars annually in costs associated with obesity (Centers for Disease Control and Prevention, 2022a). Additionally, research indicates that obese individuals have a reduced quality of life with many being mobility-challenged and having a higher prevalence of mental health challenges (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; Haga et al., 2019; Stephenson et al., 2021).

The data generated from this research could help improve worksite wellness programming in the white-collar work environment. This study has the potential to

contribute to better health outcomes, providing more effective support for the obese worker to achieve weight loss. Over time, this study could help to improve the quality of life for the obese worker. It could also reduce the direct and indirect costs organizations pay as a result of obese staff. The results of this study could support the field of health education by informing programming to support the white-collar worker in losing weight.

## Summary

Chapter 1 provided background information on significant aspects of the study, including the severity of obesity, how sedentary work can exacerbate an individual's obesity status, and the potential health consequences of increased sedentary activity. This study's purpose, the problem statement, and the research questions were supported by the literature. Definitions were provided to ensure to ensure understanding of the terminology used throughout the study. A discussion of the nature of the study, its limitations, and its assumptions was also provided. The literature review in Chapter 2 provides a comprehensive overview of this study's development. The extensive literature review that follows summarizes relevant material and previous studies on the subject. The conceptual framework for this study is also outlined, explaining how the concepts apply.

# Chapter 2: Literature Review

## Introduction

Chapter 2 of this dissertation will cover the social ecological model as the theoretical framework and key terms including obesity, sedentary behavior and sedentary activity, white-collar work, and worksite wellness programs. Chapter 2 will also cover a literature review. The literature review shows what literature currently exists on a topic and it helps the researcher avoid duplication of research. The literature review provides a strong academic foundation for the dissertation by laying out the strengths and limitations of current research.

The purpose of this qualitative narrative study was to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose significant weight. The prevalence of obesity has been on the rise for decades, with obesity rates tripling since 1975 (World Health Organization, 2020). Approximately 31% of the United States population was obese in 1999-2000. The prevalence of obesity jumped to nearly 43% in 2017-2018 (Centers for Disease Control, 2021a). The increased prevalence of obesity is especially concerning as obesity has been linked to serious health conditions such as diabetes, CVD, high blood pressure, and several forms of cancer (Centers for Disease Control, 2021a). Obesity was once a condition that an individual could live with, without ongoing medical care. It is now a condition that could require significant medical intervention (Haga et al., 2019). There are many quantifiable costs associated with obesity such as increased medical expenses, increased insurance expenses, increased costs to organizations from worker absenteeism, or increased

prevalence of workplace injury. There are also immeasurable costs associated with obesity. For example, those living with obesity tend to have lower self-esteem, are often confronted with biases, and may experience bullying as a result of their weight (Haga et al., 2019; Ueland et al., 2019). They may have reduced mobility and experience a reduced quality of life (Haga et al., 2019; Ueland et al., 2019). As the prevalence of obesity continues to increase, health educators can gain valuable insight into programming needs from white-collar worksite wellness participants to support future programming needs and design.

Workers who spend the bulk of their time in sedentary positions, such as white-collar workers are at increased risk for obesity (S. Park et al., 2014; Tigbe et al., 2017). The prevalence of sedentary roles have increased 83% since 1950 (Johns Hopkins Medicine, 2021b). Approximately 80% of roles today are sedentary leaving less than 20% of roles that are physically active (Johns Hopkins Medicine, 2021b). Sedentary roles are predominantly found in white-collar environments (Fukushima et al., 2021).

The upcoming chapter will discuss how obesity is defined, the history and prevalence of obesity over time, the economic and personal costs associated with it, and the causes of obesity. Challenges to achieving sustained weight loss will be discussed. Research will be shared on challenges that the obese individual experiences in the workplace. Finally, a review of literature will highlight workplace wellness programs, and how they have both benefited and hindered obese individuals in the workplace.

## Literature Search Strategy

The strategy for the literature review was to do a comprehensive search of databases and search terms in various combinations. Databases included Google Scholar, PubMed, National Institutes of Health, and all Walden University collections using EBSCO Information Services. Search terms included obesity, obesity in the workplace, worksite wellness and obesity, workplace wellness and obesity, the impact of obesity on workers in America, obesity and lost productivity, weight stigma in the workplace, workplace health promotion, significant weight loss, corporate workplace wellness, white-collar worker, and white-collar and obesity. Most research was published over the last five years. When researching the Social ecological model, seminal works dated back to 2016 were included.

## Theoretical Foundation

The SEM is the framework that was used in this dissertation. The social ecological model was initially developed as a model for understanding human development in the 1970s by Urie Bronfenbrenner (Kilanowski, 2017). It was formalized into a theory in the 1980s (Kilanowski, 2017). It has been depicted by a series of circles nested in each other and are lined up relative to the individual (Kilanowski, 2017). The SEM recognizes the interplay between the different factors of a health challenge. The constructs of intrapersonal factors, interpersonal factors, organizational factors and public policy factors will be included. Intrapersonal or individual factors consist of an individual's knowledge, attitudes and skills (Rural Health Information Hub, n.d.-a). In the case of addressing obesity, a worksite wellness program can serve to provide education to

enhance an individual's knowledge and skills in making healthier decisions (van Kasteren et al., 2020). Additionally, a worksite wellness program can serve to give tools and resources to support a healthy attitude (van Kasteren et al., 2020). Hearing perspectives on what knowledge, skills, attitudes and resources are needed to achieve sustained weight loss and what is not included in worksite wellness programs today could support future programming. Interpersonal factors pertain to the impacts of social networks, family, and friends (Rural Health Information Hub, n.d.-a). Worksite wellness programs can encourage the building of social networks within the work environment that include other employees who have similar health goals (van Kasteren et al., 2020). A worksite wellness program will also encourage support from others outside of the program such as close friends or family members (Serrano Fuentes et al., 2019). These interpersonal factors will consider those relationships. Research indicates that social networks can impact weight loss and gain (Serrano Fuentes et al., 2019). Hearing perspectives on the support of social networks can be used to inform future worksite wellness programming (Serrano Fuentes et al., 2019). Organizational factors can pertain to the corporate environment in which the work is done (van Kasteren et al., 2020). The organization may have policies and practices pertaining to how much work is sedentary and how much time is allowed for breaks (van Kasteren et al., 2020). Organizational culture can play a role in promoting healthy behaviors (van Kasteren et al., 2020). A workplace culture that encourages employees to work through lunch breaks or that encourages long working hours may be encouraging sedentary behavior (van Kasteren et al., 2020). Hearing perspectives from obese individuals and the corporate culture under

which they work can serve to provide guidance on how a worksite wellness program can work with an organization to instill a culture that supports healthier living (van Kasteren et al., 2020). Finally, public policy or environmental factors include federal, state or local policy on health and safety in the workplace (van Kasteren et al., 2020). Legislation can impact determinations of liability in what organizations can mandate in a worksite wellness program, and how involved an organization can be in an employee's health (van Kasteren et al., 2020). Policy can also impact the types of incentives or rebates employees can receive when participating in worksite wellness programs (van Kasteren et al., 2020). Hearing perspectives about public policy and the impact of worksite wellness programs can give insight into needs for advocacy or change. The social ecological model conceptualizes health holistically and accounts for the effects of the interplay of these factors on health outcomes (Rural Health Information Hub, n.d.-a).

The SEM recognizes that several factors influence health behaviors such as factors within the individual, factors within interpersonal relationships, organizational factors such as informal structures rules and regulations, community factors, and public policy factors (National Cancer Institute, 2005; Rural Health Information Hub, n.d.-a). Obesity is a complex disease resulting from behavioral, environmental and genetic factors (Centers for Disease Control, 2020; Mayo Clinic, n.d.). The social ecological model conceptualizes health holistically and accounts for the effects of the interplay of these factors on health outcomes (Rural Health Information Hub, n.d.-a).

Several worksite wellness studies have leveraged the social ecological model. For example, LaCaille et al. (2016) conducted a quantitative study with 407 hospital

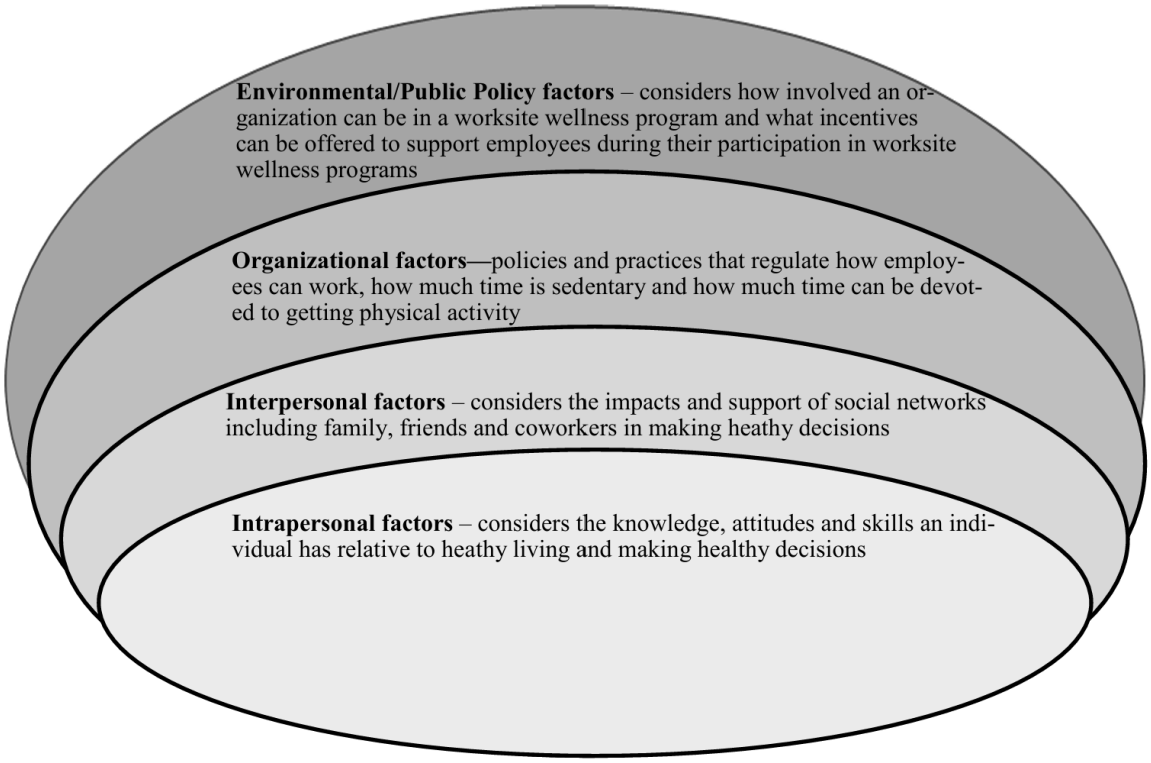
employees to evaluate the effectiveness of a multi-component 12-month worksite obesity prevention program. The program focused on educating participants on food choices, changing their environments, and promoting physical activity. Primary outcomes included changes in weight, BMI, waist circumference, and physical activity, all of which were measured at six months and at one year. Worksite wellness programs offer unique opportunities to support healthy living as they offer social networks, communication systems, and support groups for employees.

Pahn and Yang (2021) conducted a study involving 221 office workers aimed at understanding the personal, intrapersonal and organizational factors connected to cardiovascular disease prevention. The study used an ecological model because of the interplay between these components and the multi-dimensional factors that can impact individual health behavior. Health perception and organizational health culture were significantly associated with CVD prevention behaviors. Women were more likely to practice prevention behaviors over their male counterparts. This study suggests that gender should be a consideration when developing intervention strategies to reduce or combat CVD. It also suggests that working conditions play a significant role in increasing the risk of CVD. This study is important because it suggests interventions to prevent CVD should be created to consider the unique needs of the population impacted.

**Figure 1**

*Relevant Constructs From the Social Ecological Model*

*, amended from Meador et al., (2016)*.




## Literature Review Related to Key Variables and/or Concepts

### Obesity

Overweight and obesity are common health conditions defined by increased levels of fat in the body (National Heart, Lung, and Blood Institute, 2022b; World Health Organization, 2022). Both conditions can be complicated, and caused by environmental, behavioral, and genetic factors (Centers for Disease Control and Prevention, 2024c; Dreher et al., 2019; National Heart, Lung, and Blood Institute, 2022b). Overweight and obesity are commonly measured using the BMI, which is a calculation using an

individual's body weight compared to their height (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; National Heart, Lung, and Blood Institute, 2022a; World Health Organization, 2022). Overweight is defined when BMI is between 25 to 29.9 for an adult (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; National Heart, Lung, and Blood Institute, 2022a; Wang et al., 2020). An adult is considered obese when their BMI is over 30.0 (Centers for Disease Control and Prevention, 2022b, 2024b; Chu et al., 2019; Hales et al., 2020; National Heart, Lung, and Blood Institute, 2022a; Wang et al., 2020). Obesity is further subcategorized into classes – Class One, Class Two, and Class Three. Class One obesity occurs when an individual has a BMI between 30.0-34.9 (Centers for Disease Control and Prevention, 2024a; National Heart, Lung, and Blood Institute, n.d.); Class Two obesity is present when an individual's BMI is between 35-39.9 (Centers for Disease Control and Prevention, 2024a; National Heart, Lung, and Blood Institute, n.d.); Class Three obesity occurs when an individual's BMI is greater than 40.0 (Centers for Disease Control and Prevention, 2024a; National Heart, Lung, and Blood Institute, n.d.). While BMI is a widely used tool for understanding an individual's overweight or obesity status, it does not accurately calculate an individual body fat levels (National Heart, Lung, and Blood Institute, 2022a).

The prevalence of obesity has been on the rise for decades (Centers for Disease Control and Prevention, 2022b; Hales et al., 2020; NCD Risk Factor Collaboration (NCD-RisC), 2019; Wang et al., 2020). Obesity was first recognized as an epidemic in 1980 when approximately 15% of adults were obese (Temple, 2022). The prevalence of adult obesity increased to approximately 23.3% between 1988-1994, and then increased

again to approximately 30.9% in 1999-2000 (Temple, 2022). The prevalence of adult obesity has continued to increase in this century, with approximately 35.7% of adults being obese in 2009-2010; approximately 42.4% of adults were obese in 2017-2018 (Hales et al., 2020).

Obesity was declared a disease in 2013 by the American Medical Association (Obesity Medicine Association, 2023b). It is strongly correlated with several chronic health conditions, and the disease can impact the individual in many ways. For example, research is well documented that obesity is heavily correlated with high blood pressure, Type II diabetes, heart disease, stroke, and several forms of cancer (Centers for Disease Control and Prevention, 2022a, 2024b; Chu et al., 2019; U.S. News, 2021). Research conducted by Rezai, et al., (2020) indicated that an individual is at a 28 times greater risk for diabetes when their BMI is > 30, and they are 93% more likely to be diagnosed with diabetes when their BMI is > 35. Finally, according to Rezai et al. (2020), an individual is 50-100% more likely to develop cardiovascular disease when their BMI is > 30. Further, obese individuals have a higher prevalence of mental health and psychological problems, lower self-esteem, poor body image, and reduced quality of life when compared to their normal-weight peers (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; Haga et al., 2019; Stephenson et al., 2021)

The economic impacts of obesity are significant. One estimate indicated that annual obesity-related medical costs were estimated at $173 billion in 2019 (Centers for Disease Control and Prevention, 2022a), costing each individual more than $1,900 per year more than a person of normal weight (U.S. News, 2021). Additionally, obese

individuals are more likely to have lower productivity at work and higher rates of absenteeism than their normal-weight peers, costing organizations significantly (Centers for Disease Control and Prevention, 2022a; Mohammad et al., 2019; Narisada & Suzuki, 2019; Stephenson et al., 2021). One estimate from the Centers of Disease Control and Prevention estimates the cost to organizations between $3.38 billion to $6.38 billion annually (Centers for Disease Control and Prevention, 2022a). It is unclear whether these estimates include direct and indirect costs.

Obesity is caused by behavioral, environmental, and genetic factors (Centers for Disease Control and Prevention, 2024c; Dreher et al., 2019; Stephenson et al., 2021; Wang et al., 2020). Behavioral factors that influence obesity include increased levels of sedentary time, insufficient levels of physical activity, excessive calorie consumption, smoking, and insufficient amounts of sleep (Dreher et al., 2019). Environmental factors that influence obesity include the physical surroundings in which people live (Rural Health Information Hub, n.d.-b). Factors include access to affordable and healthy food or access to public sidewalks, public transportation, and public parks which can impact an individual's ability to get physical activity (Rural Health Information Hub, n.d.-b). Finally, a growing body of evidence suggests that genetics can play a causal role in obesity (Obesity Medicine Association, 2023a). Current estimates suggest that between 200 and 500 genes have a causal link to obesity, influencing how an individual's body metabolizes nutrients, signals hunger and satiety, and stores body fat (Obesity Medicine Association, 2023a).

Increased levels of sedentary behavior can negatively impact physical and mental health outcomes. For example, sedentary behavior has been positively correlated with various health conditions such as CVD, cancer, weight gain, Type II diabetes, and obesity, as well as musculoskeletal pain (Aliouche, 2022; Fukushima et al., 2021; Johns Hopkins Medicine, 2021b; Pahn & Yang, 2021; van Kasteren et al., 2020). Additionally, those with obesity often experience mental health challenges such as anxiety and depression, sleep disorders, low self-esteem and poor body image, and motivational and eating disorders such as binge-eating disorder and night eating syndrome (Chu et al., 2019; Stephenson et al., 2021). The correlation between obesity and depression is significant because the relationship is bilateral (Chu et al., 2019). Those who are obese have a higher risk of being depressed, but depression and the use of anti-depressants increase the risk of obesity (Chu et al., 2019). These care needs mean that obese individuals typically have higher healthcare costs as a result of managing chronic conditions (Stephenson et al., 2021). They also have lower life expectancies (Stephenson et al., 2021).

In addition to impacting physical and mental health outcomes, the obese individual typically has a lower quality of life, both in their personal and professional lives (Abdul Manaf et al., 2021). A common way to measure quality of life across all populations is through the Health Related Quality of Life (HRQoL) (Salas et al., 2019; Stephenson et al., 2021; Yin et al., 2016). The HRQoL is a useful indicator of physical and mental health status, acknowledging the complex relationships that each component of health has on an individual's holistic health and  yielding insights into the impact of

health challenges on their quality of life (Stephenson et al., 2021; Yin et al., 2016). Research indicates that there is an inverse relationship between an individual's obesity status and their HRQoL score, suggesting people who are obese have a poorer quality of life and are more likely to live with physical and mental health-related challenges (Abiri et al., 2022; Salas et al., 2019; Stephenson et al., 2021).

Increased levels of sedentary behavior have been linked to an increase in obesity (Aliouche, 2022; Fukushima et al., 2021; Johns Hopkins Medicine, 2021b; Pahn & Yang, 2021; van Kasteren et al., 2020). One objective way to measure physical activity is through the metabolic equivalent of a task or the MET. A MET is one way to describe the intensity of an activity or exercise and it is defined as the ratio of an individual's metabolic rate at work compared to their metabolic rate at rest (Green, 2023; Roland, 2019). One MET is equated to the energy expended at rest. It is also known as the basal metabolic rate or resting metabolic rate (Roland, 2019). If an activity has a MET value of two, it means that an individual is exerting two times the energy that they would normally exert at rest (Green, 2023; Roland, 2019). One MET is approximately 3.5 milliliters of oxygen per kilogram of body weight (Green, 2023; Roland, 2019). Sedentary activity is defined as any activity in which < 1.5 METS is expended during activity and includes activities such as sitting, reclining, or lying down (Aliouche, 2022; Fukushima et al., 2021; J. H. Park et al., 2020; van Kasteren et al., 2020).

**Weight Loss**

Losing weight can be a challenging endeavor. Common barriers can be biological, behavioral, or environmental. For example, an individual's metabolism changes

throughout life and the body retains additional body fat until the eighth decade of life (Richards, 2023). Going through changes like menopause or changes in health such as depression can also impact the individual's ability to lose weight (Richards, 2023). Behavioral and environmental factors can also make weight loss challenging. For example, those who have desk jobs or have sedentary lifestyles have challenges losing weight as well as those individuals who eat out often as a result of social events (Richards, 2023). Finally, other factors may impact an individual's ability to lose weight. Factors such as lack of willpower, lack of motivation, or lack of knowledge on diet and exercise may impede weight loss (Richards, 2023). Additionally, many overweight or obese individuals may not find the medical care they need to support weight loss (Horn et al., 2022). Patients indicate they are not given the time during office visits, physicians are not prescribing treatment options as a result of other health conditions, or patients believe they are perceived as being unmotivated or unwilling to change their behavior (Horn et al., 2022).

Approximately 70% of Americans are either overweight or obese today (Horn et al., 2022). Achieving and sustaining significant weight loss is essential to improving health outcomes and reducing physical, psychological, and financial burdens (Horn et al., 2022). However, there is a question about what it means to achieve and sustain significant weight loss. Horn et al. (2022) put forth a meta-analysis to understand the impact of weight loss of $\geq$ 5%, $\geq$ 10%, and $\geq$ 15% of an individual's body weight. The meta-analysis conducted by Horn et al., (2022) suggested that weight loss of $\geq$ 5% is generally accepted as the level for clinically meaningful weight loss, and the Federal

Drug Administration (FDA) has recommended this level to support some reduction in co-morbidities associated with overweight and obesity (Horn et al., 2022; Spreckley et al., 2021). However, greater weight loss is required to see a more meaningful reduction in co-morbidities and complications related to overweight and obesity, suggesting that ≥ 10% will provide improved health outcomes and reduced risks (Horn et al., 2022; Kheniser et al., 2021; Spreckley et al., 2021; Zhang et al., 2023).

Losing weight can be both challenging and complicated. Even if an individual overcomes barriers to achieve significant weight loss, they are highly likely to regain the lost weight (Spreckley et al., 2022). In some cases an individual may gain more weight than they initially lost (Spreckley et al., 2022). Research is inconsistent on how long it may take to regain the lost weight, but researchers agree that most people who achieve significant weight loss will regain it (Johns Hopkins Medicine, 2021a; Spreckley et al., 2021, 2022; Wade, 2023). One estimate indicates that an individual will typically regain the lost weight within two to three years (Johns Hopkins Medicine, 2021a; Spreckley et al., 2021). Other research suggests that most individuals will experience the regain of all lost weight within five years (Wade, 2023). Finally, other research suggests that 80% of those who lose a significant amount of weight will not maintain it for 12 months and will regain as much as 50% of the lost weight within two years (Engber, 2020). The remaining weight will likely be regained before the fifth year (Engber, 2020). According to Spreckley et al,. (2021), weight loss should be considered successful if an individual can lose > 10% of their body weight and maintain it for one year. According to Spreckley

et al,. (2022), those who maintain their weight loss for at least two years have a higher likelihood of maintaining it over the next five to ten years (Spreckley et al., 2022).

Many factors impact an individual's ability to sustain significant weight loss because the body goes through physiological changes during the weight-loss process. For example, significant weight loss results in a change in resting metabolic rate, the amount of energy an individual needs at rest (Engber, 2020). The body also experiences changes in hormones, the microbiome of the gut, and the makeup of its fat tissue (Busetto et al., 2021; Engber, 2020). These factors do not reset once significant weight loss is achieved. For example, an individual's resting metabolic rate will continue to remain low, which means that any increase in energy consumption may impact weight regain (Engber, 2020). The hormone Leptin, which signals food satiety becomes depleted during weight loss and does not completely reset after weight loss is achieved, even one year after weight loss has been achieved (Busetto et al., 2021; Engber, 2020). To complicate matters, the hormone ghrelin increases, which signals to the brain that the body is hungry (Cleveland Clinic, 2019). This means that the obese individual continues to feel unsatiated and will continue to feel the urge to eat (Busetto et al., 2021; Cleveland Clinic, 2019; Engber, 2020). Further, significant weight loss creates stress in the membranes of fat cells which inhibits the further release of fat and the release of leptin (Busetto et al., 2021; Engber, 2020). Weight regain is equally as complex as the physiology of obesity (Busetto et al., 2021; Engber, 2020). Further research will allow for more effective strategies to be developed to impact the prevalence of weight regain (Busetto et al., 2021).

**Obesity in the Workplace**

Adults spend approximately one-third of their lives, or 90,000 hours during a lifetime at work (Abdul Manaf et al., 2021; Cable, 2020). The work experience of an obese worker is different than that of their normal weight counterparts. For example, obesity is highly correlated with several chronic conditions including hypertension, Type II diabetes, coronary artery disease, stroke, several forms of cancer, osteoarthritis, and diseases impacting the liver and gall bladder (Abdul Manaf et al., 2021; Stephenson et al., 2021). Additionally, those living with obesity are more likely to have chronic pain and respiratory challenges (Stephenson et al., 2021). These chronic conditions can create disruption in daily life, and they require care. For example, those who are obese have higher absenteeism at work than their normal weight peers (Abdul Manaf et al., 2021; Amenyah et al., 2022; Mohammad et al., 2019; Narisada & Suzuki, 2019; Stephenson et al., 2021). They have increased physical limitations as it can be harder for an obese individual to execute basic movement (Stephenson et al., 2021).

Another component of the work experience for the obese worker is how other professionals experience them in the workplace. Those living with obesity may experience weight bias or obesity stigma (Salas et al., 2019). Weight bias includes negative attitudes or beliefs about another individual because of their weight (Salas et al., 2019). It occurs when an overweight or obese individual is subjected to prejudice, discrimination, stereotyping or other type of disparate treatment (Nutter et al., 2024; Salas et al., 2019; Spreckley et al., 2022). Weight bias or stigma can have far reaching consequences to an individual's physiological, social, and psychological wellbeing that

may result in poor health outcomes, weight gain and decreased quality of life (Salas et al., 2019; Spreckley et al., 2022). A primary driver of weight stigma or weight bias is a lack of education and understanding of obesity (Salas et al., 2019). For example, common narratives regarding obesity are that obesity results from an individual consuming too many calories and without getting the necessary physical activity or that the disease is self-inflicted and they should rely upon themselves to course correct their behavior (Salas et al., 2019). Obesity is more complicated.

Finally, the obese individual may not have the same access to work or competitive compensation that their normal weight counterparts have. The obese individual is often paid a lower wage (Groves & Wilcox, 2023; Lee et al., 2019). Additionally, obese workers often experience higher rates of unemployment (Amenyah et al., 2022) and when unemployed, workers typically experience unemployment for longer periods of time (Groves & Wilcox, 2023; Lee et al., 2019). For example, on average, an obese individual experiences a 6% increase in bouts of unemployment (Groves & Wilcox, 2023). The length of unemployment can be greater, depending on sex, race and ethnicity of the worker (Groves & Wilcox, 2023). Additionally, the obese worker typically earns less money than their normal weight counterparts, by as much as 12% (Groves & Wilcox, 2023). The difference in salary is larger in obese women (Groves & Wilcox, 2023; Lee et al., 2019). Obese individuals are less likely to be placed in professional roles with high salaries, limiting their earning potential (Lee et al., 2019). Additionally other organizations may be less likely to place obese workers in sales or other customer-facing

roles, as they may not fit an image or display positive social characteristics that are desired by an organization (Lee et al., 2019)

Obesity has a significant impact on organizations as organizations incur higher costs from their obese employees compared to their employees of normal weight. Approximately 30% of employees on non-farm payrolls are considered obese (Degnan, 2024). An additional 34% of workers are overweight (Degnan, 2024). Recent research indicated that obesity and its associated comorbidities accounted for $480 billion in direct health care costs and $1.24 trillion in indirect costs related to work (Ramasamy et al., 2019). Indirect costs were 2.5 times higher than direct health care costs and account for factors such as presenteeism in the workplace, absenteeism, short- and long-term disability, and workers' compensation costs (Ramasamy et al., 2019). According to Degnan (2024) $82.3 billion was attributed to missed workdays, $160.3 billion in reduced productivity, $31.1 billion resulting from higher disability costs, and $5.2 billion in higher workers' compensation costs. These costs are in addition to the $146.5 billion in increased medical costs for these employees and their families to treat chronic conditions and co-morbidities associated with overweight and obesity (Degnan, 2024). Additionally, healthcare costs are known to increase as the level of obesity increases (Ramasamy et al., 2019, 2020; U.S. News, 2021). For example, those with Class One obesity generally have direct health care costs that are $1,775 higher per year than their normal weight peers (Ramasamy et al., 2019). Those with Class Two obesity generally have direct health care costs that are $3,468 higher per year than their normal weight peers (Ramasamy et al., 2019). Finally, those with Class Three obesity generally have direct health care costs that

are $11,481 higher per year (Ramasamy et al., 2019). When considering direct and indirect costs, the impacts of obesity to the organization are greater at $11,125 for class 1; $14,341 for class 2 and $28,321 for class 3 on an annual basis (Ramasamy et al., 2019). Leaders in organizations have not always been concerned about obesity in the workforce, but it has become a focus for organizations because of the impact it has on the workforce (Degnan, 2024). Therefore leaders are now turning attention to how they can support employees in getting the care they need, and how they can support employees in living healthier lifestyles, as doing so can have a significant and positive economic impact (Degnan, 2024).

**White-Collar Work and Obesity**

White-collar jobs are typically office-based and include roles that are professional, technical, executive, administrative or managerial, sales, and administrative support (U.S. Bureau of Labor Statistics, 2021). These types of roles are different from blue-collar jobs that are typically defined as roles involved in handling, operating, or inspecting heavy machines or equipment, repair operations, vocational/crafts workers, transportation or moving occupations, or laborers (U.S. Bureau of Labor Statistics, 2021). Activity levels between these two types of roles are markedly different. Where blue-collar workers inherently perform roles that often require movement, white-collar workers have more sedentary time at work (Fukushima et al., 2021; Narisada & Suzuki, 2019).

Sedentary activity is often seen in office jobs that predominantly require sitting at a desk (van Kasteren et al., 2020). Some estimates indicate that office workers spend 2/3

of their workday in a sitting position (Aliouche, 2022; Safi et al., 2022). Other estimates indicate that office workers spend up to 77% of their time engaged in sedentary activity (Halling Ullberg et al., 2023; Van Nuys et al., 2014). New Canadian guidelines recommend that sedentary activity be limited to less than 8 hours per day (Fukushima et al., 2021). However only 4.8% of white-collar workers achieve that on workdays (Fukushima et al., 2021; Narisada & Suzuki, 2019). For every two hour period spent sitting, there is a 5% increase in the prevalence of obesity and a 7% increase in mortality (Aliouche, 2022). The resultant obesity exacerbates the effect of work related psychological stress on blood pressure and impacting the autonomic nervous system which functions to help the body maintain well-being (Aliouche, 2022; Narisada & Suzuki, 2019). Negative health effects intensify with increased sedentary time (J. H. Park et al., 2020).

Leaders in organizations can reduce the amount of sedentary time of their white-collar workers. For example, jobs that require long work hours can negatively impact employee health (Amatori et al., 2023; Cook & Gazmararian, 2018; Mazzola et al., 2019; Myers et al., 2020; Narisada & Suzuki, 2019; Pahn & Yang, 2021). Additionally, jobs with high psychological demands, job insecurity, or lack of employee control on the job can negatively impact health behaviors and health-related outcomes (Myers et al., 2020). Additionally, the level of effort needed to do the job can also be a factor, specifically with time pressures or working conditions (Myers et al., 2020). Therefore, to reduce the risk of obesity, CVD, and other chronic health conditions, work hours should be reduced, breaks should be given from sedentary time, and education should be provided pertaining to the

benefits of physical activity, living a healthy lifestyle and the importance of getting routine health screenings (Pahn & Yang, 2021). Additionally, leaders in the organization can consider providing access to or installing health equipment at the worksite to improve health outcomes for their employees (Pahn & Yang, 2021). White-collar workers often make more personal decisions at work than their blue-collar counterparts (Narisada & Suzuki, 2019). For example, workers can often decide when to take a break, eat, and whether and when to engage in physical activity at work (Narisada & Suzuki, 2019). Leaders that employ white-collar workers can encourage autonomy and provide flexibility for their workers to reduce their levels of sedentary activity. Workplace initiatives that support increased physical activity during the day will not only support enhanced employee wellbeing but will improve an employee's ability to complete their tasks and will boost their productivity (van Kasteren et al., 2020).

**Worksite Wellness Programs**

Worksite wellness programs are known by several names – workplace wellness programs, corporate wellness programs, employee wellbeing programs, workplace wellbeing programs, and others. A worksite wellness program is a program organized and sponsored by an employer designed to support employees as they implement and sustain positive health behaviors that reduce health risks and improve quality of life (Cai, 2021). Worksite wellness programs can include health screenings, health education, nutrition services, vaccination services, mental health support, resources and support for getting physical activity, support for disease management, and education relating to occupational safety and health (U.S. Office of Personnel Management, n.d.). These programs can

enhance employee productivity and they can benefit an organization financially, depending on how the wellness program is designed (Cai, 2021). The objectives of a workplace wellness program are important because life-style related chronic diseases account for 70% of medical costs in the United States. Individuals who have unhealthy habits and behaviors are known to have higher medical costs (Cai, 2021; U.S. News, 2021).

Worksite wellness programs originated in response to the effects of work on worker health (Pal, 2022), and they have evolved throughout the years. For example, in the 1950s worksite wellness programs focused on interventions to curb alcoholism or to support concerns with an employee's mental health (Pal, 2022). The next major evolution of worksite wellness occurred in 1979 when Johnson & Johnson rolled out its Live for Life program, providing employees with support in adopting behaviors to support healthy living such as controlling weight, improving their nutritional behaviors, and managing stress (Pal, 2022). Worksite wellness programs in the 1980s primarily focused on how an employee's physical fitness impacted worker performance (Pal, 2022). Later in the decade, worksite wellness programming shifted to support mental health disorders arising from the workplace (Pal, 2022). Corporate culture has continued to shift to prioritize initiatives that positively impact an employee's quality of life. The advent of the internet resulted in increased use of technology, innovation, and expansion of worksite wellness programs (Pal, 2022). Today's worksite wellness programs provide more preventative care and support for employees and they incorporate both clinical and non-clinical

practitioners (Pal, 2022). They integrate physical, mental, and financial well-being focusing on support for employees in balancing work life with personal life (Pal, 2022).

Worksite wellness programs look different across employers. For example, some worksite wellness programs help employees manage preventable conditions such as obesity or diabetes (Society for Human Resources Management [SHRM], 2022). Other programs may offer incentives to complete a health assessment or stop smoking (SHRM, 2022). Yet other programs provide information and education to support employees in making healthier lifestyle choices (SHRM, 2022). Employers may also offer programs such as access to telehealth visits, First Aid/CPR training, or massage therapy. Regardless of design, in 2019, approximately 84% of large employers with 200+ workers that offered health benefits also offered an employee wellness program (Pollitz & Rae, 2020). Another 4% had programs that exclusively provided health screenings and another 72% offered the opportunity to do an assessment such as a biometric screening (Pollitz & Rae, 2020). This means that 9 out of 10 large organizations had some type of employee wellness program in 2019 (Pollitz & Rae, 2020). The programs covered an estimated 63 million employees (Pollitz & Rae, 2020). These numbers are an increase from 2008 when approximately 70% of large companies offered an employee wellness program, covering 41 million employees (Pollitz & Rae, 2020). Additionally, health information collected through a well-designed wellness program can support employee wellness by providing them with meaningful feedback on their health (Pollitz & Rae, 2020)

There are considerable challenges in measuring the effectiveness of workplace wellness programs (Pollitz & Rae, 2020). Consequently, organizations have mixed results

with their worksite wellness program, depending on how they are designed and what they include. Additionally, healthier people tend to participate in workplace wellness programs which may result in skewed data relative to health outcomes (Pollitz & Rae, 2020). Finally, many programs focus on health screening versus health promotion (Pollitz & Rae, 2020). Approximately 67% of wellness programs are designed to understand employee health risks; they are not designed to help improve health-related behaviors, which can be more challenging to measure (Pollitz & Rae, 2020).There are different types of workplace wellness programs and different factors that can contribute to their successes.

**Employee Needs**

Understanding the needs of the employee population is essential for the success of a workplace well program (María-Ángeles et al., 2021; Upadhyaya et al., 2020) as there are organizational and personal factors that influence an individual's decision to engage in healthy behaviors (Mazzola et al., 2019). For example, Safi, et al., (2022) conducted a qualitative study with 41 university employees who self-reported that they were either active or inactive. They were grouped by activity level before participating in semi-structured focus groups to understand perceived facilitators and barriers to achieving physical activity. Thematic analysis was used to analyze the data from the focus groups. Approximately 80% of participants indicated that lack of time was a barrier to achieving adequate physical activity (Safi et al., 2022). Approximately 63% of inactive participants and 17% of active participants indicated time as a barrier (Safi et al., 2022). Interestingly, the results of this study indicated that 67% of those who indicated time as a barrier were

women (Safi et al., 2022). A study by Jiménez-Mérida et al. (2023) supported this finding as employees in this study indicated they were often too busy or needed to work longer hours which negatively impacted their decision to exercise. Long commutes and family responsibilities were also a factor (Jiménez-Mérida et al., 2023).

Workplace culture may also play a role in an employee's decision to participate in a worksite wellness program. For example, leadership engagement is crucial to the successful implementation of a worksite wellness program (Saito et al., 2022). Leadership engagement is the degree to which the leadership of an organization has demonstrated commitment, involvement, and accountability for the program, demonstrating the belief that the health of employees is important (Saito et al., 2022). Employees must feel that participation in a workplace wellness program is supported and expected within the organization as this will improve employee motivation and self-efficacy (Jiménez-Mérida et al., 2023; Saito et al., 2022; Sonnentag et al., 2022). Some employees believe the workplace should be an exercise-friendly environment (Jiménez-Mérida et al., 2023). Approximately 75% of participants indicated that lack of management support was a barrier to physical activity (Safi et al., 2022). Additionally, 58% indicated that workplace culture was a barrier (Safi et al., 2022). Workplace culture included components of work such as flexibility during the workday, working long hours or employees having the minimum required lunch break to meet state and federal law requirements, thus not having time to exercise (Safi et al., 2022).In fact, those who work long hours are more likely to consume saturated fat and sugar over those long hours and may may not have the opportunity to exercise during the day (Amatori et al., 2023;

Mazzola et al., 2019). Workload and time constraints are among the top barriers to engaging in healthy behaviors (Halling Ullberg et al., 2023; Mazzola et al., 2019; Sonnentag et al., 2022). Time constraints in the office are similar to time constraints found in the home and health-related behaviors are known to be intertwined between home and work life (Sonnentag et al., 2022). Approximately 41% of participants indicated that responsibility to family was a barrier to physical activity; this included 29% of inactive participants and 12% of active participants (Safi et al., 2022). Again, women were more adversely impacted by having responsibility as 70% of women indicated family responsibilities were a significant burden to physical activity (Safi et al., 2022). Given these challenges, Safi et al., (2022) found that 71% of employees indicated that they were too tired to exercise which could be an indication of stress, workplace pressure, working long hours, busy life-styles or a lack of colleague support or engagement. Additionally, these challenges may not only inhibit employees from engaging in healthy behaviors, they may also contribute to weight gain (Mazzola et al., 2019).

Another factor that should be considered in the development of a worksite wellness program is the cost for the employee. For example, a worksite wellness program may encourage increased consumption of fruits and vegetables. However, healthy food can be more expensive than convenience or fast foods. Additionally, a worksite wellness program can encourage employees to get greater levels of physical activity. However, engaging in physical activity may come at a cost as well, with the purchase of gym memberships or equipment (Mazzola et al., 2019). Cost may be a hinderance to an

individual making healthy eating and exercise choices (Mazzola et al., 2019). This research underscores the importance of understanding the needs of the employee population for which a worksite wellness program is developed, understanding their priorities, how they experience the workplace, and the perceived level of support they have to build or engage in healthy behavior.

**Types of Worksite Wellness Programs**

Some worksite wellness programs target a single focus or strive to achieve a single outcome rather than focusing on broader health initiatives. Other types of wellness programs target more than one focus or strive to achieve more than one outcome. Worksite wellness programs can be effective whether they focus on a single outcome or several outcomes, and it is important to set the goal at the outset of program development to ensure its success can be measured.

An example of a worksite wellness program with a singular focus is a diabetes prevention program. A recent meta-analysis conducted by Fitzpatrick-Lewis et al., (2022) looked at five randomized controlled trials involving workplace wellness interventions that used generalized protocols to help employees lose weight, reduce BMI and increase physical activity for the purpose of preventing Type II diabetes. These randomized controlled trials were compared to the Diabetes Prevention Program, which is a year-long, evidence-based program that helps participants change their lifestyles and adopt healthy behaviors to prevent Type II diabetes. The five trials included 1,494 adults. Approximately 53% were randomized into these interventions while the remaining groups were included into their existing worksite wellness programs. Participants in the

Diabetic Prevention Program were nearly four times more likely to achieve weight loss > 5% and were more than 9% more likely to achieve weight loss greater than 7% (Fitzpatrick-Lewis et al., 2022). All studies included three common elements – coaches supporting participants with nutritional counseling and lifestyle support coaching, a focus on achieving at least 7% weight loss, and an increase in physical activity to 150 minutes per week (Fitzpatrick-Lewis et al., 2022). The core intervention included 16 weekly sessions with a coach, lasting between 30-60 minutes, self-monitoring of weight, dietary intake, and physical activity (Fitzpatrick-Lewis et al., 2022). Additional research from this meta-analysis concludes that taking a similar approach with focus on weight loss interventions garnered similar effects (Fitzpatrick-Lewis et al., 2022).

A meta analysis conducted by Peñalvo et al. (2021) has findings that align with the meta-analysis conducted by Fitzpatrick-Lewis et al. (2022) in that workplace wellness programs are more effective when they target a specific health outcome. Peñalvo et al. (2021) studied the effectiveness of workplace wellness programs to improve specific outcomes using interventions such as diet habits or cardiometabolic risk factors. After reviewing and analyzing data from 121 workplace wellness programs, Peñalvo et al. found that worksite wellness programs can successfully impact a specific outcome but the goal of the program and the measurement criteria should be clear. The findings are significant because this meta-analysis included workplace wellness programs in a wide variety of countries, industries, workplace settings, intervention characteristics and durations, population sizes, and employee characteristics (Peñalvo et al., 2021). The

meta-analysis did not analyze heterogeneity of the these workplace wellness programs and the potential for these factors to drive different outcomes (Peñalvo et al., 2021)

Other types of wellness programs seek to improve several health behaviors or outcomes. For example, Tyrrell et al. (2023) conducted a study with 1,210 participants to determine the effectiveness of a multi-component corporate wellness program, looking at two outcomes specifically – weight loss and step count. If an employee's BMI was > 30, they were automatically placed into the BMI weight loss track. Otherwise they were placed into the Healthy/Step Track (Tyrrell et al., 2023). The wellness program included a variety of campaigns such as newsletters and other materials, various physical activities such as exercise classes, group walks, discounts for fitness equipment, discounted gym memberships (Tyrrell et al., 2023). Finally, a nutrition component included a five-month course that taught the fundamentals of nutrition, meal prepping, meal planning, mindful eating and drinking, hunger and satiety cues, and the effects of sleep on food choice (Tyrrell et al., 2023). Information was also provided on fad diets, plant based eating, the affects of stress on eating, gut health, and how to make healthy choices when eating out (Tyrrell et al., 2023). This study found no correlation between step count and BMI (Tyrrell et al., 2023). Those in the Healthy/Step Track gained weight while those in the BMI track lost weight (Tyrrell et al., 2023). Those who participated in the nutrition education components experienced a decrease in BMI while those who did not participate experienced an opposite result (Tyrrell et al., 2023). These results indicate that nutrition education could support participants in significant weight loss (Tyrrell et al., 2023). Limited success of multi-component wellness programs could be the result of unclear

goals for the program and ambiguous measurement criteria (Peñalvo et al., 2021). Additionally, in conducting a meta-analysis, there are challenges in evaluating programs because the evaluation process is not standardized (Jiménez-Mérida et al., 2023; María-Ángeles et al., 2021; Peñalvo et al., 2021).

**Workplace Wellness Program Design**

The design of an employee wellness program is also important as it can boost awareness and encourage engagement. Downes et al., (2021) conducted a study with 96 university employees to determine the effects of a workplace nutrition education program on health behaviors, motivators and barriers, confidence and biometrics (Downes et al., 2021). The specific health behaviors included in this study included dietary habits, emotional eating, and physical activity (Downes et al., 2021). The specific biometrics included in this study included BMI and triglyceride levels (Downes et al., 2021). The Downes et al. (2021) study included educational sessions facilitated by faculty including a nurse practitioner, a registered dietician, and an exercise physiologist. Education included the benefits of a high-fiber diet, emotional eating cues and education on engaging in physical activity. Participants also set weekly goals. Participants reported a statistically significant increase in the consumption of fruits, vegetables, beans, and grains. Additionally, the results indicated a statistically significant increase in the prevalence of eating breakfast and in the avoidance of consuming high fatty foods. Finally, participants significantly increased the number of days per week in which they engaged in physical activity. There was a statistically significant reduction in BMI after the intervention.

Hyży et al. (2023) conducted a review of nutrition interventions based in workplaces of office workers to examine the efficacy of cognitive, behavioral, and mixed nutrition interventions. Cognitive interventions are those most focused on providing education and increasing knowledge and awareness of the importance of nutritional health (Hyży et al., 2023). Examples of behavioral interventions include workshops or prevention programs, and these interventions are focused on building skill to implement changes that will impact health outcomes related to nutrition (Hyży et al., 2023). The review focused on either cognitive or behavioral interventions. They also examined the efficacy of interventions that combined both cognitive and behavioral components (Hyży et al., 2023). Hyży et al. (2023) considered the design, implementation and evaluation of interventions in the review. Evaluations are an important component of an intervention, because they determine the effectiveness of the intervention. Effectiveness of cognitive interventions can be measured by knowledge tests before and after the intervention. Effectiveness of behavioral interventions can be measured by changes to the work environment or other factors such as a reduction in absenteeism or by reviewing health metrics such as BMI or glucose levels. Hyży et al. found that there is inconsistency across research on which measurements are used to assess the effectiveness of interventions. Additionally, there is a lack of consensus on guidelines for the design and implementation of interventions. This can make interventions difficult to evaluate and compare. Interventions that solely focus on cognitive or behavioral components have mixed results (Hyży et al., 2023). However, interventions that include both behavioral and cognitive components seem to have better outcomes, but determining their

effectiveness remains challenging (Jiménez-Mérida et al., 2023). Saito et al. (2022) agreed indicating that organizations can further self-efficacy if they provide knowledge and skill development for their employees. However, it was noted that focusing more holistically on health through multiple techniques supported success measures across the research (Hyży et al., 2023; Jiménez-Mérida et al., 2023). According to Jiménez-Mérida et al. (2023), multi-component interventions that include lifestyle modifications, physical activity, nutrition and psychological support are the most effective. Interventions that occur over prolonged time and provide educational content and workshops have also been effective (Jiménez-Mérida et al., 2023). Providing support through coaching supports the adoption of healthy behaviors and proactively addresses barriers to behavior change (Jiménez-Mérida et al., 2023). Finally, Hyży et al. (2023) called out the importance of considering the needs and characteristics of the participants, specifically pertaining to diversity, sex, gender, economic and social statistics.

Son et al. (2023) conducted a study across eight workplaces in different industries in Korea to understand whether a mobile health intervention would be effective in addressing overweight and obesity and in changing dietary behavior. Additionally, the researchers sought out to determine whether engagement in the intervention impacted its effectiveness. The study involved 235 participants recruited for a 12-week intervention using surveys, anthropomorphic measurements, and food journals to determine the intervention's effectiveness (Son et al., 2023). The dietary application "NOOM" was purchased and provided for all participants to record their meals, at a minimum of twice per week (Son et al., 2023). The InBody wearable was provided to participants to monitor

physical activity and body composition (Son et al., 2023). The Kakao Talk messenger application was provided as a communication tool to provide support for participants (Son et al., 2023). Dietary and lifestyle habits were assessed using a questionnaire from the Diet-Related Health Risk Appraisal called Cardiovascular and Metabolic Disease Health Risk Assessment (Son et al., 2023). Engagement level in the intervention was assessed by scoring the participants usage of the "NOOM" application for recording of activities such as meals, measuring body fat, tracking physical activity, and using the wearable daily. This study had no control group. However participants engaged with the application differently. While all participants lost an average of 7.5% of their body weight, those who had high engagement levels saw a statistically significant greater reduction in weight with an increase in the consumption of fruits, vegetables, and whole grains. A strength in this study can be seen in the tracking of data. Many studies use self-reported weights of participants which can have limitations. This study used a wearable with technology that had been validated which increases the accuracy of the results (Son et al., 2023).

There are components of worksite wellness programs that may not directly impact health outcomes in their design, but may support an employee in building better habits, engaging in improved behaviors and increase overall engagement. For example, findings from a meta-analysis from Upadhyaha et al. (2020) indicated that components of wellness plans such as social marketing campaigns, signage and posters, annual counseling and access to a wellness center impacted the building of healthy habits, but did not effectively improve an employee's weight outcomes. These components also

boosted an employee's perceptions of organizational support for health and wellness (Upadhyaya et al., 2020).

Upadhyaya et al. (2020) found that leveraging multiple strategies in workplace wellness program design may be more effective in supporting employees in achieving their health goals (Upadhyaya et al., 2020). For example, incorporating environmental components such as using sit-stand workstations or providing access to walking paths or a fitness center, in addition to behavioral interventions such monthly counseling, meeting with a dietitian, reimbursements for gym memberships or providing instructor-led classes have been most effective in improving health outcomes (Halling Ullberg et al., 2023; Upadhyaya et al., 2020). Additionally offering programming on-site or face-to-face was more effective than offering programming over long distances or in remote work environments (Upadhyaya et al., 2020). All of these strategies can be implemented in consideration of the unique needs of the population.

**Program Delivery and Facilitation**

Determining how a wellness program will be delivered to employees is an important factor that should be contemplated in the development of the program. An example of this is seen in a secondary analysis conducted by Hicks-Roof et al. (2021) involving 1,123 employees in 77 worksites in the United States. The purpose of this analysis was to understand whether a face-to-face counseling intervention from a registered dietician (RDN) as part of a worksite wellness program could result in changes in dietary and lifestyle related factors of obese workers (Hicks-Roof et al., 2021). The worksite wellness programs that were delivered or facilitated by trained professionals

showed high rates of effectiveness in helping the overweight or obese individual lose weight and maintain their weight loss (Hicks-Roof et al., 2021). Additionally, the results indicated an increased consumption of fruits, vegetables, and whole grains with increased participant visits to the RDN. Participants engaged in increased levels of physical activity as well (Hicks-Roof et al., 2021).

**Workplace Environment**

The environment in which a worksite wellness program exists is an important component of any worksite wellness program, as the environment can affect decisions related to healthy eating and exercise (Mazzola et al., 2019). A meta-analysis by Mazzola et al., (2019) indicated that one of the environmental factors that had a significant effect on food choice was access to healthy food options (Mazzola et al., 2019). The presence of vending machines, the availability of unhealthy food around the office, and the lack of availability of healthy options close to the workplace were all barriers to making healthy food choices (Mazzola et al., 2019). Organizations that had a cafeteria offering plenty of affordably priced fruit and vegetable options allowed employees to make healthier menu selections and more of these items were sold as a result (Mazzola et al., 2019). Similarly, the presence of exercise facilities and the ability to access them had a significant influence over whether an individual exercised at work (Halling Ullberg et al., 2023; Mazzola et al., 2019). Additionally, the presence or absence of shower facilities was also shown to impact exercise behavior at work (Mazzola et al., 2019) with up to 85% of employees indicating a lack of changing rooms or showers was a barrier to engaging in exercise during the workday (Safi et al., 2022). These findings were similar to those

found by Halling Ullberg et al. (2023). Finally, the external environment in which the worksite existed was a contributing factor to an individual's decision to exercise during the work day (Mazzola et al., 2019). Employees felt impeded from exercising outdoors if the workplace was in an unsafe neighborhood or if there was inclement weather (Mazzola et al., 2019).

**The Employee Experience**

Approximately 61% of large organizations and 39% of small organizations had programs to help employees lose weight in 2015 (Clancy et al., 2018). However, only modest improvements have been made in addressing overweight and obesity in the workplace (Clancy et al., 2018). Many participants join worksite wellness programs that focus on weight loss for the purpose of living healthier lives (Abdul Manaf et al., 2021; Clancy et al., 2018). They acknowledge that the workplace could be an effective setting for them to participate in a weight loss program (Clancy et al., 2018; Torres et al., 2023), and that organizations should set up exercise programs for employees to participate or they should otherwise encourage employees to exercise (Abdul Manaf et al., 2021). Additionally, employee perspectives on their needs and their perceptions of the program should be solicited when designing a worksite wellness program, as it could impact perceptions and the overall success of the program (Jessen-Winge et al., 2021; Torres et al., 2023).

Quality programming, knowledge and support are important factors for workers participating in a worksite wellness program. For example, a study from Crino et al., (2020) found that those who participate in worksite wellness programs desire to have a

program with an educational focus that offers nutritional, psychological and lifestyle interventions and contains a focus on holistic health such as self-care, body acceptance or sexual health (Crino et al., 2020). A study by Jessen-Winge et al. (2021) had similar findings. This study included qualitative interviews with 34 participants who were asked what they would want in a weight loss program. This study did not involve a worksite wellness program, but participants wanted similar components. For example, participants wanted a structure for building healthy habits related to exercise and nutrition. Participants wanted a support network made up of family, friends, others with obesity, and health care providers. Finally, they wanted to find meaning and joy in physical activity and needed education to support them in finding activity to support their weight loss (Jessen-Winge et al., 2021). Suire et al. (2021) conducted a walking intervention with obese women in sedentary roles, and also found that having a structured goal for walking supported the participants in meeting their goal.

Lack of quality programming, knowledge and support can also negatively impact an employee's experience in a worksite wellness program. For example, workers believed that one barrier to exercise was their lack of knowledge of how to properly engage in physical activity without harming themselves (Abdul Manaf et al., 2021). Some workers prefer to have an exercise module provided by a qualified professional (Abdul Manaf et al., 2021; Suire et al., 2021). Other workers needed support from a network of people. For example, a spouse, partner or other close family member can provide essential support for an employee that is trying to live a healthier lifestyle using a worksite wellness program (Abdul Manaf et al., 2021). Others prefer leveraging the

services of a health and wellness coach for support (Clancy et al., 2018). The findings from Clancy et al., (2018) cautioned that employees may be challenged to attend face-to-face coaching sessions, especially if the coach does not offer flexible scheduling. Additionally employees may not participate in wellness coaching if the requirements for doing so are particularly arduous, such has having to read packets of information or attend lengthy conference calls (Torres et al., 2023). However, research is consistent that employees need to feel supported in their weight loss and they need to be able to easily incorporate healthy behaviors into their lives (Abdul Manaf et al., 2021; Clancy et al., 2018; Crane et al., 2022).

Additionally, employee perception can influence employee engagement in a worksite wellness program. For example, participants often perceive barriers to participating in weight loss programming in the workplace (Abdul Manaf et al., 2021; Clancy et al., 2018). For example, some cite a negative workplace culture or a sedentary role that does not offer the opportunity to be physically active during the day (Clancy et al., 2018; Suire et al., 2021). Some employees feel pressure to remain at their desks as a result of workload which impedes their ability to exercise (Suire et al., 2021). Additionally, any staff parties or social events that occur in the workplace often involve unhealthy foods or sugary treats that make meal plan adherence feel challenging for employees (Clancy et al., 2018). Another barrier for employees was having access to safe and affordable places to exercise with employees requesting gym access or access to no-cost fitness classes (Clancy et al., 2018) or having an adequate space to change clothes (Abdul Manaf et al., 2021). Further, some employees refrain from getting the necessary

physical activity because they lack the motivation after working long hours (Abdul Manaf et al., 2021).

## Summary and Conclusions

Overweight and obesity are complicated health conditions that continue to be on the rise (Centers for Disease Control and Prevention, 2024b; Dreher et al., 2019; National Heart, Lung, and Blood Institute, 2022b). Approximately 35.7% of adults were obese in 2009-2010 which increased to approximately 42.4% in 2017-2018 (Hales et al., 2020). Overweight and obesity rates have increased since pandemic, and the increase in these rates is more prevalent in office workers with sedentary jobs (Hyży et al., 2023). Overweight and obesity are commonly defined by an individual's BMI (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; National Heart, Lung, and Blood Institute, 2022a; World Health Organization, 2022) and they are strongly correlated with co-morbidities such high blood pressure, Type II diabetes, heart disease, stroke, and several forms of cancer (Centers for Disease Control and Prevention, 2022a, 2024b; Chu et al., 2019; U.S. News, 2021). Additionally, those who are overweight or obese often experience a reduced quality of life. Many of these individuals are mobility-challenged and have a higher prevalence of mental health challenges, specifically with depression and anxiety often experiencing lower self-esteem, poor body impact and shaming from others (Centers for Disease Control and Prevention, 2024b; Chu et al., 2019; Haga et al., 2019; Stephenson et al., 2021).

In addition to the physical and mental health challenges that are common in the overweight and obese population, this group incurs significant financial costs. For

example, obese individuals spend approximately $1,900 more per year in medical expenses than their normal weight peers (U.S. News, 2021). The overweight and obese population are responsible for more than $100 billion in increased medical costs for treating obesity and its associated co-morbidities each year with billions more attributed to missed work days, lower productivity, higher rates of disability and increased workers' compensation costs (Degnan, 2024). Approximately 16%-18% of total healthcare costs in the U.S. will be directly related to overweight or obesity by 2030, potentially totaling $956.9 billion (Hicks-Roof et al., 2021). Medical and pharmaceutical costs increase between 4%- and 7% for every point increase in an individual's BMI (Hicks-Roof et al., 2021). While many obese individuals would like to lose weight, losing weight is both challenging and complicated. In the event an individual is successful in achieving significant weight loss, research indicates that lost weight will be regained in the months and years ahead (Johns Hopkins Medicine, 2021a; Spreckley et al., 2021, 2022; Wade, 2023).

An obese individual experiences the workplace differently than normal weight individuals. Chronic conditions, chronic pain, and mobility limitations that are more prevalent in this population require increased levels of medical care (Abdul Manaf et al., 2021; Stephenson et al., 2021). Obese workers may also experience weight stigma or weight bias in the workplace which can impact mental health outcomes and quality of life (Salas et al., 2019; Spreckley et al., 2022). Finally obese individuals may not have to same access to desirable work, competitive compensation and benefits (Groves & Wilcox, 2023; Lee et al., 2019), and they may experience higher rates of unemployment

(Amenyah et al., 2022). White-collar jobs, which are typically office-based, usually involve more sedentary behavior which increases the likelihood for obesity (Fukushima et al., 2021; Narisada & Suzuki, 2019). For example, those working 40 or more hours per week in sedentary roles are more than 40% more likely to be obese (Suire et al., 2021).

Worksite wellness programs may be an ideal mechanism to help address obesity, given the volume of time adults spend in the office (Jiménez-Mérida et al., 2023; Sandercock & Andrade, 2018). Obesity rates are also increasing because adults are not eating as many fruits, vegetables, and whole grains and they are getting less physical activity (Sandercock & Andrade, 2018). According to a meta-analysis conducted by Sandercock and Andrade (2018), worksite wellness programs geared at addressing obesity should incorporate and focus on education in physical activity, nutrition and overall wellness and should be customizable to the individual. Research from Hicks-Roof et al., (2021) had similar findings in that comprehensive worksite wellness programs that incorporate nutrition, physical activity and stress have shown the most effective in supporting significant and long-term weight loss and maintenance in those who are overweight or obese. Participant interactions with peers or a coach have been shown to be effective in sustaining weight loss as well (Sandercock & Andrade, 2018). These types of programs should last at least 12 months to support the necessary change in behavior (Sandercock & Andrade, 2018). However, longer programs have shown to be more effective (Sandercock & Andrade, 2018). Finally, the meta-analysis from Upadhyaya et al., (2020) discussed the return on investments that organizations will see when investing an employee wellness programs, indicating that employers spend approximately $500 per

employee per year less in health care costs and get a return of $2.73 for every dollar spent related to absenteeism.

Organizations play a significant role in whether employees participate in a worksite wellness program (van der Put & van der Lippe, 2020). Organizations can provide access to free or cost effective nutrition and exercise options to support them in making healthy decisions (Mazzola et al., 2019). There are other factors to employee engagement in a worksite wellness program however (Fink et al., 2020). An employee's perception on the value of the worksite wellness program, the employer's role in the worksite wellness program, the commitment of the organization as demonstrated by the CEO and other senior leaders, employer-sponsored resources and support for achieving and maintaining wellness goals and incentives for participation are all important factors to consider (Fink et al., 2020). There are also common barriers to participating in a worksite wellness program. Work pressure is considered a primary influencer on whether employees utilize worksite wellness programs (Mazzola et al., 2019; van der Put & van der Lippe, 2020). Work pressure occurs when an employee feels immense pressure to work and complete their work tasks, and they are less likely to engage in worksite wellness programming (van der Put & van der Lippe, 2020). Some employees feel guilty for engaging in exercise during the workday, believing that they should choose to do their work over any other activity (Mazzola et al., 2019). Employers should consider providing employees time to exercise during work hours. Research by Jiménez-Mérida et al., (2023) finding that physical activity performed during the workday has a more positive impact on BMI. Further, when employees are allowed to take breaks, they experience a

greater relief of stress and anxiety (Jiménez-Mérida et al., 2023). It improves the amount of sedentary time spent at work and reduces the risk of musculoskeletal problems that arise from sedentary work (Jiménez-Mérida et al., 2023). This is supported by research findings from van der Put and van der Lippe (2020) that found that employees are more likely to take a longer break to participate in a fitness class or to support their own wellbeing when they know their employer is supportive of this. Additionally, an employee is more likely to participate in a worksite wellness program when their colleagues do as well, as the behavior of participation is perceived as being more acceptable and they can support each other in the shared experience (van der Put & van der Lippe, 2020). Employers should consider the challenges and barriers to healthy living when designing a worksite wellness program and ensure there is support senior management for its implementation (Jiménez-Mérida et al., 2023)

Chapter 2 included the literature search strategy used for this dissertation. Additionally, the theoretical foundation and key terms were discussed. Chapter 3 will include the research design and rationale, the role of the researcher, the methodology, and issues of trustworthiness.

# Chapter 3: Research Method

## Introduction

The purpose of this basic qualitative study was to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose weight. A primary focus of this study aimed to understand how the white-collar worker experiences a worksite wellness program. Additionally, the present study aimed to understand what support should be included in a worksite wellness program to support weight loss. The intricacies of research design, rationale and methodology will be explored in this chapter. Additionally, an exploration of the logic pertaining to participant selection, the instruments used, recruitment selection, procedures for data collection, and the techniques for data analysis will be shared.

## Research Design and Rationale

RQ: How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?

Sub RQ: What additional support does the white-collar worker need to support weight loss?

The prevalence of obesity is high in white-collar work environments where sedentary work is more common (Aliouche, 2022). Increased levels of sedentary behavior are correlated with chronic diseases and ailments such as Type II diabetes, musculoskeletal pain, CVD, and cancer (Aliouche, 2022; Fukushima et al., 2021; Johns Hopkins Medicine, 2021b; Pahn & Yang, 2021; van Kasteren et al., 2020). While many organizations have implemented a worksite wellness program to support employees in

living healthier lives, there is no known research on worksite wellness programs that have focused on the obese population as they try to lose weight. Given the impact of obesity both on the individual and the organization that employs them, there is a need for worksite wellness programs to target those individuals in white-collar roles who want to lose weight.

This study used a basic qualitative design. Qualitative research seeks to understand the experiences of the participant and to gain insights on their perspectives, behaviors, and expectations (Bazen et al., 2021). It collects information on a participant's feelings, beliefs, and values. It seeks to understand what motivates them by asking questions starting with “why,” “how,” and “what,” prompting the participant to share their experiences (Bazen et al., 2021). A basic qualitative design for research involves collecting data through interviews, focus groups, and documents to understand participants' perspectives. Inductive reasoning is often used in qualitative research to generate broad themes across participant responses (Bazen et al., 2021). Findings from qualitative studies typically generate rich information from a small group of participants (Bazen et al., 2021). Therefore, results are not expected to be generalizable across large populations (Bazen et al., 2021). Narrative analysis is a type of qualitative data analysis that involves interpreting core narratives from an individual’s personal story. Analyzing data through narrative analysis gives the researcher perspectives on the participant by understanding their needs, barriers, and facilitators to behavior change (Gillespie et al., 2024). A study conducted by Gillespie et al. (2024) indicated that understanding

participant narratives gives insights into factors that impede behavior change and strengthen relationships between an individual and their care provider.

## Role of the Researcher

The role of the researcher is to uncover the participant's feelings and perspectives by listening to their experiences. Interviews were conducted through Zoom using audio recording only, to protect individual anonymity. The researcher is responsible for creating an environment in which the participant feels safe in sharing their experiences. The researcher also protects the individual's anonymity and safeguards the information and data received, keeping it confidential.

Additionally, the researcher is responsible for considering reflexivity prior to collecting data. Reflexivity is about acknowledging the researcher's role in the research, and understanding how their personal experiences or biases may impact the data collection and interpretation components (Collett, 2018). Reflecting on personal experiences and biases should be done throughout the research process, and should be integrated into each step of the research (Olmos-Vega et al., 2023). This critical self-reflection enhances credibility and trustworthiness of the research, as the researcher acknowledges how they may shape the research results (Collett, 2018).

## Methodology

Qualitative research requires the researcher to collect data from participants based on their experiences and report on the nuances of data, given the lived, storied context (Olmos-Vega et al., 2023). Collecting individual narratives supports understanding of individual accounts and supports the identification of themes collected through listening

to individual experiences. This qualitative study allowed participants to reflect on their history with obesity, what support has been helpful in the past in their pursuit of weight loss and what support would have been helpful for them. I chose a basic qualitative design for the study, because I wanted an opportunity to deeply explore participants' experiences in using worksite wellness programs to try to lose weight. Obesity is a complex and nuanced disease, and I wanted to fully explore participant experiences. I chose to conduct a narrative analysis to fully and deeply understand participant experiences and the meaning that they assign to those experiences through their stories.

This study used a semi-structured interview guide. The interview guide contained open ended questions that allowed the participants to reflect on their story, explore emotions, and provide context for their experiences. There were no personal or professional relationships with the participants. Ethical considerations for interacting with participants had been proactively considered. Examples of ethical challenges could include demonstrating respect for the participant through the use of respectful language and treatment, ensuring participant anonymity and confidentiality, the offering of incentives for participation, ensuring the participants have signed an informed consent to participate in the study, and ensuring that participant interviews are collected and transcribed with accuracy (Mirza et al., 2023). The development of a scripted, semi-structured interview guide helps to ensure that each participant is treated with the same considerations and asked the same questions (Mirza et al., 2023). The interview guide was the only instrument used in this study and had previously been vetted with classmates and close friends and family which helped to ensure each question asked had

clear and unambiguous language. Every aspect of the data collection process had been considered to ensure participant anonymity. Data files are stored on a password protected laptop in a data cloud account under password protection to ensure confidentiality, and they will be maintained for five years, after which they will be destroyed. Following Walden University's IRB requirements, all ethical considerations have been observed in working with human participants. There are no ethical issues.

**Participant Selection Logic**

Convenience sampling was used for this study. This is a method of sampling in which, provided participants meet the inclusion criteria, selection is based on participant availability and willingness to participate in the study. Using convenience sampling helps to ensure that participants are interested in participating in the study. Participants were from across the United States and met the following criteria: 1) between the ages of 25-67; 2) currently work in a white-collar work environment or have worked in a white-collar work environment in the last 12 months; 3) currently using a worksite wellness program to lose weight, or they would have participated in a worksite wellness program for this purpose in the last 12 months; 4) currently are obese using BMI as the measurement, or they were obese in the last 12 months. Participants were from varying locations across the United States. Qualification for inclusion in the study was based on the participant's self-reporting.

Recruitment occurred through social media and publicly available obesity support groups using a flyer posted on the site or to the support group. Social media platforms used were sites such as Facebook, LinkedIn, and the Walden Participant Pool. Weight

loss support groups included groups like the Obesity Action Coalition (OAC). Recruitment flyers were posted through my personal profile or page. Interested participants were asked to call, text or email the researcher. I contacted the potential participants, discussed the eligibility criteria, and verbally confirmed their eligibility and interest in participating in the study. An informed consent was then emailed to each qualified participant. The sample size of this population was based on the need to gain an in-depth perspectives on the experiences of the obese population in using worksite wellness programs to lose weight. Data collection ended when data saturation was reached and no new information was obtained. The number of participants can vary in qualitative studies using narrative analysis, but many studies have between 10 and 20 participants (Sandelowski, 1995). I aimed to include 10-15 participants as the target sample size. If saturation had not been met with 15 participants, then additional participants would have been included in the study.

**Instrumentation**

The first instrument that was used was a Walden University IRB approved social media post. The post was created by the researcher and posted on my personal Facebook and LinkedIn pages. It was also posted to the Walden Participant Pool. The social media posts included a description of the purpose of the study in addition to the flyer. Interested participants were asked to confirm their eligibility for the study verbally. After a participant's qualification to participate was determined, they received an Informed Consent via email for their signature.

The second instrument used was a semi-structured interview guide. I conducted semi-structured interviews with all participants. Once the informed consent had been received, an interview was scheduled and conducted through Zoom. Interviews were recorded using audio recording only. Recording the conversation assisted with ensuring that all responses were captured accurately. The interviews were transcribed through transcription services via Zoom. Additionally, notes were taken during the conversation to capture any observations that supported data classification and analysis. Participants had an opportunity to review their transcripts for accuracy.

The interview questions were intended to understand the participant's experiences in using worksite wellness programs to lose weight in a white-collar work environment. The research questions were researcher-developed using the social ecological model, specifically the interpersonal, intrapersonal, organizational, and public policy constructs. They were approved by the researcher's dissertation committee. Mock interviews were conducted with three personal acquaintances of the researcher, which helped to validate that the questions were clear and concise, solicited experiences in alignment with the study, and did not include references to personal feelings or observations. The questions were designed to be broad, with follow-up questions as the discussion continued and as needed to develop themes and answer the research questions.

**Procedures for Recruitment, Participation, and Data Collection**

Online media posts and flyers that describe the study and participant eligibility requirements were provided to prospective participants. Recruitment took place on social media sites such as Facebook and LinkedIn. Obesity support groups such as the Obesity

Action Coalition, were also leveraged to recruit participants. Finally, a posting was made in the Walden University Participant Pool. A snowball sampling method was used to identify other prospective participants who fit the study's requirements. Snowball sampling is a method of sampling in which research participants are asked to assist the researcher in identifying other prospective participants (Oregon State University, Division of Research and Innovation, 2012). No incentives or compensation were provided for referrals. All participants self-identified as meeting the criteria for participation. The process of collecting referrals and interviewing other participants supported the researcher in reaching data saturation which occurs when no new data is being found in the interviews. Data saturation was determined by interpretation of participant responses by the researcher.

Once a participant had verbally confirmed their eligibility and signed the informed consent, they were scheduled for an interview using Zoom. Participants received an invitation to participate with an individualized link to attend the interview via Zoom. All participants were told, before the interview begins, that the interview is confidential, the researcher is in a closed room, and participants will be encouraged to be in a place free from distraction where they feel comfortable answering the interview questions. The audio recording feature within Zoom was used to record the interview. The interview was anticipated to last for approximately one hour and was transcribed using Zoom. The interview questions were structured to answer the main research question and the sub-question. The questions were open-ended allowing participants to speak about their experiences. Follow-up questions were asked if additional clarification

was needed. The participant was thanked for their time at the conclusion of the interview. They were instructed on how to view a copy of the transcript of their interview and how to report inaccuracies, if any. Participants were asked if they knew of anyone else who might qualify to participate in the study. This served as the conclusion of the study for each participant.

**Data Analysis Plan**

Qualitative research is a method of research that focuses on the collection, analysis, and interpretation of non-numerical data. (Aspers & Corte, 2019). This type of research serves to support contextual understanding of human experiences, beliefs, attitudes, and motivations through collecting observations or conducting focus groups or individual interviews (Aspers & Corte, 2019). The interview questions in this study were guided by the research questions and were therefore designed to answer the research questions. The data from the individual interviews collected in this study were themed based on the theoretical framework of the social ecological model. The interview questions were open-ended and aligned to the constructs in the SEM that underpinned this study.

All interviews were recorded with audio only using Zoom. Recording the interviews allows the researcher to read and listen to the interview several times if needed to ensure interpretation. The interviews were transcribed using Zoom. The researcher wrote notes to assist with code development. Codes and themes were developed manually without the use of software to support trustworthiness, credibility, and dependability. All

transcripts, notes, and codes are being stored on a password-protected computer using cloud storage that is also password-protected.

Narrative analysis was used to analyze the interview responses. Narrative analysis focuses on the interpretation of narratives from the research participants. It can provide deeper context for human experience, and it has been useful in supporting understanding of expectations and motivations for specific behaviors (Gillespie et al., 2024). Data was collected through individual interviews. The researcher read through the narratives to understand the content and context and looked for recurring themes, phrases, or concepts. Key elements were identified within the narratives, and codes were assigned to them. These codes represented themes or patterns in the narratives. Codes were grouped to form broader themes or subcategories. This helped to organize the data and understand the connections between different ideas. The coded data was examined, looking for patterns, themes, and insights to inform the research questions. Findings have been presented, using quotes and examples from the narratives to support the analysis.

## Issues of Trustworthiness

Trustworthiness in research refers to the quality, reliability, and validity of the research findings and it is made up of different components – credibility, transferability, dependability, and confirmability. These components were developed by Lincoln and Guba (1985) as criteria for evaluating the quality of qualitative research. Their framework has been widely adopted today and is seen as foundational in guiding researchers in qualitative inquiry.

It is important to establish trustworthiness in qualitative research for several reasons. For example, it ensures the credibility and validity of the research, making it more reliable. Establishing credibility ensures that the research findings represent the participants' experiences and perspectives. One way to do that is through member checking. Member checking is a technique that enhances the credibility of a study by allowing participants to review their interview transcript to ensure it is accurate. This study utilized member checking to enhance the credibility in the findings. If corrections to an interview transcript were necessary, the researcher had the participant submit a written statement that detailed the inaccuracy and the correction needed.

Transferability can be compared to external validity in research. Transferability is the extent to which research findings can be applied in other contexts and settings (Drisko, 2025). One way to establish transferability in research is to provide 'thick descriptions' which are detailed descriptions of the research context, participants, and processes which can help other researchers determine if the findings can be applicable to other settings (Drisko, 2025).

Dependability pertains to the consistency of repeatability of the research. Creating thorough documentation of the research process is essential to ensure that others can understand and follow the steps taken in the research process. Keeping audit trails is one method of establishing transferability in which the researcher keeps detailed records of their research process, key decisions, and methods used, as this will help future researchers understand the progression of the study and help them determine its transferability to other settings (Drisko, 2025). Another method for establishing

dependability is Data Triangulation. Data Triangulation involves using several researchers, methods, and sources, and implementing a research process where researchers can cross-check research findings. This enhances transferability by reducing bias and increasing the quality of the results.

Confirmability ensures that the research is representative of the participants' experiences and does not include the researcher's biases. Reflexivity is a process by which the researcher reflects on their own biases and how those biases might influence the research. When a researcher recognizes and understands their biases, they can take better care to ensure that the research reflects the participants' experiences only.

A final component essential to establishing trustworthiness in research is intra-coder reliability. Intra-coder reliability measures the consistency of coding by a single researcher over time. It ensures that the researcher applies codes consistently across the research process. Intra-coding reliability can be established through maintaining an audit trail, as described above. Additionally, intra-coding reliability can be established through a test-retest method in which the researcher codes the same data at two different points in time and then compares the results to determine consistency in the codes. Coding was an iterative process in which the codes and themes were examined over several points. This supported intra-coding reliability.

## Ethical Procedures

Ethical procedures in research should be at the forefront of consideration in any research study. While Walden University's IRB and federal regulations uphold the highest ethical standards, the researcher has a great responsibility to uphold ethical

practices and procedures throughout the research process. The quality of the research – its validity and reliability are dependent on the ethical practices and procedures of the researcher.

Participants in this study have the ability to receive the results of this study upon request once the research is complete. They also have access to their individual transcripts. Participants were selected through convenience sampling. Participants were recruited through social media platforms such as Facebook, LinkedIn, and the Walden University Participant Portal. They were not coerced or incentivized to participate.

Participants were assigned a number and an alias name during their participation in the study to safeguard their identity and maintain their privacy. A list of participant numbers or aliases is being maintained in a secure, password-protected location, available only to the researcher. All research records are being stored in that location for five years, after which they will be discarded. Informed consent forms served as the participant's consent to participate in the study, which could have been revoked at any time. Participants were reminded at the start of the interview that they could choose not to participate in the study at any time. Participants could also refuse to answer any questions that are uncomfortable for them. The Informed Consent form was be taken from a template provided by Walden University and customized for the participants. The form included information on the study's background, interview procedures, the voluntary nature of participation in the study, risks and benefits, and privacy. Additionally, contact information for Walden University's Institutional Review Board was provided.

## Summary

The purpose of this basic qualitative research study was to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose weight. A basic qualitative design uses interviews, focus groups, and documents to understand participant perspectives. Data was analyzed using a narrative analysis, which is a type of qualitative data analysis that involves interpreting core narratives from the individual. This type of analysis gives the researcher perspectives on the participant by understanding their assumptions, needs, barriers, and facilitators to behavior change. Participants were recruited from social media accounts like Facebook and LinkedIn using my personal account using a Walden University approved flyer. Participants were also recruited through the Walden Participant Portal. Convenience sampling was be used to help ensure participants were available and interested in participating in the study. Participants participated in an individual interview using a semi-structured interview guide. The interview was recorded with audio only and transcribed. Participants can receive a copy of the summarized results by request after the study, and they have access to review their transcripts to ensure the data collected was accurate.

The next chapter will detail the results of the data collection. The results of data collection and data analysis will be presented and discussed. Evidence of trustworthiness will be shared. Finally, a summary of the chapter will be provided.

# Chapter 4: Results

## Introduction

The purpose of this qualitative study was to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose weight. Participants in this study participated in one-on-one, semi-structured interviews via Zoom (audio). All interviews were recorded after participants signed an approved informed consent form. Strict confidentiality was maintained throughout the interview process. Each participant was given an alias and a participant name to be used in the transcript analysis and presentation of study results. The interviews addressed the following research and sub-research questions:

RQ: How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?

Sub RQ: What additional support does the white-collar worker need to support weight loss?

By understanding whether obese individuals were successful in losing weight using a worksite wellness program, what support they had while participating in the program, and what additional support they would have needed to lose weight, this research could be used to inform future worksite wellness programming and support needs for the obese population.

This chapter outlines my research study and details the conditions, codes, and analyses. Data is presented in tables and figures to support understanding of the results. An overview of the research setting, participant demographics, data collection, and data

analysis will be presented in this chapter. Finally, trustworthiness and results will be provided.

## Setting

Participants were recruited through the Walden University Participant Pool as well as through social media outlets. These recruitment methods aligned with the approved IRB proposal provided through Walden University. Individuals interested in participating in the study were asked to email me through my Walden University email address. Qualified participants were those individuals who currently worked in a white-collar work environment or have worked in a white-collar work environment in the last 12 months between the ages of 25 and 67. Additionally, they must have been currently using a worksite wellness program to lose weight, or they would have participated in a worksite wellness program for this purpose in the last 12 months. Finally, participants were either currently obese, using BMI as the measurement, or they had been obese in the last 12 months. All participants self-identified as meeting the criteria for participation. The inclusion criteria were in the approved recruitment flyer. Each potential participant confirmed they qualified before an informed consent form was sent to them via email. Once the informed consent was received, a one-on-one interview via Zoom was scheduled at a mutually convenient time. The interview questions focused on the participants' experiences in participating in a worksite wellness program to lose weight, the types of support they received, and what additional support, if any, they would have needed.

## Demographics

All participants were between the ages of 25 and 67. The exact age of the participants was not requested. All participants were obese or had been obese in the last 12 months as defined by the BMI scale. All participants self-identified as having obesity according to the BMI scale. All participants self-reported that they worked in a white-collar work environment or had worked in one in the last 12 months. All participants reported that they were working in a white-collar work environment. Finally, all participants participated in a worksite wellness program to lose weight or participated in one in the last 12 months. All participants self-reported that they were participating or had participated a worksite wellness program in the last 12 months.

## Data Collection

Data collection started on March 6, 2025 and ended July 6, 2025. Participants were recruited from the Walden University participant pool, through social media sites including LinkedIn and Facebook, through the local library, and through Craiglist in several cities nationwide. The recruitment process consisted of interested participants emailing me with their interest after they saw an approved recruitment flyer. I then emailed them an informed consent form, I asked them to review it and let me know if they had questions. If they agreed to be included in the study, they were asked to reply to the email with “I consent” in the body of the email. I also asked each participant to provide options of availability for an interview conducted via Zoom. I selected a mutually agreeable time from the options they provided, I scheduled the interview and sent them a calendar invitation with a Zoom link. The interview durations were between 35 minutes

and one hour in length. I began each interview by expressing appreciation for their participation in my research. I reviewed the research questions with each participant so each person understood the information I wanted to collect. I confirmed that the interview would be recorded, and I asked each participant if they had questions before we began. Each interview was recorded and transcribed through the Zoom platform.

During the interview, I established rapport by asking each participant to describe their experiences in using a worksite wellness program. I then proceeded to ask interview questions from an approved semi-structured open-ended interview guide. Asking semi-structured open-ended questions allowed each participant to reflect on their experiences and share stories and examples to illustrate their points. I summarized what I heard the participant say when needed to ensure clarity. I asked follow-up questions that intuitively came up during the discussion. At the conclusion of the interview, I asked participants if there was anything else that they felt was relevant to share that I did not ask. I then thanked the participant for their time in participating in my study. I downloaded each transcript from Zoom. I emailed a copy of the transcript from Zoom to each participant and asked that they contact me if there were inaccuracies in the transcript. I did not receive any feedback from the participants.

Once I had all the transcripts, I consolidated the responses into a table by interview question. I changed the participant's identification at the time the transcripts were consolidated. A copy of the interview guide can be found in Appendix A. After reviewing all transcripts, a decision was made to stop the recruitment for additional participants as data saturation has been reached. Data saturation occurs when no new

themes or insights emerge from additional data collection (Saunders et al., 2018). Achieving data saturation indicates that the interview questions have been sufficiently answered. Achieving data saturation helps ensure the credibility and reliability of the study's findings (Saunders et al., 2018). Data saturation can occur with only a few interviews, and in other studies, more interviews may be required to reach data saturation (Saunders et al., 2018). It was evident from the rich data in each transcript that saturation had been reached after six interviews.

## Data Analysis

The purpose of this study was to explore the lived experiences of individuals with obesity working in white-collar work environments who have used worksite wellness programs to try to lose weight. Convenience sampling was used for this study. All interviews were recorded and transcribed in the Zoom platform. The data were edited for typos and returned to the participants to verify accuracy. Participants were asked to contact me via email only if there were corrections required to their transcripts. I did not receive any feedback from the participants. The transcripts were then organized in a separate Word document by interview question.

The next step was to develop codes. Codes are labels used to categorize and interpret qualitative data. The data are used to develop patterns and insights in the data and are used to help organize large amounts of textual data. I developed the codes manually through a careful review of each transcript. I noted codes in a spreadsheet, noting which participant used the code, the interview question in which the code was used, how many participants used the code and how many times the code appeared in all

transcripts. A code was included if at least 50% of the participants used it. Twenty-seven codes were developed from the transcripts. The codes were then developed into categories. Categories are a consolidation of similar codes and are used to further help organize and interpret data to further identify patterns. The codes were consolidated into nine categories as seen in Table 1.

**Table 1**

*Codes and Categories From This Study*

| Category | Codes | Number of participants | Participant numbers | Number total |
|---|---|---|---|---|
| Activity | Exercise | 5 | 2,3,4,5,6 | 38 |
| | Activity/ activities | 4 | 1,2,3,5 | 21 |
| | Steps | 3 | 2,4,5 | 11 |
| | Workout/ working out | 3 | 1,2,6 | 11 |
| Gym | Gym | 4 | 2,3,4,6 | 14 |
| Wellbeing | Health/ healthy | 6 | 1,2,3,4,5,6 | 46 |
| | Mental health/ mental | 3 | 1,2,4 | 5 |
| Education | Information | 4 | 1,2,5,6 | 11 |
| | Educate/ education | 3 | 2,3,5 | 7 |
| Consumption | Nutrition | 4 | 1,2,3,6 | 18 |
| | Food | 4 | 1,2,4,5 | 22 |
| | Sugar | 3 | 1,2,4 | 17 |
| | Calorie | 3 | 2,4,6 | 8 |
| | Carb | 4 | 1,3,4,6 | 7 |
| | Diet | 4 | 1,2,4,6 | 17 |
| Weight status | Obese | 3 | 4,5,6 | 6 |
| | Weight | 6 | 1,2,3,4,5,6 | 52 |
| Programming | Benefits | 3 | 2,5,4 | 6 |
| | Program | 5 | 2,3,4,5,6 | 36 |
| Perception and sentiment | Stress | 3 | 1,4,6 | 8 |
| | Motivate/ motivation/ motivation | 3 | 2,5,6 | 13 |
| | Effect | 4 | 2,3,4,6 | 11 |
| Support and connection | Support | 4 | 3,4,5,6 | 12 |
| | App | 4 | 1,2,4,5 | 13 |
| | Track(ing)/ log(ging) | 3 | 2,4,5 | 12 |
| | Social | 3 | 2,5,6 | 14 |
| | Team | 4 | 2,4,5,6 | 9 |

The codes and categories were developed into themes using inductive reasoning. Themes are broader than codes and often incorporate more than one code. A theme represents a pattern or a relationship across the data that supports the purpose of the study and helps to answer the research questions. Creating themes is an iterative process that often requires going back to the codes and categories to identify commonalities in the data. Inductive reasoning is a method of thinking where conclusions are drawn from

observations or examples (Birenbaum, n.d.). Inductive reasoning seeks to find patterns in observations or data (Birenbaum, n.d.)

## Evidence of Trustworthiness

Ensuring trustworthiness in research is crucial to establishing credibility and reliability, as qualitative research explores the nuances of human experience, attitude, and behavior (Ahmed, 2024). These criteria are used to ensure research is believable, applicable to other contexts, consistent, and unbiased (Ahmed, 2024). The elements of trustworthiness include credibility, transferability, dependability, and confirmability (Ahmed, 2024).

### Credibility

One of the ways that credibility can be demonstrated is through triangulation (Stahl & King, 2020). The method of triangulation that was used in this study was member checking. Member checking validates findings with the participants who provided the data. Transcripts were sent to each participant following the interview. Each participant was asked to review their transcript and respond to me via email if there were inaccuracies in the transcript. Member checking allows the researcher to validate the accuracy of each transcript by incorporating participant feedback, which enhances the credibility of the research.

During the research process, I acknowledged that my experiences and perspectives could bias the research findings (Stahl & King, 2020). Throughout the interviews, I often confirmed my understanding of participants' responses by summarizing what I heard the participant say. This ensured that I was understanding the

participant's response accurately and that my own bias was not introduced. Reflexive self-analysis is a crucial component in ensuring rigor and trustworthiness throughout the research process. Because of the triangulation and reflexive self-analysis processes, credibility can be confirmed.

**Transferability**

Transferability is the degree to which research findings can be applied to other contexts, settings, or populations (Drisko, 2025; Stalmeijer et al., 2024). Developed by Lincoln and Guba, the concept of transferability involves assessing whether the results of the study would be relevant and meaningful beyond a specific situation (Stalmeijer et al., 2024). This analysis is done by the current researcher, not a previous or former researcher (Stalmeijer et al., 2024). One of the ways that transferability can be confirmed is through the use of thick descriptions (Drisko, 2025; Stalmeijer et al., 2024). Thick descriptions are intended to orient the reader to specific components of the study such as the participants, the setting, the time period, the sampling strategy, and the data collection method (Drisko, 2025).

Thick descriptions are necessary to strengthen the transferability of a study (Drisko, 2025; Stalmeijer et al., 2024). A researcher's procedures can also help strengthen transferability. Documented procedures on how the researcher approached and interacted with the participant gives context for how the interactions might have shaped the data (Drisko, 2025). I asked open-ended questions throughout the interviews and encouraged participants to share anything they felt was relevant. Additionally, I asked follow-up questions where additional clarification was needed to support understanding.

**Dependability**

While qualitative research acknowledges the inherent variability in human experience, it also aims to have replicable results (McLeod, 2024c). Dependability pertains to the consistency in the research process and the degree to which another researcher could replicate the research process and findings (McLeod, 2024c). Dependability in research focuses on transparency in the research process, so that if the study were repeated, differences in results could be understood (McLeod, 2024c). Research procedures to include the sampling method and the data collection tool used were documented in Chapter Three. The procedures used for member checking and the techniques for data analysis were documented earlier in this chapter.

External auditing also supports dependability. Discussions with my dissertation committee have occurred throughout the research process. Additionally, my committee chairperson reviewed an interview transcript and recording for accuracy. These actions support the quality of student research and are a mechanism to receive timely feedback through the dissertation process.

**Confirmability**

Confirmability is the extent to which research findings are grounded in the data, are objective, and are not reflective of the researcher's personal bias (Ahmed, 2024; McLeod, 2024b). Confirmability ensures that the research findings can be verified and traced back to the data collected (Ahmed, 2024; McLeod, 2024b). While researchers aim to minimize personal bias, some perspective from the researcher will influence the research process (Ahmed, 2024; McLeod, 2024b). The goal is not to eliminate bias, but to

ensure transparency in the analytical process and to ensure the findings are grounded in data (Ahmed, 2024; McLeod, 2024b). Strategies for enhancing confirmability include triangulation, peer debriefing, and producing an audit trail (Ahmed, 2024; McLeod, 2024b).

One method of triangulation includes member checking (McLeod, 2024b; Stahl & King, 2020). Member checking allows for the sharing of data (or components of data) with the participant to ensure the data collected was accurate (McLeod, 2024b). Following each interview, the interview transcript was provided to the participant. Each participant was asked to review the transcript and send me an email if there were any inaccuracies. This process ensured the data collected was accurate.

Peer debriefing involves discussing the findings with colleagues or other experts to help spot potential bias that the researcher may have missed (McLeod, 2024b). I had regular conversations with my dissertation committee chairperson in which we talked through the interviews I conducted and what I found in the data. Conversations with others can help shed light on biases and challenge assumptions (McLeod, 2024b). Our conversations helped ensure that interpretations from the interviews were grounded in the data.

One of the functions of an audit trail is to ensure that the steps taken throughout the research process are documented (McLeod, 2024b). Audit trails support transparency of decision-making and analysis of data (McLeod, 2024b). Finally, future researchers can trace the journey from data collection to the summation of final conclusions (McLeod, 2024b). All research procedures have been documented in this dissertation. Additionally,

my dissertation committee chairperson reviewed an interview transcript and audio recording to ensure accuracy of the data collected.

Qualitative research has limitations, as it can be perceived as being subjective and difficult to replicate. The methodical application of criteria to ensure trustworthiness is important. These criteria enhance the objectivity and reliability of qualitative research.

## Results

I consolidated all transcripts and organized interview responses by interview questions. I developed codes based on my research questions. I then consolidated similar codes into categories. Three themes emerged from the categories. These themes relate to the perspectives of the obese white-collar worker in using a worksite wellness program to lose weight. Additionally, they give insight into the type of support the obese white-collar worker needs when using a worksite wellness program to lose weight. The following is a comprehensive analysis that answers the research and sub-research questions and details themes developed from the data.

### RQ

How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?

White collar obese workers were asked about their experiences in using a worksite wellness program to lose weight. Worksite wellness programs are often structured differently, offering workers different benefits (Pollitz & Rae, 2020; SHRM, 2022). I wanted to understand if there were commonalities in how white-collar obese workers have experienced worksite wellness programs. All participants said that they

joined their worksite wellness program specifically to lose weight. Five out of the six participants indicated that they sought out supplemental resources to support their weight loss. The first RQ corresponded with the following interview questions:

- Please describe your experiences in using worksite wellness programs to lose weight
- How would you describe the tools, resources, or educational materials provided through worksite wellness programs that you have used to lose weight?
- How would you describe your attitude towards worksite wellness programs while participating in them?
- How would you describe the effectiveness of worksite wellness programs in supporting weight loss?
- Describe your previous worksite wellness programming content and how the content has supported sustained weight loss?
- What is your perspective on the type of workplace culture that is needed to support sustained weight loss?
- Please describe the effectiveness of support provided in the following areas
    - Food selection/making healthier choices
    - Exercise/Quality/Quality
    - Social Support

**Emergent Theme: Experiences Using a Worksite Wellness Program**

Participants were asked about their experiences in using a worksite wellness program to lose weight. They were also asked about the level of support provided in the

worksite wellness program to lose weight. Participants described the role of the worksite wellness program in weight management as supplementary, not comprehensive. Each participant described deficiencies in their worksite wellness programming. Four participants also described other resources they sought to receive the additional support they needed. For example, one participant, "P4" described her experience in using her worksite wellness program, saying,"I did not find it beneficial because they couldn't tell me anything I didn't already know." P4 also said,

> I've had so much knowledge on what's good for me that they didn't offer a lot to help me. I really struggle with, and I think you know, there's probably a lot of people who struggle with addictions to sugars and other things, and those don't just go away because you have a health coach that calls you to check in on your goals. … the workplace wellness program doesn't factor in those things.

Another participant, "P2" has struggled with obesity most of his life. When asked about the effectiveness of the worksite wellness program, "P2" said "I don't feel like it was effective–not really." Another participant, "P1" talked about the worksite wellness program, "made me aware of what my goal is for weight loss. You know what I mean, because…Wellhub doesn't help me do my workout, but it gives me tips and techniques…it makes me self-aware…" He later talked about the deficiencies in the program pertaining to guidance on nutrition, saying, "I did online research and determined what diet to follow. This is a missing component in Wellhub – Wellhub provides a cursory overview of nutrition." Finally, "P6" talked about support that was not available in his worksite wellness program, saying,

> So you know, a lot of us over 40 are struggling to figure out how can I lose 20 pounds? What, do I eat six times a day, or do I do intermittent fasting? You know, it's hard. And then, even if we do those things, right, because experts don't agree on everything. There's experts on everything. There's experts on everything, you know. Some will tell you that you got to have carbs, and ketogenic is bad for you. Others will tell you that. ...most of us only figured it out or found some success through months or years of trial and error, you know.

**Sub RQ**

What additional support does the white-collar worker need to support weight loss?

White collar obese workers were asked about their perspectives on what could make a worksite wellness program more effective, what additional support they would need to achieve weight loss, their perspectives on the type of workplace culture needed to support weight loss, and any specific recommendations they would have for enhancing a worksite wellness program to support weight loss. Measuring the effectiveness of a worksite wellness program in influencing health behavior change can be more challenging. Many worksite wellness programs are developed to help employees understand their health risks; they are not typically designed to change health-related behavior (Pollitz & Rae, 2020). Additionally, worksite wellness programs can have different focus areas and different factors that can contribute to their success (Pollitz & Rae, 2020). However, each participant shared their perspectives and ideas on what additional support they needed based on their circumstances, their challenges, and their

unique needs. While different types of support were needed for each participant, it was clear that worksite wellness programming should be customizable to account for the needs of a variety of participants. Further, each acknowledged the need for accountability, social support, and connection. The Sub RQ corresponded to the following interview questions:

- What would make a worksite wellness program more effective in supporting weight loss?
- What is your perspective on the type of workplace culture that is needed to support sustained weight loss?
- Describe what actions your organization could take to support you in achieving your health goals?
- What might further encourage or support you in achieving your health goals?
- Please describe what recommendations you would make for enhancing the support to achieve weight loss in the following areas
    - Food selection/making healthier choices
    - Exercise/Quality/Quality-
    - Social Support

**Emergent Theme: Personalized, Multi-faceted Approach**

A common theme emerged from these interviews that indicated employees have different needs in worksite wellness programming depending on their lived experiences and challenges. Therefore, effective weight loss support for the obese white-collar worker requires a personalized, multifaceted approach that addresses mental health, physical

activity, and nutrition in flexible, user-centric ways. One participant, “P1” described the support he needed in a worksite wellness program specifically pertaining to nutrition and physical activity, saying that a worksite wellness program should be “as much of a resource as possible for nutritional information.” Later in the interview, he shared, “if a wellness app would be hyper focused on nutritional things, that would be of the most utility to somebody like myself.” He changed the topic and talked about needing guidance and support on “what physical fitness activities will facilitate weight loss as well as about cardio versus lifting weights and lifting weights are actually better for weight loss than cardio.”

Another participant, “P3” talked about needing a more holistic and formalized worksite wellness program saying,

> I feel like if they were to have a program, they could switch it up, like maybe somedays they ride the bike, some days they go on walks. So maybe each day of the week is for different types of people…offering a range of different activities to choose from.

“P3” also talked about the desire to have support with nutrition, saying he would value “some type of meal plan prep help, just pretty much like a little of everything...especially if not only are you trying to exercise, but also you’re also trying to watch what you eat and stuff.” Another participant, “P4” talked about the support she needed with mental health, saying of her employer,

> They started offering free to all employees as part of its benefits page the Calm app, and I downloaded it, and I’m like ‘oh, what is this? What are these sleep

> things?' I'm like, 'oh, meditation, maybe.' But I found sleep stories, and I had a horrible time getting to sleep and staying asleep because of stress. But when I played a sleep story outline, I fell asleep, never heard, rarely heard the end of the story, and often slept through the night.

Another participant, "P5" talked about the desire to have incentives included in her worksite wellness program to reward positive health behaviors. She said,

> …we have a point system, so I actually get Amazon gift cards every time I hit a certain threshold, and as a teacher, we shop Amazon all the time, so I think it encourages me to hit the weekly steps...I mean obviously they knew what would motivate educational people too.

P6 talked about the importance he places on exercise and the importance of his employer giving him time during the day to exercise, saying,

> you know anyone who works needs that stress relief, that physical training, that opportunity you know, to go do things that take your mind off the job for a little while, relieve some stress from life and obviously lose weight…and there is a lot of flexibility with it and the way I do mine is I take 45 minutes per day.

**Emergent Theme: Social Connection is Key**

Finally, a common theme emerged from these interviews, indicating that social connection is a key motivator and a source of accountability for the obese white-collar worker using a worksite wellness program to lose weight. All six participants discussed the importance of having others with whom they could connect for support and accountability. For example, one participant, "P2" has always believed that social

connection is an important part of her weight loss journey. She initially reflected on going to the gym earlier in her life, saying,

> When I used to go to the gym back in my twenties, we would go to like one of those group classes and then you start to meet people at the group classes. And then suddenly you have friends who go to the group class, and then you're like 'oh, I'll see you at the group class' and it's like, you know…you're holding each other accountable, so it's like 'well, don't miss the group class, I'll see you there.'

This participant later drew comparisons between her current worksite wellness program and one she used earlier in her career, saying about the previous experience,

> They would kind of have this ongoing team that would do runs for like breast cancer awareness or what is it they used to do? Alzheimer's. There was an Alzheimer's run we did every year, and I thought that was really effective, because in order to participate in the run, you kind of have to train for it, so you were doing this in a group, and we were all like a little group of us would be consistently maybe on a, you know, bi-weekly basis going out and walking together or jogging together, so that we could prepare for the run that was gonna happen. I feel like that kind of active culture is very helpful.

Another participant, "P5" talked about a component of her worksite wellness program that included a social media-type feed so she could stay connected with others and receive support. She said, "so, it's like a Facebook feed and different people posting like what they did on the weekend, like she went on a bike ride. So, it's like that social encouragement." Another participant, "P6" also expressed appreciation for social media-

type content to stay encouraged and motivated. He believes this was a great way to support colleagues in their weight loss, saying,

> …I know, full disclosure I'm a social media junkie. I, you know, I just, I do Facebook. I do Tiktok. I can just scroll and be entertained and learn all kinds of stuff. Especially about diet and exercise. I think a lot of people are like that, and it's also no secret that most workplaces I know, a few workplaces in DoD have their own social media platforms, right, because they understand it's good. It's a good way to project a positive image, right? If a workplace, if an employer wanted to enhance their physical fitness program, then I would absolutely consider a social media platform that maybe even spotlights, you know the progress of employees who participate, right? Because then you know, recognition breeds more people who want to motivate more people to do that. 'Oh you know Bruce lost 15 pounds, and he can squat or run' or whatever the case may be right? And you know, people have that in mind and then start thinking 'Oh I can do that too. I want to be featured next month or the month after.'

Another participant, "P3" talked about how supportive his work group was as they participated in their workplace wellness program, saying,

> And we would do like a little activity group, I guess you could say, like, just like a little group stretch every few hours, because we're on the computers for a long time. Just get a little stretching after like 3, 4, 5 hours, we did that. And I would see other groups, like from other departments, they would get together. They walk around like on their lunch break or after work.

"P3" talked later in the interview about the importance of having a social connection, saying,

> Especially like you're with other people that are like also overweight, and like, you guys have like the same kind of plan to lose weight. I feel like that's like a big plus instead of just like doing it by yourself.

"P5" talked about how her current worksite wellness program has improved over time. Her coworkers are often in different locations, and a sense of connection was missing. Her organization's worksite wellness programming has evolved and now encourages colleagues in different locations to connect. She said it has recently become more collaborative, saying,

> I think, for us, at least in this program, the big difference is that it's collaborative, where we didn't always have that collaborative nature in our professional contexts all the time. As teachers, a lot of times we feel isolated because we're the adult, or the adult in charge. We might have a couple other adults in that one small area with a bunch of young children. We don't get a lot of peer interaction, so I think that this helps because we're getting peer interaction, but it's also supporting our health and wellness.

P6 talked about a competition he was participating in with colleagues prior to the COVID-19 pandemic that was motivating for him. He said,

> There were several of us who worked in close proximity of one another. You know the people you see, you know become your work buddies, right? The workplace wellness program offered what they called 'weight loss wars.' And you

> know, you could have a team I think of up to five people and everyone weighed in at the beginning. I think over the course of you know, I don't know, maybe 10 weeks or so, everyone was gonna, you know would weigh in every week and you know the winners of the program would win something...I remember that they advertised that and made it into a game like, you know, a competition. It actually involved other people, right? That you had to have a team to participate, I think made it very effective and had we not been interrupted by COVID, we all probably would have lost, you know, several pounds over the course of those 10 weeks.

## Summary

In this basic qualitative study, I interviewed six obese individuals working in a white-collar environment who were using a worksite wellness program to lose weight. Each participant was asked about their experiences in using a worksite wellness program to lose weight and to give their perspectives on how the worksite wellness program could be more effective in supporting weight loss. Codes and themes emerged from the data, guided by the principles of the social ecological model. All participants shared that their experiences in using a worksite wellness program to lose weight were supplemented by other programs and resources. They also shared that they needed a personalized and multifaceted approach to their program that addressed mental health, physical activity, and nutrition in user-centric ways. Finally, they each shared that social connection is a key component to weight loss, as it provides a source of motivation and accountability. This study provides health educators with detailed insights into current worksite wellness

programming and how programming could be enhanced to support the obese white-collar worker in achieving weight loss. In Chapter 5, the interpretation of findings, limitations of the study, recommendations and implications for future research will be discussed.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

The purpose of this basic qualitative study was to understand the lived experiences of white-collar workers who have used worksite wellness programs to lose weight. The primary focus of this study was to understand how white-collar workers experience a worksite wellness program. Additionally, this study aimed to understand what support should be included in a worksite wellness program to support weight loss. White-collar workers between the ages of 25 and 67 who were obese and had used a worksite wellness program to lose weight were included in this study. My study collected data from six participants who volunteered to participate in a semi-structured interview involving open-ended questions. My goal was to identify which elements of worksite wellness programming have been effective in supporting weight loss among obese white-collar workers to inform more effective strategies and reduce workplace obesity in the white-collar work environment. The key findings provided insights on how participants experienced worksite wellness programming and how worksite wellness programming could be more effective to support weight loss.

## Interpretation of the Findings

As a result of this research study, organizations, healthcare providers, and public health professionals may be able to enhance worksite wellness programming to better support the needs of the white-collar obese worker who is trying to lose weight. This study highlighted their experiences, gave insights into what was effective, and where the obese white-collar worker needed additional support to achieve weight loss. Worksite

wellness programs are often created with different areas of focus, and their effectiveness can be challenging to measure because there is no single measurement criterion. However, this study shared insights on how a worksite wellness program can be customized for this specific population who is trying to lose weight. The following questions were used to understand the experiences of the obese white-collar worker in using a worksite wellness program to lose weight and to better understand what additional support is needed for them to lose weight using a worksite wellness program.

RQ: How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?

Sub RQ: What additional support does the white-collar worker need to support weight loss?

Three themes emerged in response to the study's research questions: Experiences using a worksite wellness program; personalized, multi-faceted approach; and social connection is key.

**Theme 1: Experiences Using a Worksite Wellness Program**

There was consensus across all participants that each participant's worksite wellness program was not comprehensive; each was lacking some type of support that the participant needed to support their weight loss. Most participants sought out other resources. This research was based on the social ecological model and the specific constructs of intrapersonal factors, interpersonal factors, organizational factors, and public policy factors. The data that informed this theme pertains to the construct of intrapersonal factors. Examples of intrapersonal factors are factors that influence

personal behavior, such as knowledge, attitudes, and beliefs (Pahn & Yang, 2021). All participants discussed the need for education on various aspects of weight loss. For example, one participant expressed a desire to better understand the types of physical activity that supported weight loss. Other participants expressed a desire to know more about the types of diets or food choices to best support weight loss. Each participant expressed deficiencies in the educational components in their worksite wellness programs that resulted in each person feeling that they do not have the requisite knowledge to achieve weight loss.

**Theme 2: Personalized, Multi-Faceted Approach**

All participants discussed the needed support pertaining to nutrition. However, each participant needed a different level of support. For example, some participants talked about addictions to foods such as sugar and not knowing how to combat the addiction; some participants talked about not knowing what to eat that was healthy for their bodies. Another participant acknowledged that it is difficult to find consensus on what type of diet to follow, as research is conflicting. The obese white-collar worker needs support with nutrition that is customized to fit their specific challenges and needs.

The data that informed this theme pertains to the SEM construct on public policy. The construct on public policy considers policy factors, laws, and regulations that act as a barrier to healthy living (van Kasteren et al., 2020). Each participant joined their worksite wellness program to lose weight. They were each not satisfied living with obesity and understood the benefits and importance of living a healthier lifestyle. They were open to receiving education on how to lose weight. However, they were not getting the holistic

and comprehensive education they needed. As we think about the obesity epidemic, there is a responsibility for equal access to nutrition education that helps the obese white-collar worker make food choices to support their health and weight loss. Based on the data, this education does not exist today and is therefore an area of opportunity for public policy. For example, public policy could inform and influence tax breaks to those organizations that provide worksite wellness programs. Public policy could also insist that nutrition education and resources be provided as a component of the worksite wellness program. Organizations spend more than $80 billion in absenteeism costs related to obesity and its associated co-morbidities (Degnan, 2024). Additionally, organizations spend more than $160 billion in costs associated with reduced levels of productivity (Degnan, 2024). Organizations with obese workers have higher rates of disability and workers' compensation claims and costs than organizations that employ individuals of normal weight. These rates and costs are on top of the more than $140 billion in increased medical costs that organizations pay to treat chronic conditions for the obese worker and their families. In fact, organizations can see a real benefit in reducing obesity levels, even if their employees remain obese, as healthcare costs increase as the level of obesity increases (Ramasamy et al., 2019; U.S. News, 2021). Providing the necessary education to support the obese white-collar worker in losing weight could have a meaningful impact on an organization's absenteeism, productivity and health care costs.

**Theme 3: Social Connection is Key**

There was consensus across all participants that each participant needed support for their weight loss through connecting or collaborating with other people. Peers and

colleagues offer a source of support and accountability for the obese white-collar worker using a worksite wellness program to lose weight. The data that informed this theme pertains to the constructs of interpersonal factors and organizational factors. Interpersonal factors considers the support provided by family, friends, and colleagues to support the obese white-collar worker in making healthy decisions (van Kasteren et al., 2020). Specifically, interpersonal factors considers the degree to which an employee is encouraged to build social networks while at work to support healthy living (van Kasteren et al., 2020). Organizational factors considers the organizational policies and practices that regulate how employees work (Rural Health Information Hub, n.d.-a). Three participants discussed the value of having a social-media-type feed that allowed them to connect with others and see how others were succeeding in their weight loss goals. These participants expressed the impact of this as motivational or inspirational. Three participants discussed the value in having a group of people with whom they can do activities as a way to hold each other accountable and form social connections and friendships. Corporate culture and worksite wellness programming should encourage workers to connect with each other and support each other in losing weight.

The SEM provided a useful framework for this study, supporting the rationale for the development of the research questions. The SEM provided a framework for understanding the experiences of the obese white-collar worker in using a worksite wellness program to lose weight. The SEM also provided a useful framework to understand how a worksite wellness program could be more effective in supporting this population in losing weight. The participants in this study shared their experiences

authentically on using a worksite wellness program to lose weight and how their worksite wellness programs could be enhanced to better support their weight loss efforts. Establishing themes from the data gave a structure to the data that was supported by the narratives from each participant.

Understanding the lived experiences of the participants was very important for this study. Obesity is a complicated disease, and each worker expressed a strong desire to live a healthy lifestyle. Each participant approached the interview with their own knowledge and experiences, the knowledge they gained through their worksite wellness programs, and a strong sense of the additional support they needed to support weight loss that was not otherwise offered in their worksite wellness program. The SEM provided a framework for analyzing their responses and offering a better understanding of the holistic support required to help obese white-collar workers lose weight.

## Limitations of the Study

There are two major limitations to this qualitative study. All participants were required to self-disclose their qualifications to participate in the study. The age of each participant was not verified. Additionally, their obesity status, their occupation, and their participation in a worksite wellness program were not verified. Each participant shared their experiences, their challenges with obesity, and they talked about their worksite wellness program and the nature of their work. All participants, based on their responses, appeared to qualify for the study.

The ways in which participants express themselves may be different. The worksite wellness programs of the participants had different components, and each

engaged with the program in different ways. Additionally, obesity can be a sensitive subject that can be challenging to discuss, depending on individual experiences. Each interview was conducted over Zoom. Each participant had the option to be on camera or to participate in the interview with the camera feature turned off. Each participant had the option of using their real name or using a made-up name. These efforts were taken to ensure that participants felt comfortable in sharing their stories. Participants' recollections of their experiences were seen to be accurate and authentic.

One participant asked me to define what a worksite wellness program was. It occurred to me that others may have a similar question or may be unclear on how this term was defined. Worksite wellness programs are known by many terms. The term "worksite wellness program" was defined in Chapter 2, and each participant's experiences reflected participation in a worksite wellness program that aligned with that definition.

## Recommendations

The obesity epidemic persists. Given the impact that obesity has on an organization, leaders are now turning their attention to how they can support employees in living healthier lives (Degnan, 2024). However, additional research is needed to understand the specific types of support that may be helpful. For example, research suggests that social networks can influence weight loss and weight gain (Serrano Fuentes et al., 2019). Following the COVID-19 pandemic, there is an opportunity to explore further the impact of in-person connection with social networks or connections via a software application or other virtual connection.

Another area of research pertains to the setting of objectives for a worksite wellness program. Approximately 67% of worksite wellness programs are designed to understand employee health risks (Pollitz & Rae, 2020). Worksite wellness programs are not typically designed to improve health-related behaviors (Pollitz & Rae, 2020). Additionally, 70% of medical costs are attributable to lifestyle-related chronic conditions (Cai, 2021; U.S. News, 2021). Future research could focus on the lived experiences of those who did achieve weight loss in a worksite wellness program to better understand the design and components of the program.

A final area of research pertains to nutritional education. A study conducted by Tyrrell (2023) found that participants who participated in a nutritional education program lost more weight and experienced greater decreases in BMI than those participants who did not participate in nutritional education. However, there is no standard for what this type of education should entail to be effective. Some participants in this study struggled with food addiction, while others felt uneducated on what they should eat and in what portion sizes. Future research could compare the effectiveness of nutritional education components in worksite wellness programs that support weight loss.

One of the most important components of a worksite wellness program is defining the objective for the program (Bell, 2014). Additionally, worksite wellness programs in the United States have been primarily concerned with reducing health care costs, not necessarily improving employees' health and wellbeing (Mujtaba & Cavico, 2013). Finally, there is no standard definition for a worksite wellness program and no standard

definition of what components should be included (Mujtaba & Cavico, 2013). It may be helpful to put definitions and structure behind these concepts.

## Implications

This basic qualitative study sought to understand the lived experiences of the obese white-collar worker who has used a worksite wellness program to lose weight. Additionally, this study aimed to understand what support should be included in a worksite wellness program to support weight loss. This study was guided by the constructs in the social ecological model. I actively listened to the experiences of all participants as I asked them semi-structured interview questions from an interview guide. I confirmed understanding when necessary to ensure I clearly understood their experiences.

This study has the potential to impact social change positively. The data confirmed that social implications exist with intrapersonal, interpersonal, organizational, and public policy constructs. The results of this study are clear that the obese white-collar worker needs additional support from a worksite wellness program to lose weight. The support that the obese white-collar worker needs may not solely be related to decision-making on what types of foods to choose or how to increase movement through exercise. Learning and education are vital, and the data indicated a need for greater levels of education. The data from this study indicated that current worksite wellness programming is insufficient when it comes to educating participants on nutrition and exercise. There is a broader question of whether public policy should legislate what content and education should be provided in worksite wellness programs. Other regions of the world, such as

the UK, which has a similar percentage of the population impacted by obesity, is calling for public policy intervention (Dicken et al., 2025). It may be prudent to provide more holistic and thorough education in the public school system pertaining to nutrition and physical exercise so that rates of obesity can be reduced in adulthood. Approximately 20% of children ages 2-19 in the United States are currently obese (Centers for Disease Control, 2024), and many children are not getting the recommended 60 minutes of physical fitness every day (Centers for Disease Control and Prevention, 2024d). As one example, public education in California requires that high school students receive 400 minutes of physical education for every 10 days of school (California Department of Education, 2022). This equates to 40 minutes per day. This level of exercise does not meet the minimum standard set forth by the U.S. Department of Health and Human Services. In addition to the school system providing a more holistic education, there is a broader question of whether health education should be legislated through public policy. For example, what would it look like if public policy legislated required education pertaining to exercise and nutrition? In the adult population, data indicates that full-time workers spend approximately 90,000 hours at work during their lifetimes (Abdul Manaf et al., 2021; Cable, 2020). Additionally, in a white-collar environment, up to 75% of that time is spent engaging in sedentary behavior (Halling Ullberg et al., 2023; Van Nuys et al., 2014). Given the volume of time that adults spend at work and given the benefits to the organization in having healthy workers, it makes sense that organizations support their workers in living healthy lifestyles. The number of people impacted by obesity is not decreasing, which indicates that as a nation, we're headed in the wrong direction

relative to obesity and public health. An argument can be made that education related to nutrition and exercise should be made available to everyone to support healthy living.

## Conclusion

This study filled a gap in research pertaining to the experiences of the obese white-collar worker who has used a worksite wellness program to lose weight. The social ecological model guided this research with specific constructs pertaining to intrapersonal factors, interpersonal factors, organizational factors, and public policy factors. All participants described challenges in receiving the necessary and personalized education and support they needed to achieve weight loss.

Participants demonstrated alignment with current research in several ways. For example, worksite wellness programs that lack quality programming, knowledge, and support impede weight loss (Abdul Manaf et al., 2021; Suire et al., 2021). The data in this research clearly indicated that participants needed additional education and knowledge on how to properly exercise and make food and nutrition choices to achieve weight loss. Additionally, the data was clear that participants needed support, whether it was from online collaboration or in-person social support. Research is consistent with this sentiment in that workers need support from a network of people, whether that is a partner, spouse, friend group, group of peers, or a health coach (Abdul Manaf et al., 2021; Clancy et al., 2018).

Additional research is needed to support the obese white-collar worker in achieving weight loss. For example, additional research is needed to better understand the design of workplace wellness programs in which participants did achieve weight loss.

Understanding the design of those programs could support the standardization of worksite wellness programs across the country. Additionally, research is needed to better understand what type of nutritional education is most supportive in helping participants achieve weight loss. Finally, understanding the nature and impact of social support would be beneficial in supporting workers in achieving weight loss. This additional insight and knowledge could help health educators influence the design and implementation of worksite wellness programming.

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Appendix A: Interview Guide

## Opening Script

Thank you for your time and participation in this interview. As I have shared, the research questions I am looking to answer pertain to:

- Understanding the experiences of the obese white-collar worker in using a worksite wellness program to lose weight

My research questions specifically are

- RQ1: How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight?
- Sub RQ1: What additional support does the white-collar worker need to support weight loss?

The interview is intended to take approximately 45-60 minutes, and it includes approximately 10 open-ended questions. It's ok to take some time and consider your response. Please share what you feel might be relevant. I may also ask follow-up questions, depending on your responses.

The interview is meant to be conversational, so please try not to be nervous. The purpose of this study is to support weight loss intervention strategies in worksite wellness programs that support weight loss. While the audio for this interview is being recorded, I may jot down notes too. Do you have any questions before we get started?

## Interview Questions

Please describe your experiences in using worksite wellness programs to lose weight (RQ1; Intrapersonal factors)

Describe how this program is advertised.

Describe your previous worksite wellness programming content and how the content has supported weight loss? (RQ1)

How would you describe any additional tools, resources or educational materials provided through worksite wellness programs that you have used to lose weight? (RQ1; Intrapersonal factors)

How would you describe your attitude towards worksite wellness programs while participating in them? (RQ1; Intrapersonal factors)

How would you describe the effectiveness of worksite wellness programs in supporting weight loss? (RQ1)

- What would make a worksite wellness program more effective in supporting weight loss? (Sub RQ1)

What is your perspective on the type of workplace culture that is needed to support weight loss? (RQ1; Organizational factors)

- Describe what actions your organization could take to support you in achieving your health goals? (Sub RQ1; Organizational factors)

What if anything else might further encourage or support you in achieving your health goals? (Sub RQ1; Public Policy factors)

Please describe the effectiveness of support provided in the following areas (RQ1; Intrapersonal factors; Interpersonal factors; Organizational factors)

- Food selection/making healthier choices
- Exercise/Quality/Quantity
- Social Support

Please describe what recommendations you would make for enhancing the support to achieve weight loss in the following areas (Sub RQ1; Intrapersonal factors; Interpersonal factors; Organizational factors)

- Food selection/making healthier choices
- Exercise/Quality/Quantity
- Social Support

Is there anything else you feel is relevant to share?

**Closing Script**

This concludes the interview. Thank you so much for being willing to participate, for your time today and your candor. I'll send you a copy of the transcript for you to review. Please let me know if there are any inaccuracies. If there are, please document them in an email so I can include them along side the transcript.

As a reminder, your identity will be kept confidential, and your responses will be used to help inform recommendations for future worksite wellness programs. If you would like a copy of the my findings, please let me know the best email to use, and I will send a copy once the research is completed. Also, if you think of any additional information that you would like to share, please reach out through email. Again, thank you so much for your time and participation. I will turn off the recording now.

Appendix B: Description of the SEM Constructs

- Intrapersonal factors
    - individual's knowledge, attitudes, and beliefs (Rural Health Information Hub, n.d.-a).
    - education provided through a worksite wellness program which can influence an individual's knowledge, beliefs, or attitudes about their weight and their overall health (van Kasteren et al., 2020).
- Interpersonal factors
    - interactions an individual has with others that can support or hinder healthy behavior (Rural Health Information Hub, n.d.-a).
    - the degree to which participants were encouraged to build social networks within the workplace to support healthy living (van Kasteren et al., 2020).
- Organizational factors
    - rules, policies, culture, or structure within the business environment that promote or hinder healthy behavior (Rural Health Information Hub, n.d.-a).
    - workplace culture and organizational policies and practices that influence an individual's decision to participate in a worksite wellness program and any support the organization provides for an employee to participate in a worksite wellness program (van Kasteren et al., 2020)
- Public Policy factors

- laws or other regulatory policies that support or act as a barrier to healthy behavior or disease prevention (Rural Health Information Hub, n.d.-a).
- legislation that impacts worksite wellness programming as well as how involved an organization can be in an employee's health, and what incentives can be provided for employee participation (van Kasteren et al., 2020).

Appendix C: Summary of Themes

| Theme(s) | Research Question | Code(s)/Phrases |
|---|---|---|
| The worksite wellness program is supplementary, not comprehensive | How do white-collar workers describe their experiences of using a worksite wellness program to try to lose weight? | "I did not find it beneficial because they couldn't tell me anything I didn't already know" , "I don't feel like it was effective–not really" , "I did online research and determined what diet to follow. This is a missing component in Wellhub." |
| Effective weight loss support for the obese white-collar worker requires a personalized, multifaceted approach that addresses mental health, physical activity, and nutrition in flexible, user-centric ways | What additional support does the white-collar worker need to support weight loss? | Worksite wellness programs should be "as much of a resource as possible for nutritional information" , "some type of meal plan prep help, just pretty much like a little of everything...especially if not only are you trying to exercise, but also you're also trying to watch what you eat and stuff" , "…we have a point system, so I actually get Amazon gift cards every time I hit a certain threshold, and as a teacher, we shop Amazon all the time, so I think it encourages me to hit the weekly steps..." |
| Social connection is a key motivator and a source of accountability for the obese white-collar worker using a worksite wellness program to lose eight | What additional support does the white-collar worker need to support weight loss? | "When I used to go to the gym back in my twenties, we would go to like one of those group classes and then you start to meet people at the group classes. And then suddenly you have friends who go to the group class, and then you're like 'oh, I'll see you at the group class' and it's like, you know…you're holding each other accountable…" , "…a Facebook feed and different people posting like what they did on the weekend, like she went on a bike ride. So, it's like that social encouragement…" , Especially like you're with other people that are like also overweight, and like, you guys have like the same kind of plan to lose weight. I feel like that's like a big plus instead of just like doing it by yourself" |